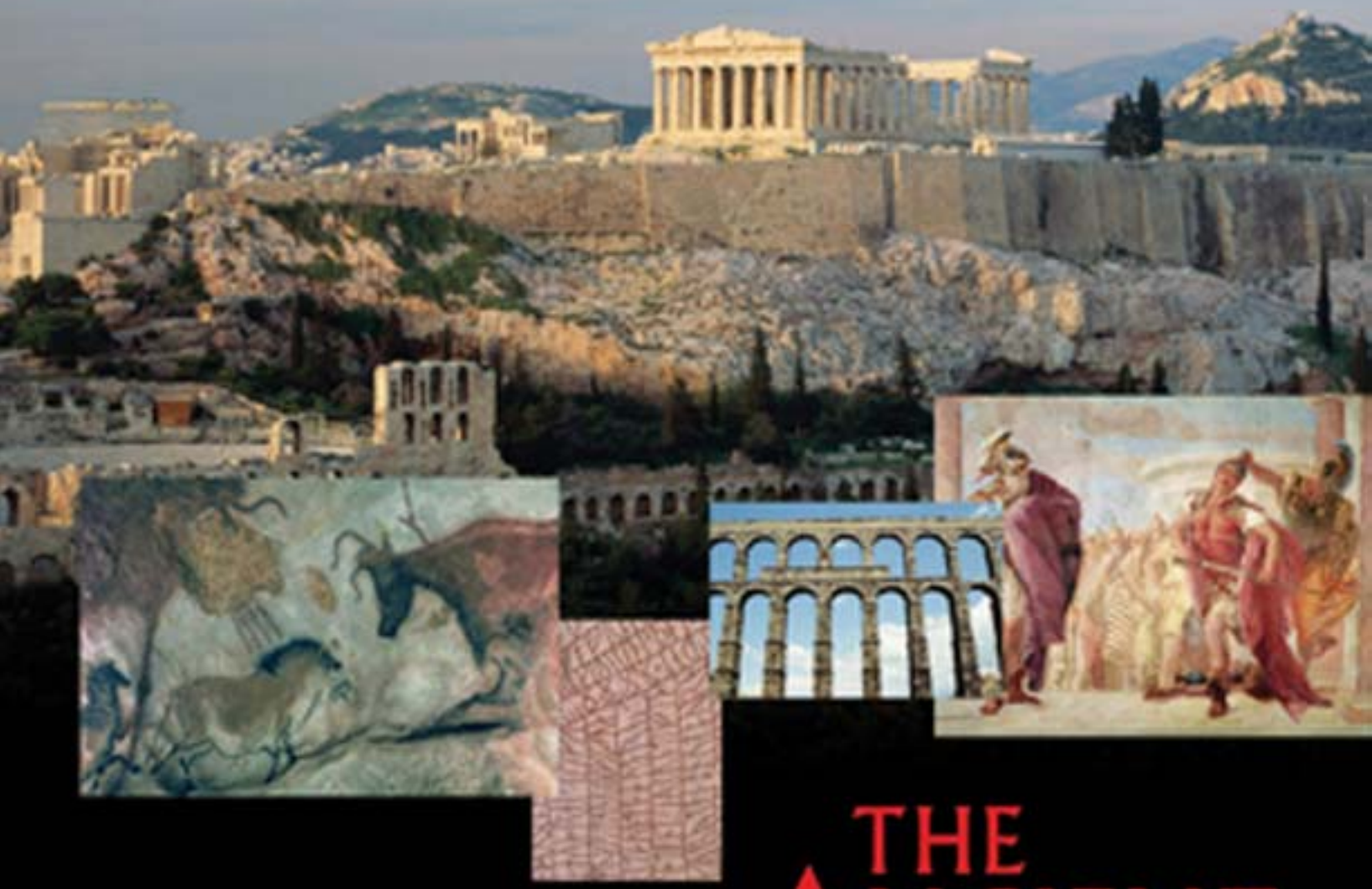
Civilizations of Europe



The Ancient World

THE ANCIENT WORLD

CIVILIZATIONS OF EUROPE

Volume 2

The Ancient World

Civilizations of Europe

Volume 2

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Preface

Studying the world's history is like being an explorer who travels across centuries to unfamiliar lands. The traveler encounters ancient cultures and civilizations and, above all, has countless opportunities to examine both what was thought to be familiar and what was completely unknown.

The history of the ancient world, much like that of the modern era, is a series of interactions played out by familiar and unfamiliar characters upon a stage of equally diverse geography. Knowing how these interactions occurred and evolved, and how, at times, they were obstructed, is crucial to both the study of the past and an understanding of the present, in terms of both progress and conflict. The five volumes of *The Ancient World: Civilizations of Africa, Europe, the Americas, the Near East and Southwest Asia,* and *Asia and the Pacific* help readers step back in time, making familiar what was unknown.

The way we interact with others today—learning a world language and exploring another culture, for example—is not very different from how people in the ancient world interacted with each other. Geographical characteristics, however, played a much more dramatic role in governing the interactions among ancient peoples than they do in interactions among modern ones.

Humans have been on the move from the beginning. Paths they have taken and other peoples they have encountered have always been functions of the geographical opportunities or hindrances they have faced. From Africa, the first place where humans lived, populations began to migrate north into Europe and throughout Asia as the glaciers of the last Ice Age receded. In the South Pacific, people seeking fertile hunting and fishing grounds sailed from one island to another centuries before open sea travel was thought possible in the West. As a result of the Ice Age, a land bridge, known as Beringia, connected Eastern Siberia, Asia, and North America, a connection that the Bering Sea now covers. Beginning around 13,000 B.C.E. or even earlier, humans called Paleo-Indians, in search of food, crossed from Asia into what is now Alaska and from there moved farther south.

While populations spread across the globe at an early time, their growth was limited by a reliance on hunting and foraging for subsistence. In order for large civilizations to develop, humans had to learn how to manipulate their environment; the cultivation of crops became a necessity for survival. The earliest evidence of crop cultivation appeared in Jericho (an oasis in the Jordan Valley) around 8,000 years ago. From there, agriculture spread in all directions, giving rise to the greatest of the early civilizations, those of Egypt and Mesopotamia. These kingdoms rose along what is known as the Fertile Crescent, a region of rivers, oases, and arable coastland that stretches in a curve north from the Persian Gulf, across the northern reaches of modern-day Iraq, and south along the Levantine coast into the Nile Delta region of northern Egypt.

Although different civilizations have been, and continue to be, separated by distance and by variation in climate and topography, not to mention differences in languages, traditions, and belief systems, some elements of one culture's intellectual history closely resemble those elements in other cultures. The creation and flood narratives of the Old Testament, for example, exist alongside similar tales in the ancient cultures of the Middle East, the Mediterranean region, and Africa. Ancient stories about the creation of the world, genealogy, agricultural practices, and morality, have been found to bear striking similarities all over the globe among groups of people who had little, if any, possibility of interacting.

With countless movements and human interactions obscured by time, distance, and varying perspectives, surveying the terrain of the ancient world may seem intimidating. As your guide, the volumes of this series provide a road map of the past. *The Ancient World* allows you to travel back in time to examine the origins of human history, how the environment shaped historical development, and how civilizations developed.

Articles are arranged alphabetically, and sidebar features expand the coverage: "Turning Points" discuss topics such as inventions that have propelled civilization forward; "Great Lives" reveal individuals whose extraordinary deeds shaped a people's history and culture; "Links in Time" connect the past to the present or one period to another; "Links to Place" draw some startling parallels in far-flung places; and "Ancient Weapons" reveal amazing early technology. May this journey offer you not only facts and data but also a deeper appreciation of the past and an understanding of its powerful connection to the present.

Sarolta A. Takács

Crossroads of Culture

The history of ancient Europe is a story of cultural exchange facilitated by the continent's relatively compact size and the presence of a navigable waterway to the south—the Mediterranean Sea. Europe's proximity to Africa and Asia, and to the many vibrant cultures that developed on those continents, guaranteed that it would be a hub of cross-cultural contact. Seafaring coastal dwellers from Greece and Crete were the first to come into contact with foreign cultures in both trade and war. Also, interior cultures, such as the Germans and Celts, would take part in this process of exchange. In fact, contact between coastal powers and inland groups spread foreign influences throughout the continent.

These interactions resulted not only in commerce and trade in material goods but also in the exchange of ideas and customs. It is during this early period of outside contact, in the late second millennium B.C.E., that much of the seed for modern Western thought was sown. While two great civilizations—Greece and Rome—dominate much of the history of ancient Europe, the region was strongly influenced by cultural interchange between European and non-European societies. Europe was then, as it is today, a true crossroads of culture.

PREHISTORY

When the earliest ancestors of modern humans first arrived in Europe almost two million years ago, they found a landscape dramatically different from the one they left in Africa. The climate, however, was not entirely dissimilar to that of Africa. These circumstances changed as a series of ice ages, interrupted by periods of warming, caused major climatic shifts in Europe. It would not be until after the last ice age ended (about 10,000 years ago) that humans could make a permanent home on the continent.

The Land and Its People

While primitive hominids are believed to have arrived in Europe long ago, the earliest modern humans began to venture from Africa into Europe only during the last 100,000 years. It is difficult to say how far north these early migrations extended. The earliest human remains found in Europe were discovered in present-day Romania and date to only about 30,000 years ago. At about this time, the ice caps were receding, and small bands of humans began to disperse across the mountains and valleys that had been carved into the landscape by retreating glaciers.

Scholars know little about the earliest Europeans beyond the fact that they subsisted through hunting and gathering. Spear tips and arrowheads have been found throughout the continent, and cave paintings in France and Spain dating from 15,000 to 20,000 years ago depict wild animals. About 6,000 years ago, knowledge of agriculture spread to Europe from Asia Minor. Then, with the domestication of wild wheat and barley, humans began to move from a society based on hunting and gathering to one based on farming.

Languages

Most European languages derive from a single early form of speech brought west from the region of the Caucasus Mountains and known as Indo-European. The two most influential languages of ancient Europe, Greek and Latin, are both offshoots of Indo-European. Not all European languages, however, derive from Indo-European roots. Basque, Maltese, Turkic, and Finno-Ugric, to name a few, developed in relative isolation from the Indo-European family.

Language patterns in modern Europe reflect the enduring influence of the continent's ancient cultures. The Romance languages, such as Italian, French, Spanish, and Portuguese, are derived from Latin, the official language of the Roman Empire, which conquered all of those areas during its period of imperial expansion. In Central Europe, where Celts and Germans resisted Roman expansion, Germanic languages came to dominate. English, which borrows heavily from both Romance and Germanic languages, developed in Great Britain, a land ruled at various time by Celts, Romans, Germans, and the Norman French.

EARLIEST CIVILIZATIONS

The most influential civilizations of ancient Europe developed along the Mediterranean coast,

where constant contact with different cultures enabled the growth of wealthy and cosmopolitan trading cities such as Athens and Rome. In fact, the two greatest empires to develop during ancient times, those of Greece and Rome, achieved their preeminent status by dominating the seas.

The Minoans

The Mediterranean island of Crete, located at the crossroads of three continents—Africa, Asia, and Europe—was the site of Europe's first major civilization. Minoan Crete was a maritime trading power that controlled the Aegean Sea during the Bronze Age (ca. 3000–1500 B.C.E.), reaching the height of its power in about 1600 B.C.E. Modern archeological excavations of the Minoan palace of Knossos, for example, provide a glimpse of what must have been a bustling city with an elaborate system of sophisticated public works. Some scholars suggest that the eruption of a volcano on what is now the island of Santorini initiated the decline of Crete's power.

The Myceanaens and Dorians

By 1400 B.C.E., an Indo-European group called the Myceanaens, named for the Peloponnesian city of Myceanae, replaced the Minoans as the major political force in the Aegean. The language of the Myceanaens was an early form of Greek. Around 1100 B.C.E, a people from the northern and northeastern parts of Greece called Dorians toppled the Myceanaen civilization. Archeological data surrounding the Dorian invasion is scarce, and there is no written record of the region until the eighth century B.C.E., with the emergence of the early Greek alphabet.

Greece

The fall of the Myceanaens was followed by a period during which a number of individual Greek city-states grew up along the shores of the Aegean Sea. These early Greek societies introduced the precursors of Western literature, philosophy, and governance.

During the earliest era of Greek history, called the Archaic Period (ca. 800–500 B.C.E.), Greek city-states began to establish overseas colonies on the west coast of Asia Minor and around the Black Sea. Later Greek colonies also were established in Sicily and southern Italy, as far north as the Bay of Naples in Italy, and as far west as present-day Marseille, France. Territorial expansion spurred economic growth, which in turn stimulated political changes. Monarchy, or government by a single, absolute ruler, gave way to oligarchy—rule by a small elite class—and even to limited democracy, as in Athens.

The Classical Period (ca. 480–323 B.C.E.) was marked by external and internal conflict as well as by impressive economic and cultural progress. This era saw the flowering of Greek philosophy, poetry, mathematics, and history, which provided the foundation of Western culture. After the Greeks banded together to defeat a Persian invasion in the early fifth century B.C.E., Athens emerged as the leading Greek city-state. However, Athenian attempts to impose its will on the other city-states led to the Peloponnesian Wars and the defeat of Athens at the hand of its rival Sparta.

War between Athens and Sparta coincided with the emergence of a new power to the north, Macedonia. In the fourth century B.C.E., the Macedonian king Philip II (r. 359–336 B.C.E.), subdued the Greek city-states. His son, Alexander III, the Great (r. 336–323 B.C.E.), conquered the Persians and extended the Macedonian empire as far east as the Indus River. Although his empire dissolved shortly after his death, Alexander's military exploits established Greek as the universal language of the East, and the cities he founded throughout Asia formed the basis of a flourishing trade network.

Rome

Founded, according to tradition, in 753 B.C.E., Rome was only one of many small city-states in Iron Age Italy. At the time, the Etruscan civilization dominated the Italian peninsula. The Romans, who belonged to an Italic group called Latins, were subject to the authority of Etruscan rulers until the end of the sixth century B.C.E. After ousting their last Etruscan king, Tarquin the Proud (r. 535–509 B.C.E.), the Romans adopted a republican form of government.

By the third century B.C.E., Rome had expanded to bring all of Italy under its control. The integration of Greek colonies in southern Italy gave Rome access to Greek culture, which it eagerly adopted

and adapted to suit Roman tastes. The conquest of southern Italy also brought Rome in direct conflict with the major economic power of the time, the North African city-state of Carthage. Between 264 and 146 B.C.E., Rome and Carthage engaged in a series of conflicts known as the Punic Wars. The victorious Romans emerged as the most important military, economic, and political power of the Mediterranean basin.

Although its military was powerful, Rome was beset by political turmoil. As the republic weakened, influential military leaders vied for control of the state. When General Julius Caesar (r. 49–44 B.C.E.) assumed dictatorial powers, he was assassinated by his rivals. After a period of civil war, Caesar's great-nephew, Octavian (r. 27 B.C.E.–C.E. 14), emerged as the most powerful individual in Rome. Taking the name Augustus, Octavian assumed the title of emperor, thus returning the republic to its autocratic roots.

The next 200 years were a period of unparalleled peace and prosperity popularly called the *Pax Romana*, or Peace of Rome. By the third century C.E., however, invasions of migrating tribes, runaway inflation, and civil wars beset the Roman Empire. Despite the occasional strong ruler such as Constantine (r. C.E. 306–337), a long period of decline set in as weak and incompetent emperors were unable or unwilling to check the decay of Roman power. In the late third century C.E., the empire was divided into eastern and western halves. The western empire came to an end in C.E. 476 when Germanic invaders deposed the last Roman emperor. The eastern portion, based at Constantinople, survived for the next 1,000 years as the Byzantine Empire.

MODERN EUROPE: CONNECTIONS TO THE PAST

Europe's geographical proximity to Asia and Africa has continued to provide many of the same advantages and problems that it did for Athens and Rome. Immigrants from the neighboring continents—both those formerly under the sway of European colonial powers and those who never were—still make Europe a region of cultural and intellectual diversity and exchange. However, these influences not only enrich European culture. They also present challenges to it. Like the ancient Romans and Greeks before them, modern Europeans often feel threatened by the influx of foreign ideas from nearby lands. Even while expanding into new territories, the Greeks and Romans took pains to promote and maintain their own cultures. This process continues today, as descendents of the ancient Europeans discover for themselves Europe's ongoing position as a physical and symbolic crossroads of people and ideas.

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Sarolta A. Takács, Ph.D.
General Editor

Map of Ancient Europe

ANCIENT EUROPE, CA. C.E. 300

By the fourth century C.E., the Romans had built a mighty empire that reached from Hispania to Dacia and from Anatolia to Albion. After C.E. 476, the persistence of Celtic groups in the British Isles, the migration of Germanic groups from northern and central Europe, the excursions of Norse adventurers from Scandinavia, and the consolidation of Slavic kingdoms in eastern Europe in the centuries to follow helped establish the modern cultures of Europe on lands once occupied by prehistoric peoples.

Agriculture

In ancient times, methods of farming and raising animals for food initiated a change from the nomadic hunter-gatherer way of life to one centered around settled communities. In ancient Greece, the widespread use of agricultural practices, such as cultivating crops and raising animals began around 6000 B.C.E. and by 2500 B.C.E. had spread to the most northern and western parts of Europe.

As they adopted agriculture, tribes migrated to places with arable, or farmable, land, building permanent villages and, in some cases, defensive structures to protect their resources from wild animals or aggressive neighbors. Domesticating animals and plants afforded a stable means of food production that in turn supported population growth. In time, cities developed trade networks with one another, exchanging goods and information. Agriculture, in short, transformed human society in early Europe, prompting technological innovations such as the plow and the wheel, causing changes in political systems and leading to inventions such as weaving and the making of pottery. The story-telling and religious traditions of early European cultures frequently feature themes that indicate agriculture's crucial role in sustaining human life.

ORIGINS

In the development of prehistoric culture, knowledge of agriculture marks the transition from the **Mesolithic Period** to the **Neolithic Period**. The earliest inhabitants of Europe, including the Neanderthal and Cro-Magnon peoples, depended on hunting to provide meat as well as other materials for clothing, shelter, tools, and fuel sources. Gathering wild nuts, grains, roots, berries, seeds, and other vegetation also contributed to their diet. These hunting and gathering practices persisted throughout the Ice Age. After the last glaciers receded, between 12,000 and 10,000 B.C.E., gradual climactic changes in Europe eliminated many of the animals and plants that were once available as food. At the same time, improvements in tools and weapons for hunting might have helped deplete game, causing tribes to look to alternate food sources.

Agricultural practices first appeared in southern Europe around the Mediterranean Sea, introduced through contact with the peoples of the Near East. Starting around 8000 B.C.E., groups of people living in Mesopotamia began to migrate north through Anatolia (modern-day Turkey) to the Aegean Sea, bringing discoveries such as farming and animal domestication with them. On the Mediterranean island of Crete and parts of Greece, signs of agriculture appear definitively around 6000 B.C.E.

Scholars believe that the people of ancient Rome worshiped Ceres, the goddess of agriculture. As seen in this terra cotta sculpture, animals were sacrificed for her each spring during the festival of Ambarvalia to ensure fertility of the land. (Erich Lessing/Art Resource, NY)

Agriculture spread through Europe following two major routes. From the Balkans, farming methods spread along the Danube into the Rhine valley, extending from what is now Hungary and Bulgaria to Poland, Germany, and the Netherlands. A second route of transmission along the Mediterranean coast brought agriculture to Spain, France, and the British Isles. Between 6000 and 4500 B.C.E., permanent settlements emerged throughout Europe as many tribes gave up semi-nomadic lifestyles to tend fields.

Agriculture and Innovation

The farming tools of the Neolithic Period were simple. Using a stone axe called an adze, farmers could make hoes out of wood or sharpen digging sticks used to plant seeds. Stone knives or sickles helped with harvesting the crops. By 4000 B.C.E., wooden plows were in use to prepare soil for planting. Oxen or other draft animals harnessed to the plow helped make the farmer's task easier, particularly in the denser soils of northern Europe.

Other inventions accompanied the introduction of agriculture. The wheel first appeared in Europe during the Neolithic Period, used by potters to make clay jars and other food containers. Agriculture also spurred the invention of **textiles**, as people learned to weave flax and other fibers into fabric. The invention of spinning turned wool from sheep into yarn or thread, which could then be woven into clothing, blankets, and other coverings.

Farming practices also required early Europeans to keep a calendar so they could anticipate when to plant, when to harvest, and when to expect the rainy season or other changes in the environment. Because the changing phases of the moon could be easily observed, many early societies developed lunar calendars that recorded the phases of the moon and provided farmers with a reliable way to predict the change in seasons.

Agriculture and Social Changes

As the very basis of human sustenance, farming often held religious significance. The grave goods and **artifacts** left behind by prehistoric peoples suggest that early Europeans worshipped mother goddesses who were responsible for the fertility of the earth and its people. The Germanic groups honored Freya, while residents of ancient Greece worshipped Demeter, the goddess of grain. The Romans also venerated a goddess of agriculture named Ceres. Seasonal **rituals** and annual festivals paid tribute to these patrons of fertility in the hope that winning the goddess's approval would ensure a favorable growing season and a fruitful harvest.

Agricultural societies also developed economic and political structures based on the ownership of

LINK TO PLACE

Lunar Calendars in Europe and in Asia

The calendar, used to track the passing of time, gives a society a sense of its history and often takes on religious and spiritual significance. Ancient cultures observed the sky and used the motions of the sun and moon to define lengths of time in days, months, and years, which not only told farmers when to plant and harvest crops but also marked festival days and other memorable events. The earliest calendars were lunar calendars, often beginning a new month with the new moon.

The ancient Chinese were precise astronomers and built some of the first astronomical observatories. The first Chinese lunar calendars appear as incisions on **oracle** bones, dating to the late second millennium B.C.E., which seem to record a twelve-month year. The traditional Chinese calendar begins with the year 2637 B.C.E. and names each month after a sign of the zodiac. By 841 B.C.E., the Chinese calendar had become standardized. The ancient Hebrews and Hindus also used lunar calendars. Muslims still employ a lunar calendar for determining the dates of religious holidays and festivals, although the daily secular routine in Muslim lands follows the solar calendar.

In Europe, particularly in the British Isles, **megalith** structures, such as Stonehenge, once thought to have purely ceremonial purposes, may have functioned as observatories. Some scholars speculate that these large stone circles served as enormous calendars, designed to identify the solstice and other days that marked the passing of the year.

land. In both Celtic and Germanic societies, as well as in early Greece and Rome, the majority of people belonged to the class of landowners or farmers. Those who owned the most land had the most influence, and kings or chieftains were often the richest individuals in their society. Before the invention of currency, early Europeans bartered with the goods they had grown or manufactured, and cattle literally represented wealth. Thus, tales of cattle raids in Celtic, Germanic, and Greek myth reflect the means that enterprising warriors used to increase their fortunes and thereby their influence. A warrior class also developed in agrarian societies where it was important to defend farmland or forcibly win new lands when famine, war, or disease drove tribes from their homes.

AGRICULTURE AND EARLY CIVILIZATIONS

Methods of food production played a major role in shaping the way early Europeans worked and lived. Environmental factors such as soil and climate naturally determined what types of crops would grow. Fruits and vine crops thrived in southern Europe, while more hardy plants such as legumes and root vegetables could be grown in colder climates. The more limited growing seasons of central and northern Europe made it necessary to find ways to store food through the longer winters.

Farming among the Celts and Germanic groups did not change significantly during the **Iron Age**. In addition to cereal crops, such as wheat, barley, oats, and rye, early farmers planted peas, beans, and lentils. They harvested the grain with a sickle and roasted it slightly to keep it from spoiling during storage. When needed, grain was threshed to separate the kernels from the stalk and then winnowed to remove the outer hull, or chaff. A hand grindstone crushed the grain into flour that could be made into cakes or bread. With the discovery of yeast, fermented beverages, such as beer, became a staple of the diet. The types of tools found in graves dating to the Iron Age suggest that the tasks of preparing, grinding, and preserving cereals were assigned to women, while men presumably plowed the fields.

Men, women, and children worked together to maintain the field and harvest the crop.

In ancient Greece and Rome, growing urban populations led to the formation of large farm estates that could produce sufficient food. Slavery developed as a system to supply labor for the fields and grain mills. Although crop yields were relatively small and most activities had to be done by hand, Roman farmers also proved inventive under pressure to sustain the growing empire. Borrowing agricultural techniques from the Greeks and Etruscans, Roman engineers improved techniques to terrace fields, provide irrigation, and drain wetland to make more land available for planting.

Roman farming methods included crop rotation and the practice of leaving a field fallow, or unplanted, to help restore the soil. Farmers would sometimes sow a crop of alfalfa or legumes to replenish nutrients and make the soil ready for another cereal crop the next year. In addition to crops that could be exported to the cities, farmers grew crops to feed their livestock, among them turnips and beans. The Romans practiced selective breeding among their animals to provide the best beef, pork, and veal for their tables. Many agricultural techniques employed by the Romans remained in use in Europe throughout the Middle Ages.

See also: Archeological Discoveries; Cro-Magnon Peoples; Culture and Traditions; Etruscan Civilization; Greece; Myths, Epics, and Sagas; Neanderthal Peoples; Religion; Society; Technology and Inventions; Tools and Weapons.

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Alexander III, the Great (356–323 B.C.E.)

Ruler of ancient Macedonia whose conquests in Europe, Persia, and Asia created the largest empire in the ancient world. At the age of 20, Alexander ruled all of Greece; at 25, he conquered the Persian Empire. When he died in Babylon at the age of 32, he ruled over numerous peoples and would be remembered as one of the most celebrated figures of **classical antiquity**.

In 359 B.C.E., Alexander's father, Philip II, became king of Macedonia and began to build a military to defend against the warlike neighboring kingdoms of Illyria and Thessaly. In 357 B.C.E., Philip married Olympias, a princess of Epirus, a realm to the south. The family of Olympias claimed descent from Achilles, a Greek hero of the Trojan War, and Olympias supposedly told her son, Alexander, that he was the offspring of Zeus, chief of the Greek gods. Alexander is said to have believed in his own divinity and this might have made him fearless.

ASCENSION

Alexander grew up at the court of Pella, the royal capital, and his father brought the philosopher Aristotle (384–322 B.C.E.) from Athens as tutor. In addition to training in sports and singing, Alexander received lessons in science, natural history, philosophy, law, statecraft, and literature.

In 340 B.C.E., before leaving on a military campaign in Asia Minor (modern-day Turkey), Philip made Alexander his regent, to rule in his absence. During Philip's absence, Alexander led a Macedonian army against invaders from nearby

Thrace. He demonstrated his military prowess by repelling the invasion and then assaulting and capturing the enemy's city, which he renamed Alexandropolis. Father and son fought together to subdue Thrace, extending the boundaries of their kingdom.

In 339 B.C.E., they turned to the city-states of Greece, which had formed an anti-Macedonian League. A decisive victory at the Battle of Chaeronea the following year brought all of Greece except for Sparta under Philip's control. He next declared war on Persia. In 336 B.C.E., however, Philip was assassinated in the middle of a festival celebrating the marriage of his daughter Cleopatra. Alexander took over the kingdom, the army, and the plans for invasion.

CONQUESTS

Already seasoned in war, the new king Alexander moved immediately to establish his supremacy. He marched into Thessaly, where he was recognized as archon, or head of the government. He went on to subdue Thrace, Illyria, and tribes of rebellious Celts living north of Macedonia. In 334 B.C.E., he moved south to subdue a Greek rebellion which had been encouraged by the Persian king, Darius III (r. 336–330 B.C.E.). With a large swath of southern Europe under his control, Alexander resolved to take his army east and fulfill his father's dream of conquering the mighty empire of Persia.

From 334 to 333 B.C.E., Alexander marched through the western provinces of Asia Minor, taking town after town from its Persian governors and installing leaders loyal to him. In Halicarnassus he returned Queen Ada to her throne, and in gratitude she adopted Alexander as her son. He went on to the provinces of Phrygia and Bithynia. In Bithynia, Alexander untied the famous Gordian knot, which reportedly could only be untangled by the supreme ruler of Asia, by cutting it with his sword. Moving south, Alexander finally confronted the amassed forces of Darius at Issus.

Alexander's strategies at the battle of Issus against the larger army of the Persians showed his genius as a military commander. The defeated Darius fled, leaving Alexander not only in possession of

LINK TO PLACE

The Spread of Hellenistic Culture

The ancient Greeks referred to themselves as *Hellenes*, and the term **Hellenistic** came to describe the culture of Greece from the time of Alexander's reign into the first century B.C.E. Through his conquests, Alexander brought Greek art, architecture, language, religion, philosophy, and political ideals to parts of Europe, Egypt, and Asia. He established more than 70 towns, many of them named after him. Some served as defensive outposts, whereas others, such as Antioch, Pergamum, and Palmyra, became large commercial centers and seats of learning. Alexandria, in Egypt, flourished as a center of learning and trade for several centuries, with Greek citizens and a Macedonian **monarchy**; until the fall of the Roman Empire, it was one of the richest and most important cities in the ancient world.

As he built or refortified towns, Alexander improved defenses and introduced Greek styles of architecture in civic buildings, such as theaters, temples, libraries, and administrative complexes. With the introduction of the Greek language, the citizens of Alexander's empire gained access to the great works of art, poetry, and drama produced during the **classical** period in Greece. A shared language and common currency allowed the peoples of Alexander's empire to trade and communicate with one another in expanded ways. Alexander also introduced Greek customs and social ideals, which survived the dissolution of his empire after his death. The Ptolemy dynasty in Egypt, the Seleucid dynasty ruling Syria and parts of Persia and Asia Minor, and the Antigonid dynasty in Macedonia all retained their Greek culture until their kingdoms were, in turn, conquered by Rome.

the victory but also of Darius's family, who had been camped nearby. Alexander's gracious treatment of the Persian royal family showed a generous side of his nature; however, his brutal treatment of the citizens of Tyre, who resisted his invasion, demonstrated a ruthless side of his personality. When he entered Egypt, where he was crowned pharaoh in 332 B.C.E., Alexander showed his respect for the Egyptian gods by visiting the sacred shrine at the oasis of Siwa. The **oracle** there purportedly affirmed Alexander's belief in his divine descent.

In 331 B.C.E., Alexander's armies again faced the forces of Darius at Gaugamela (located in what is now northern Iraq), and again Darius fled. Alexander took possession of the rich Persian cites of Babylon, Susa, and Persepolis. He moved east after the fleeing Darius only to find that the Persian king had been assassinated by his own men. Pursuing Darius's assassins, Alexander arrived in Sogdia and there married a noblewoman, Roxane, in 327 B.C.E. Roxane accompanied Alexander on his next enterprise: conquest of India.

LEGACY

Alexander supposedly had planned to travel to the southern tip of India and from there sail back to Egypt. After crossing the Indus River, Alexander first defeated King Omphis (Ambhi) of Taxila and then King Porus, who both subsequently became his allies. Although Alexander's ambition was unlimited, his resources were not. Moving further into India, Alexander met with fierce resistance from the weather, from rebels incited by the Brahmin priests, and from his own men. Exhausted, failing in their courage, and having not seen their homes in more than eight years, Alexander's troops stopped at the Beas River and refused to go further. For once, Alexander's persuasive powers and inspiring spirit failed to move his men, and he agreed to turn back.

Alexander returned to Babylon in 323 B.C.E. While making plans to invade Arabia, Alexander fell ill from a fever and subsequently died. The fever might have been due to disease or to heavy drinking, though some suspected poison.

At the time of his death, although he was not yet 33, Alexander was already a legend. His empire stretched over three continents, and his subjects numbered in the millions. Although his wife Roxane gave birth to a son a few months after Alexander died, Alexander's legacy was not to be an empire. Rather, his influence persisted in the spread of **Hellenistic** culture throughout his conquered territories. After his death, Alexander's legend continued to grow, and later conquerors, such as Julius Caesar (100–44 B.C.E.) and the emperors of Rome, respected and strove to emulate his accomplishments.

See also: Aristotle; Caesar, Gaius Julius; Greece; Myths, Epics, and Sagas.

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Archeological Discoveries

Archeology pursues the study of the past using material remains to draw conclusions about the culture and traditions of ancient peoples. By definition, history properly begins with the development of writing. Archeology, in contrast, supplies knowledge about prehistoric European cultures by recovering and studying evidence in the form of settlements, personal **artifacts**, burial practices, and human remains.

ARCHEOLOGICAL DISCOVERIES

ca. 450,000 B.C.E. First signs of Acheulian culture in Europe

ca. 130,000 B.C.E. Emergence of Neanderthal peoples in Europe

ca. 100,000 B.C.E. Beginning of Middle Paleolithic Period in Europe

ca. 40,000 B.C.E. Beginning of Upper Paleolithic Period in Europe; emergence of Cro-Magnon peoples (modern *Homo sapiens*) in Europe

ca. 30,000 B.C.E. Signs of Neanderthal inhabitation in Europe decline

ca. 17,000 B.C.E. Cave paintings at Lascaux created

ca. 12,000 B.C.E. End of last Ice Age; glaciers over Scandinavia begin to melt

ca. 6000 B.C.E. Agricultural practices in use around Mediterranean

ca. 4500 B.C.E. Spread of agriculture through central Europe

ca. 3000 B.C.E. Bronze implements in use around Mediterranean

ca. 1900 B.C.E. Building begins on Stonehenge in England

ca. 1450 B.C.E. Mycenaean Greeks conquer Minoans on Crete

ca. 750 B.C.E. Ironworking techniques develop in central Europe

C.E. 79 Eruption of Mt. Vesuvius buries towns of Pompeii and Herculaneum

C.E. 1748 Excavations begin in Italy revealing buried towns of Pompeii and Herculaneum

C.E. 1846 Discovery in Hallstatt, Austria, of Celtic cemetery dating between 800 and 500 B.C.E.

C.E. 1856 Neanderthal skull found in Neander Valley (Neander Tal) in Germany

C.E. 1857 Celtic artifacts dating between 400 and 100 B.C.E. found at La Tène, Switzerland

C.E. 1868 Cro-Magnon skeletons found at Les Eyzies, France

C.E. 1870 German antiquarian Heinrich Schliemann begins excavations at ancient city of Troy

C.E. 1879 Cave paintings dating to around 13,000 B.C.E. found at Altamira, Spain

C.E. 1900 English archeologist Sir Arthur Evans excavates the Minoan palace at Knossos, Crete

C.E. 1939 Excavation of Anglo-Saxon ship burial at Sutton Hoo, England, dating to ca. C.E. 600

C.E. 1940 Cave paintings at Lascaux discovered

C.E. 1977 Tomb of Philip II of Macedonia (382–336 B.C.E.), father of Alexander III, the Great, discovered in northern Greece

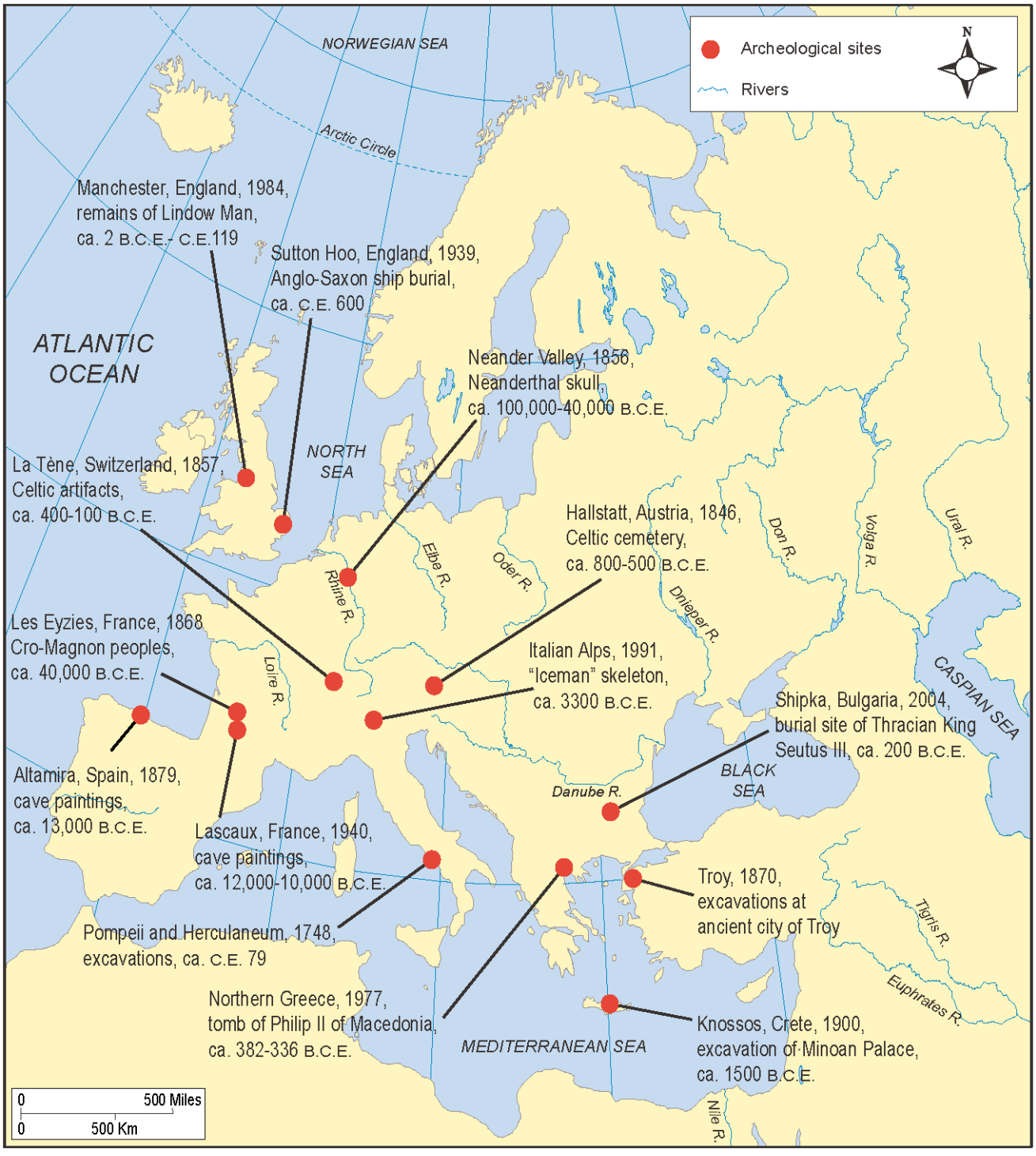
C.E. 1984 Remains of Lindow man, who died between 2 B.C.E. and C.E. 119, retrieved from a bog named Lindow Moss near Manchester, England

C.E. 1991 Frozen "Iceman" skeleton dating ca. 3300 B.C.E. found in Italian Alps

C.E. 2004 Burial site of wealthy Thracian King Seutus III who ruled ca. 200 B.C.E. found near Shipka, Bulgaria

MAJOR ARCHEOLOGICAL SITES OF ANCIENT EUROPE

Unearthed settlements and burial sites provide the most valuable records of how the peoples of ancient Europe lived. The graves of kings, such as the tomb of Philip II of Macedonia (382–336 B.C.E.), father of Alexander III, the Great (356–323 B.C.E.), often contain the treasures of an empire or civilization. Equally valuable are the finds in ordinary cemeteries such as the weapons, brooches, pottery, and bronze vessels found in the Iron Age Celtic burial ground at Hallstatt, Austria.



TURNING POINT

Loughcrew

Spread over a series of hills, the cluster of monuments at Loughcrew, in County Meath, compose one of the largest **Stone Age** sites in Ireland. Built between 4000 and 3000 B.C.E., the monuments consist of human-made mounds, or tumuli, pillar stones, a ring fort, and more than 30 cairns or passage graves, ranging from 55 feet (17 m) to 180 feet (55 m) in diameter.

In most of the cairns, a stone passage extends up to 28 feet (8.5 m) in length into a set of interior chambers laid out in the shape of a cross, or cruciform, with side chambers connected to the main room. Large stones called corbels support a ceiling high enough, in some cases, to allow a person to enter. Outside, the mound of earth covering the cairn is often surrounded by a ring of large boulders called curbstones. The Hag's Chair, one of the 37 curbstones encircling Cairn T, is six feet (1.8 m) high and weighs 10 tons.

Many of the stones both within and outside the cairns contain decorations and symbols suggesting that the site functioned as an enormous calendar. For instance, on the two days of the year when the number of daylight hours approximately equals the hours of night—the vernal (spring) and autumnal equinoxes—a ray of sunlight shines through the passage into Cairn T and illuminates the symbols carved onto the large flat backstone. Smaller cairns receive sunlight on the solstices, both the longest and shortest days of the year, as well as the cross-quarters days that fall between the solstices and equinoxes.

In addition to ceremonial and astronomical functions, the complex at Loughcrew also served as an ancient burial ground. Fragments of bone blades, glass beads, and cremated human remains suggest the cairns may have been in use as late as the first century C.E.

Archeological discoveries throughout modern-day Europe provide valuable information about the **cultural history** of little-documented ancient groups, such as the Minoans or Etruscans, as well as about preliterate societies, such as the **Iron Age** Celts or Germanic groups. Even well-documented cultures such as those of Greece and Rome emerge more fully to the modern eye when archeological finds supplement the historical record.

THE NATURE OF ARCHEOLOGICAL EVIDENCE

Archeologists searching for clues about the nature of prehistoric European peoples typically focus on burial or settlement sites. In many cases, burials preserve important cultural artifacts, such as jewelry or household goods, that otherwise become lost or destroyed in the course of daily life. Easy-to-find burial sites historically have been robbed before archeologists could reach them, as was the case with the passage graves in Ireland and the *tholos* graves of the Etruscans. Excavators at the burial mounds at Sutton Hoo in Suffolk, England, also initially found nothing of interest. Digging a bit further, however, excavators found an intact ship filled with treasures belonging to its owner, an Anglo-Saxon king who ruled in the seventh century C.E. The find illuminated a period of English history formerly thought to be a dark age.

Less spectacular burials can still be treasure troves in terms of information. Household items, such as drinking vessels; personal items and luxury goods, such as clothing and jewelry; and the tools and weapons buried as grave goods in the Celtic cemetery in Hallstatt, Austria, discovered in 1846 C.E., tell historians how members from all levels of the society lived. Settlements can be more difficult to locate, particularly since inhabitants of an area tend to build on top of previous constructions. For example, only recently have excavations at Dublin, Ireland, revealed the port founded by the Norsemen in C.E. 917.

DISCOVERING PREHISTORIC EUROPE

Archeology emerged as an academic discipline in Europe in the nineteenth century when some researchers began to use scientific methods to analyze and classify the past. Before this time, people with an interest in the past were considered antiquarians or hobbyists. Many antiquarians pursued archeology not for the sake of knowledge but in hopes of unearthing buried treasures. In addition, most Europeans believed in some form of Christianity, which taught that the world was only a few thousand years old. Because of this **historical understanding**, few Europeans imagined the existence of more ancient cultures or peoples.

During the Enlightenment of the seventeenth and eighteenth centuries, however, a greater willingness to question traditional beliefs—as well as increasing knowledge about the rest of the world—spurred interest in Europe's past. **Historical inquiry** and **historical research** began to replace unquestioning acceptance of Christian **doctrine** and the word of previous authorities. In C.E. 1748, excavations began at Herculaneum and Pompeii, two thriving Roman towns obliterated by the volcanic eruption of Mount Vesuvius in C.E. 79. The ruins discovered there captured the modern European imagination, reviving interest in the ideals and achievements of **classical** Greece and Rome.

As archeology developed into a profession, better techniques for finding, analyzing, and preserving artifacts developed. In the C.E. 1830s the Danish archeologist C.J. Thomsen adopted the three-age method to describe the development of human culture, classifying stages of progress in terms of the chief material used for weapons and other implements. He thus organized prehistoric Europe into the **Stone Age**, the **Bronze Age**, and the Iron Age. In addition, archeologists often name cultures that share similar tools, building methods, pottery, burial rites, or artistic styles by the place where these artifacts were first discovered. In this way, La Tène, Switzerland, gave its name to a distinctive style of Celtic art, and finds of tool-making implements like those found at Le Moustier in France are said to belong to the Mousterian culture.

Old Stone Age

Historians further classify the Stone Age or **Paleolithic** period into three periods distinguished by the development of tool-making technology and new methods of subsistence or food-gathering. In Europe, the Lower, Middle, and Upper Paleolithic periods cover the time of the first signs of human habitation to the close of the last Ice Age. This concept of **periodization**, or dividing history into distinct **eras**, is one of the key contributions of modern archeology. It enables scholars to trace **patterns of continuity and change** over large sweeps of time, to gain a sense of the pace and direction of human development.

During the Lower Paleolithic Period in Europe, between 450,000 and 100,000 B.C.E., the pebble and flake tools that mark the Acheulian culture were in use. The culture is named for the French town of Saint-Acheul, where in the C.E. 1830s and 1840s a quantity of stone tools were found alongside the bones of animals known to be extinct. The find confirmed suspicions that the world had a history far older than previously thought. Scholars now suspect that these first Europeans migrated from homelands in Africa and Asia.

The archeological finds concerning Neanderthal peoples, who form part of the Mousterian Culture, largely date to the Middle Paleolithic Period, between 100,000 and 40,000 B.C.E. In C.E. 1856, the discovery of a skull and partial skeleton in a cave in the Neander Valley in Germany led its finders to conclude that they had found a type of human predating the modern *Homo sapiens*. They named this branch of the human family *Homo neandertalensis*, or Neanderthal.

In Europe, the Upper Paleolithic Period began around 40,000 B.C.E. with the emergence of Cro-Magnon peoples, the first modern humans. Cro-Magnons were named for the cave near Les Eyzies in the Dordogne region of France where the fossilized remains of these modern humans were found in C.E. 1868. A variety of human cultures emerged

In 1856, scientists recognized a skull and partial skeleton found in the Neander Valley in Germany as a different species of human, or Neanderthal man, dating to 40,000 B.C.E. (Bildarchiv Preussischer Kulturbesitz/Art Resource, NY)

in Europe during the Upper Paleolithic Period, as bone and antler began to supplement stone for use in making tools, and better techniques for building shelter and making clothing evolved. Traces of communal hunting and fishing activities suggest that these ancestors of modern Europeans had developed a cooperative sort of society. Cro-Magnon peoples also left behind rock art, decorative items of horn and bone, and the elaborate cave paintings depicting animals now extinct.

Middle and New Stone Ages

Beginning around 10,000 B.C.E., the **Mesolithic Period** witnessed a revolution in the human settlements of Europe. With the end of the last Ice Age and the subsequent changes in climate and food resources, fishing and other food-gathering activities began to supplement hunting. Finds from various Mesolithic sites throughout Europe show that the gradual domestication of animals and plants led to the establishment of agriculture, and the invention of pottery led to better food storage techniques. The tendency toward permanent human settlements provides archeologists with better records of daily life. Refuse piles, or kitchen middens, which were heaps of food scraps and discarded household objects, such as those at the Ertebolle site in Denmark, leave clues to the diet and lifestyle of the inhabitants of such sites.

The introduction of agriculture customarily marks the beginning of the **Neolithic Period**, which took place at various times in different regions of Europe. Farming communities developed in parts of Greece and Crete as early as 6000 B.C.E., while the bulk of central and western Europe did not adopt agriculture until around 4500 B.C.E. Along with farming practices, technologies for manufacturing potteries and **textiles** significantly changed the civilizations of early Europe.

Bronze and Iron Ages

The development of metalworking techniques to make implements and weapons marks a turning point in various European cultures and very often accounts for why one group gains supremacy over another. In several early cultures around the Mediterranean, experimentation with copper led to the

discovery that smelting tin into an alloy of copper resulted in a stronger metal—bronze—thus initiating the Bronze Age. Bronze implements were used in southern and southeastern Europe around 3000 B.C.E. but did not appear in central Europe until 1800 B.C.E. They reached Scandinavia even later, around 1500 B.C.E.

Ironworking techniques entered eastern Europe around 1000 B.C.E. The discovery of the Hallstatt cemetery, with more than 1,000 graves, yielded proof that the Celts of central Europe had learned to work iron as early as 800 B.C.E. Celtic weapons, implements, and artistic creations dating to between 800 and 500 B.C.E. are thus classified as belonging to the Hallstatt culture. Celtic migrations as well as the movements of other Indo-European peoples spread ironworking techniques to all parts of Europe.

The Iron Age is the latest of the time periods used to describe prehistoric Europe. The rise of literate civilizations in Greece and Rome around 750 B.C.E., and the spread of their culture and learning to the preliterate societies they contacted, ended the European Iron Age and ushered in the period of recorded European history. Even when historical documents exist, however, the work of archeology provides important knowledge about the ways early Europeans lived.

ARCHEOLOGY AND THE HIDDEN PAST

Once the excavations of Pompeii proved that archeology could supplement recorded history, European archeologists began to wonder if there might be a historical basis for stories preserved in the myths, epics, and sagas of various cultures. For example, antiquarians had long searched for evidence to prove that the Trojan War of the Greek poet Homer's epics actually happened. In C.E. 1870, the German businessman Heinrich Schliemann decided to prove that the city of Hissarlik, in Turkey, was the site of ancient Troy. Schliemann uncovered not one ancient city but several, all built on the same site over a period of hundreds of years. Archeologists generally agree that one of the cities Schliemann excavated was the Troy of Homer's epic, although not the one that Schliemann believed to be Troy at the time of his discovery.

Similarly, the British archeologist Sir Arthur Evans traced Greek myths about King Minos to the island of Crete and began excavations at Knossos in C.E. 1900. His discovery of an enormous Bronze Age palace at Knossos proved that the kingdom once thought legendary had actually existed. In C.E. 1977, a Greek archeologist discovered the tomb of Philip II of Macedonia (382–336 B.C.E.), which gave scholars further insight into the life of his famous son, Alexander III, the Great (356–323 B.C.E.). In C.E. 2004, archeologists excavating the rich tomb of King Seutus II, who ruled ca. 200 B.C.E., learned much about the ancient kingdom of Thrace, now modern-day Bulgaria.

Perhaps the most romantic stories about archeological discoveries are those that are entirely accidental. The cave of Lascaux, with its treasure of prehistoric paintings, surfaced in C.E. 1940 when four French teenagers out for a walk lost their dog into an opening beneath the roots of a fallen tree. Although scholars immediately understood the importance of the Lascaux find, such was not the case in C.E. 1879 when a small girl playing in a cave near Altamira, Spain, discovered paintings on the ceilings. Only a few believed at the time that the art could be the work of early Europeans; most assumed that the paintings were a hoax.

In a different accident in C.E. 1983, police looking for a recent murder victim were led to an English bog named Lindow Moss where, in the next year, workers digging for peat found the remarkably preserved body of a Celtic man who died between 2 B.C.E. and C.E. 119. In C.E. 1991, hikers in the Italian Alps discovered the frozen body of a man who died ca. 3300 B.C.E. Along with the careful and systematic work of trained scholars, continued archeological discoveries throughout the region, some carefully planned and others accidental, serve to broaden the modern understanding about ancient European cultures and traditions.

See also: Art and Architecture; Cave Paintings; Celts; Culture and Traditions; Language and

Writing; Minoan Civilization; Pompeii; Religion; Technology and Inventions; Tools and Weapons; Trojan War.

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Aristotle (384–322 B.C.E.)

Greek philosopher whose work had a profound and enduring influence on many fields of study, including art, poetry, **rhetoric**, theology, ethics, the natural sciences, politics, and mathematics. He tutored Alexander III, the Great (356–323 B.C.E.), and ran an influential school in Athens, Greece. Aristotle left no area of human knowledge unexplored, and his writings formed the foundation of European thought for centuries to follow.

Aristotle's father, Nicomachus, was physician to the Macedonian king Amyntas II. At age 17, Aristotle went to Athens to study at the Academy of Plato, a leading Athenian philosopher.

Aristotle remained at the Academy until Plato's death in 347 B.C.E. In 338 B.C.E., Aristotle returned to Macedonia to tutor the young Alexander. Four years later, he founded his own institution in Athens, the Lyceum, informally known as the Peripatetic School because Aristotle often conducted lectures while walking through the garden. His teaching library, with its collection of maps, manuscripts, and **artifacts**, became a model for libraries elsewhere.

GREAT LIVES

Plato

Plato was a poet and philosopher who lived in Athens, Greece, between ca. 427 and 347 B.C.E. He was born to an **aristocratic** family and received his education through extensive reading, travel, and consulting with the educated people of his day, including the Athenian philosopher Socrates. Plato founded the Academy, which survived for 900 years.

Plato's writings show his interest in knowledge and his concern with correcting the political and social abuses he saw in his society. He believed that every part of the natural world followed certain principles ordered by a higher realm of Ideals, and that these Ideals could be discovered through thoughtful examination and inquiry. Modeled on the Socratic method of inquiry, Plato's *Dialogues* address topics ranging from art, love, and the soul to logic, law, and politics. In the *Dialogues*, Plato does not offer a set of **doctrines** but rather presents a series of opposing ideas and encourages readers to draw their own conclusions. Along with those of his student Aristotle, Plato's ideas about the nature of existence form the foundation of intellectual thought in the Western world.

After Alexander's death, anti-Macedonian feeling ran high in Athens, and Aristotle was compelled to leave the city to avoid a charge of impiety, the same accusation that had led to the death of the famed Athenian philosopher Socrates. Aristotle died a year later from a digestive disease.

The works of Aristotle survive as lecture notes compiled by his students. In general, Aristotle's views tend to avoid extremes and instead favor a sense of balance. Aristotle believed that anything humanly knowable could be arrived at through perception and logic. In his *Physics*, he applies a systematic method to discovering the laws that govern the natural world, and in *Metaphysics*, he uses logic to contemplate the nature of truth. In his book *On the Soul*, Aristotle asks the question of what animates all living beings.

In his works, Aristotle continuously explores the nature of human understanding and moral responsibility. His *Ethics* opens with the declaration that all human endeavors—every inquiry, every art, every action and choice—should work toward a common good. Aristotle taught that achieving virtue is more important than gathering material possessions and that virtue is achieved through moderation in all things. Humans attain happiness when they can balance reason with the pursuit of their desires.

In his *Poetics*, Aristotle argues that literature is beneficial because it allows a catharsis, or expression of extreme emotion. In his treatises on politics, he examines the origins and structures of the state and agrees with Plato that division of labor is the foundation of society. Unlike Plato, however, Aristotle believed in private property and recommended constitutional government as the most practical and beneficial political system, two ideas fundamental to the democratic countries of the western world. The ideas in these treatises provided a starting point on which later politicians and philosophers built. Aristotle is still regarded as one of the greatest thinkers of **antiquity**.

See also: Alexander III, the Great; Art and Architecture; Greece; Society.

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Art and Architecture

Art and architecture provide insight into the values, customs, and daily life of the peoples of ancient Europe. Building styles and functions reflect how early European societies were organized and sustained, while various types of ancient artwork, in the form of literature, music, and visual arts, such as painting and sculpture, reveal how individuals understood and attempted to enhance or imitate nature and decorate the world around them.

PREHISTORIC ART AND ARCHITECTURE

Much of the art and architecture of ancient Europe had a practical as well as decorative function. What survives serves as a valuable historical record that illustrates many of the beliefs and daily routines of ancient peoples. In modern times, archeological discoveries continue to uncover amazing **artifacts** that shatter the myth that prehistoric peoples were not capable of complex thought.

Stone Age Art and Architecture

In the Chauvet cave in the Ardèche valley in southern France, paintings from as early as 30,000 B.C.E. depict lions, panthers, mammoths, cave bears, and rhinoceroses. More than a set of visual instructions

This mosaic of Dionysius or Bacchus, the god of wine, appearing in a second-century C.E. Roman villa in Corinth, Greece, exemplifies how the Romans incorporated the art, architecture, and religion of ancient Greece into their culture. (Louie Psihoyos/Science Faction/Getty Images)

for hunting, these paintings were long thought to have a ceremonious function, perhaps serving in magical **rituals** designed to ensure a good hunt. In addition, archeologists have discovered many small figurines of stone, bone, or clay dating to the Upper **Paleolithic Period** (ca. 40,000–10,000 B.C.E.), including several statuettes called Venuses that might have a religious significance. **Petroglyphs** carved into rock faces dotted the landscape of early Europe, perhaps serving as a means of communication as well as an attempt to beautify what was largely, until the end of the last Ice Age, a tundralike steppe, a harsh and often featureless environment.

Several peoples living in Western Europe in the **Neolithic Period** built enormous stone structures called **megaliths** that possibly served as tombs, holy places, or calendars for observing the passing of time. These stone constructions, which appear as single pillars or groups of stones set in circles, involve huge slabs of stone, some weighing up to 20 tons (18 metric tons). In some places the circles were covered with a mound of earth called a *tumulus* (plural: *tumuli*). The tumulus at New Grange, Ireland, and the ring of standing stones at Stonehenge near Salisbury, England, are two of the most impressive examples of megalith structures.

Bronze Age Art and Architecture

Near the beginning of the **Bronze Age**, around 3000 B.C.E., civilization developed on the Cyclades, islands in the Aegean Sea. Cycladic **artisans** produced silver jewelry, pottery with geometric designs, and small marble sculptures imitating the human form. Nearby, the art of the Minoan civilization on Crete, which developed after 3000 B.C.E., reflects a love of beauty and a sense of natural order. Pottery decorated with

naturalistic scenes and small statuettes, many of women holding snakes, hint at the religious as well as everyday life of this lost culture. Minoan artisans knew advanced techniques for making metalwork of gold and copper, while frescoes, paintings made on wet plaster as it dried, decorated the walls and ceilings of the palaces at Knossos, Mallia, and Phaistos.

The architecture of these buildings demonstrates how the palace was central to Minoan government. The palace's central courtyard opened onto a series of buildings that served as living quarters, an administrative complex, gathering areas, and storage rooms. Multiple stories, exterior staircases, and columns helped divide space within the palace. When earthquakes or other disasters wrecked a palace, workers built on the remains, giving the new building the look of a labyrinth.

The Mycenaean culture developing on the Greek peninsula incorporated Minoan influence into its pottery and metalwork but reflected the society's militaristic orientation. Palace frescoes and the scenes painted on large storage vessels, or *kraters*, often involve warfare. The Mycenaeans built fortified towns where both the art and the defensive architecture were designed to intimidate potential invaders. For example, visitors to Mycenae after 1330 B.C.E. would have passed through the Lion's Gate, guarded by massive lions carved in stone.

GREEK ART AND ARCHITECTURE

Art produced in Greece is classified by period, each characterized by a particular style of decoration. In the Geometric period (ca. 900–750 B.C.E.), vases display patterns with lines and shapes similar to the designs found in earlier Minoan, Mycenaean, and Phoenician cultures. Greek temples, the best examples of surviving Greek architecture, were made of wood and had two main rooms, a smaller entry chamber and a larger audience hall that housed a statue of the god to whom the temple was dedicated. In the periods that followed, Greek art and architecture evolved to have a beauty and refinement that other European cultures admired and strove to emulate.

Archaic Age

Examples of Greek art from the Archaic Age (700–480 B.C.E.) include vases depicting mythological stories, with figures of the gods painted in either red or black, and life-sized *kouros* or *kore* sculptures of male and female figures. Homer composed his epic poems and Sappho wrote her lyric verse during this time. In the Greek temples, limestone replaced wood as the main construction material, although the basic temple shape remained a long, rectangular building surrounded by a porch or colonnade. Rows of columns bore the weight of the clay tiles of the ceiling. The Parthenon in Athens is the most famous of the Greek temples.

Classical Age

Greek art of the **Classical** Age (480–323 B.C.E.) shows a greater attention to the principles of proportion, balance, and harmony also reflected in the architecture. Figures of classical sculpture exhibit more natural features and expressions, capturing an energy of movement quite different from the archaic statues. This detailed consideration of the human form was inspired by the philosophy, held by Aristotle (384–322 B.C.E.) and others, in which humans held a superior place in the natural order. Greek pottery, metalwork, and painting, which often depicted shapes or activities familiar in everyday life, reflected an appreciation both for human comforts and for the beauty of nature.

During the classical period, sometimes called the Golden Age, Greek poetry and theater evolved from their roots in religious festivals into complex and powerful art forms. Dramatists such as Sophocles (496–406 B.C.E.) examined the problems of characters struggling to balance the demands of family and government, a struggle to which many Greek citizens could relate. Philosophical ideals such as balance and order were reflected in the graceful symmetry of the public buildings such as temples, theaters, and assembly halls built during this time.

LINK TO PLACE

Classic Columns: Ancient Greece and the United States

The columns of ancient Greece fall into one of three orders: Doric, Ionic, and Corinthian. These names derive from the area in ancient Greece where the style most frequently appeared.

Doric columns have no base, exhibit a plain shaft, and have a simple capital made of a circle topped by a square. The *frieze*, or area atop the column, bears simple decorations and carvings. The Ionic columns have a taller and more slender-looking shaft, grooved with lines representing the axe-marks left on the timbers of earlier wooden temples. An Ionic column typically consists of a base involving a set of stacked rings, a capital in the shape of a scroll, and a plain frieze at the top. Although the base and shaft of the Corinthian column resemble those of the Ionic order, the elaborate capitals engraved with flowers and leaves add a distinctive decoration.

The neoclassical style of art and architecture, which became popular in the period following the American Revolution, drew its inspiration from Greek and Roman models. The Greek Revival style in particular borrowed elements from the architecture of **classical** Greece. Public or private buildings from this period have porches or porticos supported by columns of the Doric, Ionic, or Corinthian order, with moldings between the tops of the columns and the roof that are meant to resemble the Greek buildings. These moldings are often carved with scenes from Greek mythology, reflecting the enduring fascination with the culture and traditions of this ancient civilization.

Hellenistic Greece

The art and architecture of the **Hellenistic** period (323–ca. 100 B.C.E.), ushered in by the conquests of Alexander III, the Great (356–323 B.C.E.), shows a greater interest in conflict, contrast, and experimentation. Naturalism replaced idealism as the governing aesthetic, or principle, that artists tried to attain. Some artisans focused on portraying the dynamics of inner emotions and everyday life; others incorporated heroic subjects and ideals into their paintings or sculpture. In architecture, a new interest in town planning led to a proliferation of civic centers, city squares, theaters, and gymnasia. The artistic refinement of the Greeks exerted a formative influence on surrounding and later cultures like the Celts and Romans.

CELTIC ART AND ARCHITECTURE

Celtic art is typically divided into two distinct traditions: the Hallstatt culture (ca. 1200–500 B.C.E.) and the La Tène culture (500–50 B.C.E.). During the Hallstatt period, artisans working in bronze, silver, iron, and gold produced decorated vessels, ornamental weaponry, and jewelry such as clasps or pins. Jewelers also made use of imported ivory and amber, while potters enameled their wares with a hard, glossy finish and then painted the surface with symbolic, geometric designs.

Hallstatt Celts built hill-forts fortified with wooden halls, protective walls (or palisades), and earthworks made of a series of walls and trenches. Spacious temples stood at the center of these protected towns. The Celts built long, straight roads for their horses and chariots and *tumuli* for the graves of important people. Celtic burial sites containing personal goods, household items, and wheeled vehicles furnish most of the surviving Hallstatt art.

The La Tène style is characterized by long, curved lines. Pieces of metalwork, such as bronze vessels, jewelry, helmets, and shields, show spiral and interlace patterns representing stylized animal and vegetable forms. The detailed work on jewelry in the form of *torcs* (neck rings) and *fibulae*

(brooches) suggests the Celts employed or learned from Greek artisans to elaborate on their native styles.

ROMAN ART AND ARCHITECTURE

Roman art fused native Latin or Italic traditions with influences from the Greeks and Etruscans. In the earliest Roman villages, consisting of mud huts with thatched roofs, artifacts such as clay pottery and bronze pins were simple and functional. Over time, the Romans acquired a taste for Etruscan paintings and luxury goods like enamelware and jewelry. They also acquired the Etruscan love for ceremonial displays and fine banquets that turned the process of preparing and eating food into an art form.

Roman Republic

Art in the Roman world served several public functions: documenting Rome's increasing military expansion, celebrating historical events, and honoring influential persons. Military victories furnished popular subjects for the mural paintings found in the villas and tombs of wealthy Romans, while sculptures and busts gave tribute to heroic generals and well-known statesmen. Rome's **subjugation** of the Greek colonies on the Italian peninsula in the third century B.C.E. and its conquest of the Aegean peninsula in the following century led to extensive contacts between the Roman and Greek cultures. Greek sculpture, visual and performing arts, and literature provided models for Roman artists. Rome's epic poetry, drama, and statuary blended Greek ideals with a Roman taste for austerity and ceremony.

The Romans expressed their ingenuity more fully in architecture. The first Roman advancements in towns and public buildings borrowed from Etruscan innovations such as the semicircular arch. The Etruscans employed the arch to build stone vaults to house their dead; the Romans expanded its use to **aqueducts**, city walls, and doorways. Early Roman temples also followed the Etruscan style, with a deep porch, widely spaced columns, a triangular roof with overhanging eaves, and inner chambers to hold statues of the gods.

Imperial Rome

Roman architecture reached the height of its maturity during the first two centuries of the Roman Empire, a time known as the *Pax Romana*, or Roman Peace (27 B.C.E.–C.E. 180). Vaulted domes and broad galleries called arcades, constructed of stone and concrete, made public buildings sturdy and spacious. Sanctuaries used terraces, tunnel-like passageways, and columned vaults to guide visitors through the sacred areas within. Public officials designed, financed, and built civic areas to house assemblies, courts, and other political gatherings. The most important of these areas in any city was the forum, a public space that incorporated governmental, religious, and commercial buildings arranged around a common open area.

The most spectacular forum in the empire was the Forum Augustus in Rome, commissioned by the first Roman emperor, Octavian (also known as Caesar Augustus; 63 B.C.E.–C.E. 14) and inspired by the Forum designed and built by Octavian's great-uncle, Julius Caesar (100–44 B.C.E.). Both designs enclosed a rectangular space with long colonnades and an elaborate temple. The carvings and sculpture in these forums exhibit the classical Roman ideals of balance, prosperity, and reverence for tradition.

Much of Roman architecture was practical, like roads, aqueducts, and drainage systems that supplied cities. Other examples are ornamental, such as portrait busts, **reliefs**, and mosaics, which decorate both private and public buildings. The enormous villas of wealthy Roman senators, the houses of emperors, and the massive amphitheaters built to house public spectacles, such as festivals, games, gladiatorial displays, and executions, were so solidly built as to survive the fall of the Roman Empire in C.E. 476 and resist decay through the centuries, inspiring the modern imagination with the stately artifice and imperial glory of Rome.

In fact, many Roman ruins still stand today, serving as testaments to the achievements and artistic accomplishments of ancient European cultures.

See also: Cave Paintings; Celts; Culture and Traditions; Etruscan Civilization; Greece; Minoan Civilization; Religion; Rome; Society; Technology and Inventions; Trojan War.

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Augustus

See Rome; *Pax Romana*.

Caesar, Gaius Julius (100–44 B.C.E.)

Roman general and dictator whose military conquests furthered the reach of Roman rule and whose participation in the Roman civil wars helped bring about the end of the faltering Roman **Republic** in 27 B.C.E. Caesar's assassination in 44 B.C.E. at the hands of Republican supporters led to the beginnings of the Roman Empire, making him the key figure in a pivotal moment in the history of Rome and, by extension, the history of ancient Europe.

Born into an **aristocratic** family, Caesar held a variety of military and diplomatic offices that helped him acquire personal wealth and influence. After serving as governor of Spain, which was then a Roman province, Caesar was elected consul, the highest political office in the Roman Republic in 60 B.C.E. In 58 B.C.E., he took command of Roman armies in Gaul and, over the next seven years, fought campaigns that extended the Roman province through modern-day France, Belgium, and parts of Switzerland. In 55 B.C.E., he invaded Britain but was unable to subdue the Celtic tribes there. Caesar's written accounts of his campaigns serve as the first military memoirs.

Caesar's military successes and increasing popularity concerned the Roman senators, who feared his influence. In 49 B.C.E., under the pressure from a rival consul, Pompey (106–48 B.C.E.), the senate commanded Caesar to resign his post as leader of Gaul and its legions. In response, Caesar led his army across the Rubicon River, which separated Gaul from Italy, thus provoking civil war. After waging battles in Spain and Africa to defeat Pompey and his supporters, Caesar was elected to successive terms as consul. In 46 B.C.E., he took the title of dictator, a one-year position that gave him sole control of both the Roman government and the military. He introduced reforms meant to stabilize grain prices, aid military veterans, protect lower-class citizens, and refurbish public buildings.

Hoping for a return to stability, the senate extended Caesar's dictatorship, and in 44 B.C.E., he

was made dictator for life. Some of his reforms were delayed, however, by his plans to attack Parthia, an empire that spread over much of the Near and Middle East. In addition, rumors circulated that Caesar intended to abolish the republic and make himself king. To prevent this, a group of senators assassinated Caesar in the Roman Forum on March 15, 44 B.C.E.

The move to restore the republic instead brought about its end. Caesar's heir and grand-nephew Octavian (63 B.C.E.–C.E. 14) waged another civil war with both the republican opposition and Caesar's former friend and fellow general Marc Antony (83–30 B.C.E.) for control of the government. Octavian emerged the victor, and when he was proclaimed emperor in 27 B.C.E., Octavian assumed the name Caesar Augustus, becoming the first of the Roman emperors. After Augustus, succeeding Roman emperors assumed the name Caesar to indicate imperial dignity.

Caesar's political acumen, military success, high ambitions, and sudden death made him a prominent figure in the history and literature of Europe for millennia to follow. In the centuries following the fall of the Roman Empire in C.E. 476, many of the local kings who hoped to unite a politically fractured Europe under their rule held up Caesar's career as a model to emulate. Some, such as the later Russian Tsars and German Kaisers, even adopted variations of the name Caesar for their formal titles.

See also: Gauls; *Pax Romana*; Rome.

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Cave Paintings

The naturalistic depictions of animal life, symbols, and humans found on the walls of caves throughout Europe. Cave paintings, an ancient art, were applied by prehistoric humans between 22,000 and 11,000 years ago.

Because most ancient caves in Europe appear never to have been inhabited, scholars assume that the often elaborate and beautiful paintings served **ritualistic** functions. These graphic stories herald the development of human culture, showing the ability for abstract thought and artistic expression.

Among the various forms of artistic representation predating the **Mesolithic Period** (ca. 10,000–6000 B.C.E) in Europe—ranging from beaded jewelry and decorated objects made of stone, ivory, or bone to **petroglyphs** carved on the surfaces of rocks—cave paintings are the most sophisticated examples of prehistoric art. Most of the known caves, clustered in Spain and France, were painted between 18,000 and 10,000 B.C.E., an **era** known as the Magdalenian Period (named for the French site called La Madelaine, where remains of humans dating to this time were discovered). The Blanchard shelter in the Dordogne region of France, however, holds a picture of a horse that is estimated to be 30,000 years old. Other cave paintings survive in Italy, Portugal, Germany, and the Balkans. One of the largest collections of cave paintings appears in the cave of Lascaux in France.

Cave paintings of bison, horses, and deer, such as this one found in the cave of Lascaux in France, inform historians about the lives and habits of Cro-Magnon peoples.
(Prehistoric/The Bridgeman Art Library/Getty Images)

PAINTING THE CAVES

The cave painters employed a wide variety of tools to execute their artwork. They used stone picks or sharp-edged flints to engrave lines into the surfaces. The painters most likely ground their pigments on-site using a mortar and pestle, then mixed them using water and adding vegetable or animal oils to bind the mixture into a spreadable paint. Charcoal probably provided the black, while various minerals or organic materials such as sulfurous rock or iron oxide furnished the other colors, ranging from a reddish ochre to white, yellow, and brown.

Painters either used their fingers or pads, brushes, and stencils made of wood, skin, and hair to apply color to the cave walls. Brushes might be made of twigs, feathers, or leaves. In some cases, the artist blew paint through a blow pipe made of bird bones to apply color to the surface. Sponges made of fur could also be used to fill in colors, and stencils were made by covering an object such as a hand with paint and then pressing it to the cave wall. Preparations for painting were elaborate; the upper walls and ceilings of the caves, for instance, could only have been reached by scaffolding. Torches or lamps, carved into the cave wall or fashioned from blocks of clay and fueled with animal fat, furnished the light by which the painters worked.

The style of the cave paintings developed over time. Some of the earliest cave art, dating to perhaps 30,000 B.C.E., consists of handprints, the outlines of various animals finger-painted with soft clay, and geometric figures and signs. By the time of the later

LINK IN TIME

Lascaux: Then and Now

The cave of Lascaux is located near the town of Les Eyzies in the Dordogne region of southern France. It is the most extensively decorated of all the painted caves from Ice Age Europe. About 820 feet (250 m) deep, the cave was discovered accidentally in 1940 by four local teenagers. The content of the paintings and **radio-carbon dating** of the materials suggest that the pictures were made between 17,000 and 15,000 years ago. At the time, Lascaux would have been the settlement for a small tribe of Cro-Magnon people who built hide shelters, wore clothes of fur, and melted snow in leather containers to obtain water.

Residents depended on animals for food, clothing, fuel for lamps and fires, and materials for preparing food and building shelter. The paintings inside the cave suggest the vital, almost magical, significance of the hunt in their lives.

In the first and largest section of the cave, called the Great Hall of the Bulls, a fresco about 66 feet (20 m) long contains pictures of bulls, horses, and stags. The Hall of the Bulls continues into the so-called Painted Gallery, where pictures covering the upper walls and even much of the ceiling depict horses, bulls, and ibix, or wild goats. A side passage connects the Great Hall to the Main Gallery, the Chamber of Felines, the Chamber of Engravings, and the Shaft of the Dead Man, which displays a portrait of a man facing a bison and a rhinoceros.

After the discovery, the entrance was enlarged and up to 1,200 visitors a day flocked to the site. The carbon dioxide exhaled by so many visitors in the confined space of the cave began to corrode the rock face, and in 1963, the Lascaux cave was closed to the public. The temperature and air in the cave are now monitored daily to help preserve these finest examples of late Stone Age cave art.

paintings at Lascaux (ca. 15,000–13,000 B.C.E.), the portraits progressed from single-colored outlines and silhouettes to life-sized, multicolored figures of animals depicted in stylized ways, often with small heads, big bellies, and short legs. The later examples show an increasing realism and attention to anatomical detail. Certain postures and details of the animals suggest movement, bringing the painting to life. Stylized human figures and tools frequently appear in the paintings as well. Many of the larger caves contain paintings that were completed over several thousand years, suggesting that the painters may have developed a sense of their own history. Perhaps the paintings may have served as a way to preserve tribal memories across generations.

DISCOVERING THE CAVES

These dynamic, detailed, and impressive examples of prehistoric art were first revealed to the modern world in 1869, when a fox hunter discovered the entrance to the cave of Altamira in northern Spain. Due to the startling clarity of the pictures and their state of preservation, the first excavators assumed the scenes had been painted recently. The discovery of more caves in northern Spain and southwestern France soon revealed a vivid and previously unknown artistic heritage dating to the last Ice Age (ca. 70,000–10,000 B.C.E.). More sophisticated means of determining the age of the paintings helped scientists establish their authenticity and proved that many of the animals depicted on the walls, including mammoths, musk-oxen, and the woolly rhinoceros, are now extinct.

The precise purpose and meaning of the cave paintings remains unknown. The first theories assumed that the paintings were an evening pastime for hunters with time on their hands. Later explanations held that the paintings were purely utilitarian,

designed to help educate youths in the practice of hunting. Some of the paintings, however, depict animals that were not hunted and—perhaps more puzzling—animals that were already extinct by the time of the painting. Other theories suggest that the paintings held a magical significance.

In addition to cave paintings, Magdalenian artists decorated rock surfaces in the open air. They may have executed paintings in such locations as well, but no examples have been found.

Other forms of art found in caves throughout Europe, including clay **reliefs** and statues, support the interpretation that these early art galleries were gathering places for rituals that held a symbolic meaning. Perhaps they were meant to ensure a successful hunt and thereby furnish food, clothing, and other materials that a settlement needed. Perhaps these ancient elaborate paintings provided entertainment, furnished subjects for storytelling, and represented a deep connection between humans and the environment on which they depended for survival.

See also: Archeological Discoveries; Art and Architecture; Cro-Magnon Peoples; Culture and Traditions; Ice Age; Religion.

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Celts

Groups of people who lived throughout eastern, central, and western Europe, extending into Britain and Ireland. Celtic peoples never developed as a unified nation but rather remained a collection of tribes sharing similar language, religion, **material culture**, and beliefs. Ancient Celtic civilization reached its peak of sophistication and influence during the **Iron Age** (ca. 750–100 B.C.E.). Although the mighty Roman Empire (27 B.C.E.–C.E. 476) absorbed many Celtic groups beginning in the first century B.C.E., Celtic languages and customs have survived in Ireland and parts of Britain and France to the present day.

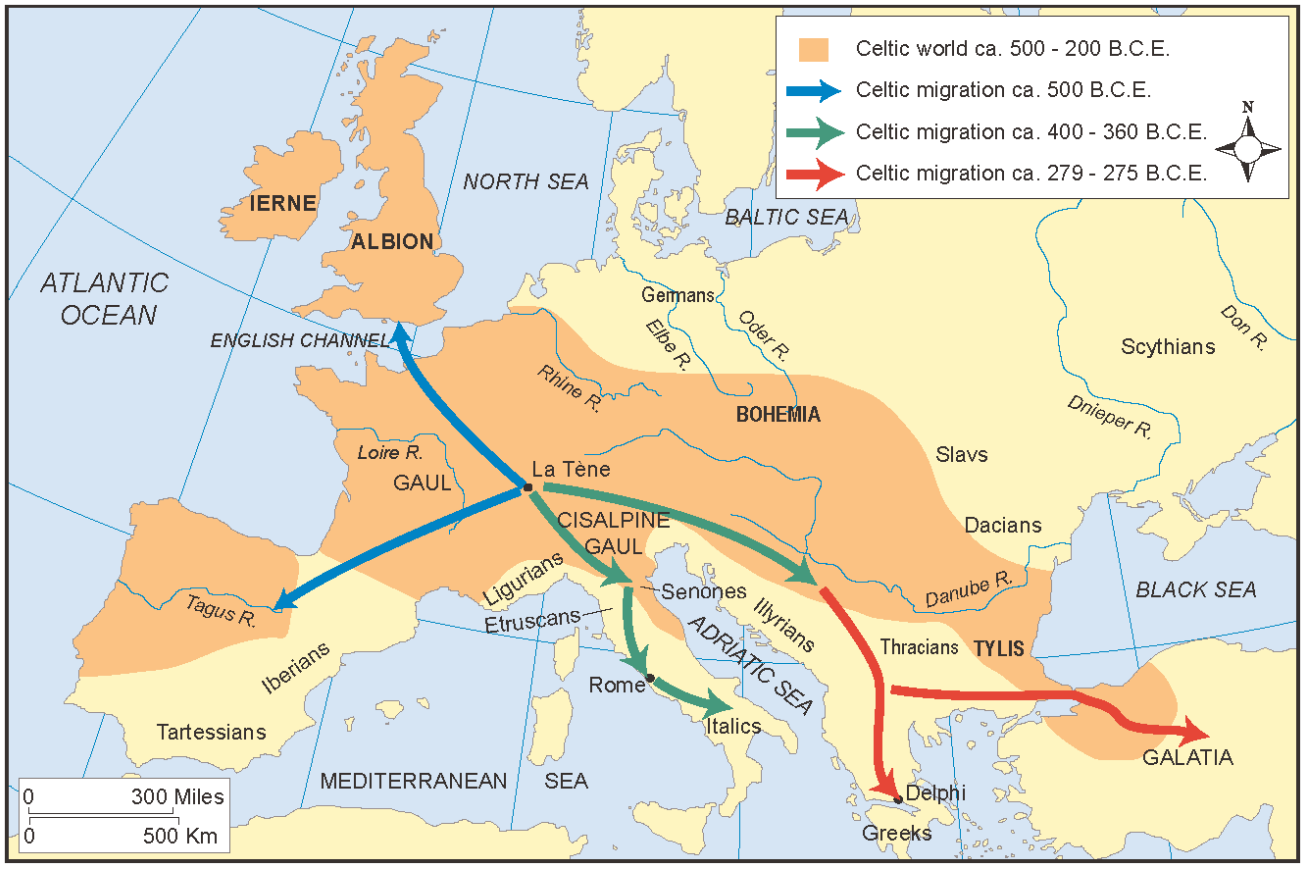
RISE

The Celtic languages evolved from a tongue spoken by groups of Indo-European peoples who originated around the Black Sea and who began to migrate through Europe around 4000 B.C.E. The earliest distinctly Celtic **artifacts** appeared around 1200 B.C.E. in the Alpine region of Austria and Switzerland. Although primarily an agricultural people, the Celts developed a militaristic advantage when, around 800 B.C.E., they learned techniques for making iron tools and weapons and adopted the horse for warfare. Greek historians writing in the sixth century B.C.E. described a warlike people living to the north who called themselves Celts or *Keltoi*, although the philosopher Plato (ca. 427–347 B.C.E.) dismissed them as unprincipled barbarians.

Beginning in the fifth century B.C.E., Celtic tribes migrated west into parts of Spain, Italy, and the British Isles. They also moved south, attacking Rome in 390 B.C.E., and east, reaching Delphi in Greece in 279 B.C.E. and settling in central Turkey. By the beginning of third century B.C.E., Celtic speakers were the most populous group in Europe. As well as being skilled warriors, the Celts were able farmers, **artisans**, and merchants who traded salt, tin, and woolen **textiles** for amber from the Balkans, bronze from Greece and Etruscan Italy, and ivory from Africa.

CELTIC MIGRATIONS

While Celtic groups largely occupied the alpine regions in what is modern-day central France and parts of Spain and Germany in 500 B.C.E., tribes in the next century began to move east, south, and west. By 200 B.C.E., the Celtic world reached its greatest extent, covering central Europe from the western coast of modern-day Ireland as far east as central Turkey.



LIFE AND SOCIETY

The term *Hallstatt* generally refers to the art and architecture of Celtic groups between ca. 1200 and 500 B.C.E., and takes its name from the site of Celtic burial grounds discovered in Austria. The La Tène culture, named for a Celtic site in Switzerland, prevailed between 500 and 50 B.C.E. Throughout this period, most Celts lived on isolated farms and villages or in small hill forts, defensive towns enclosed with stout wooden walls and earthworks of mounded soil and trenches. Most buildings were wooden or wattle-and-daub, made from stripped branches woven together and covered with mud.

The Celtic tribe, or *tuath*, was made up of extended families headed by a chieftain or king who was normally chosen from among the wealthiest families. The chieftain retained a band of skilled warriors whose loyalty he repaid with armor, ornaments, cattle, and land. Along with the Druids—the highly educated priests, judges, and historians of the tribe—the chieftain and his warriors formed the highest class of Celtic society.

Farmers and free landowners belonged to the middle and largest class. A typical Celtic farm had one or more houses, farm buildings, granaries, storage pits, and enclosures for livestock such as cattle, sheep, and goats. Circular one-room houses

sheltered a whole family, all of whom contributed to household maintenance. Men performed the farming duties, using iron axes to cut forests and clear lands for cultivation, iron plows to till the soil, iron hoes to weed and tend their crops, and iron sickles to reap the grain. Women made the grain into bread and beer, the staples of the Celtic diet, and also saw to the weaving and sewing of cloth. Everyday wear consisted of trousers for men and long tunics for women. Outdoor wear was brightly colored, and both men and women proudly wore torcs (neck rings), armlets, and brooches.

The third class in Celtic society was made up of craftspeople, the landless, and slaves, who were customarily captives taken in war. Celtic nobles practiced war in defense of the tribe and also as a way to acquire wealth. Cattle were particularly valuable, so cattle raids between tribes provided opportunities to display courage as well as amass fortunes.

The Celtic religion included a belief in an otherworld in which the deceased would need the objects he or she had acquired in life. Ordinary people were buried in small graves with a few tools, items of clothing and jewelry, and some food to accompany them. Chieftains were buried in large earthen mounds along with a chariot and an assortment of weapons, ornaments, jewels, and decorated vases. The tomb of a Celtic princess unearthed near Vix, France, contained an enormous cauldron standing five feet (1.5 m) tall and weighing 450 pounds (204 kg).

The Iron Age Celts did not have a written language of their own, but surviving Celtic myths provide glimpses into a world where kinship was valued, warriors fiercely defended their honor, guests were treated with great hospitality, and music and poetry were much admired. At the same time, Roman historians such as Livy (59 B.C.E.–C.E. 17) describe the Celts as aggressive warriors who would strip naked, paint their bodies, and rush fearlessly into battle, taking the heads of their enemies as trophies while their women looked on and shouted encouragement.

LEGACY

During the later third and second centuries B.C.E., Celtic groups came increasingly under attack. Migrating Germanic groups uprooted the Celts from eastern Europe, while Spain, Gaul, and Britain all fell under Roman rule by the first century C.E. However, Celtic groups in Ireland, Wales, Brittany, and parts of Cornwall and Scotland remained free from Roman conquest. After the introduction of Christianity and the Latin alphabet, Irish monks of the eighth century C.E. recorded the mythical histories of the remaining Celts, preserving valuable insight into the customs and beliefs of the peoples who had once flourished throughout ancient Europe.

See also: Agriculture; Archeological Discoveries; Art and Architecture; Culture and Traditions; Druids; Gauls; Myths, Epics, and Sagas; Religion; Rome; Slavery.

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Chariots See Tools and Weapons.

Christianity

Religion based on the life and teachings of Jesus Christ (ca. 4 B.C.E.–C.E. 28 or 30), whose followers believed him to be the son of God and the Jewish Messiah, the prophet who would restore the kingdom of God on earth.

Early Christians compiled oral traditions about the life and teachings of Jesus into accounts called the Gospels, which Christians regard as sacred texts. The Gospels describe Christ's central teachings of repentance and brotherly love and also focus on the cross, the crucifixion and resurrection of Christ, and salvation for those who believe. Christian missionaries spread these teachings throughout the Roman Empire. The Christian Church survived the fall of Rome in C.E. 476 and became the most prominent religion for most of medieval Europe.

BEGINNINGS

Jesus was a Jew who lived primarily in Galilee (today, northern Israel), in what was at the time the Roman province of Judaea (Jerusalem and the surrounding area), which was under the Roman procurator, or governor, Pontius Pilate. Jesus' simple life as a teacher and healer inspired many to follow him. He taught that a person could have a direct relationship with God through prayer, and he upset local Jewish authorities by defying the formal **rituals** of religion. Pilate was concerned that confrontations between Jesus' followers and the Jewish authorities would lead to unrest that might require intervention by Roman soldiers. Local resistance to Roman rule was already fierce, and Pilate feared the possibility of rebellion if he used force against the population. To avert a possible crisis, Pilate agreed to Jesus' crucifixion on a hill outside Jerusalem.

According to the Gospels, written in Greek in the late first century C.E., Jesus appeared to his followers three days after his death. He urged believers to spread the message that God would come to establish a heavenly kingdom on earth, a kingdom which would only admit those who had shown love, forgiveness, and charity to others. The early Christian church developed as these first missionaries traveled around the Mediterranean preaching the message of Christ to love one another, repent, and make ready for his return.

The message spread first within Jewish communities and then reached the non-Jews, called Gentiles. Saul of Tarsus, a Jewish rabbi who converted to Christianity in C.E. 37 and took the name Paul, traveled to many major cities of the Roman Empire, attracting converts. Roman officials sought to suppress the early Christians, regarding them as dangerous because they refused to venerate or worship the emperor. Stephen, a deacon of the church at Jerusalem, became the first Christian martyr when he was stoned to death in C.E. 34, and Paul was executed at Rome around C.E. 58. Persecutions continued throughout the first centuries of Christianity, and mass executions of Christians often turned into public spectacles held in the Roman amphitheatres. In C.E. 303, the Emperor Diocletian ordered all Christian churches destroyed. By that time, however, Christianity had grown into an influential religion, supported by the work of several church leaders.

EVOLUTION

Early Christians gathered in private homes to worship through song, prayer, and ritual meals. These homes were the first Christian churches. Following the lead of St. Peter, one of the original twelve Apostles, or companions of Christ, the head of the

DEVELOPMENT OF CHRISTIANITY, 4 B.C.E.–C.E. 1000

ca. 4 B.C.E. Birth of Jesus in Bethlehem

ca. C.E. 28 or 30 Crucifixion of Jesus in Jerusalem

C.E. 34 Martyrdom of Stephen, deacon of church at Jerusalem

ca. C.E. 37 Saul sees vision on road to Damascus; becomes Paul

C.E. 58 Paul imprisoned at Rome; later executed

C.E. 90 Clement I, the fourth pope, establishes divine authority of Roman Catholic Church; as bishop of Rome and successor of the chief apostles, Clement arbitrated disputes in other churches, exercising authority Roman Catholics see as pertaining to the papacy

ca. C.E. 100 Gospels of the Christian Bible, the New Testament, may have been composed

ca. C.E. 200 Church leaders collect most of the books and other sacred writings that form the Bible's New Testament

C.E. 231 Origen of Alexandria sets up Hexapla, a volume with six parallel translations of the Hebrew Bible, or Old Testament

C.E. 303 Roman emperor Diocletian orders persecution of Christians and destruction of all churches

C.E. 313 Roman emperor Constantine issues Edict of Milan, establishing religious tolerance

C.E. 325 First council of Nicea establishes Christian doctrine, including divinity of Christ

C.E. 380 Theodosius makes Christianity official religion of eastern Roman empire

C.E. 391 Edict bans pagan or non-Christian worship in entire empire.

C.E. 395 Roman Empire splits into Eastern and Western portions with capitals at Rome and Constantinople

ca. C.E. 405 St. Jerome translates Christian Bible into Latin

C.E. 476 End of Western Roman Empire; form of Christianity that develops into the Roman Catholic Church continues at Rome, while another form that develops into the Eastern Orthodox Church continues at Constantinople

ca. C.E. 1000 Last pagan kingdoms in Europe convert to Christianity

church at Rome (that of Peter and Paul) became the pre-eminent spiritual authority for other churches throughout the Roman Empire.

Recognizing Jesus as the Son of God as referred to in the Jewish faith, Christians adopted the Jewish Bible, or Old Testament, written in Hebrew and Aramaic, as the Christian Bible. The Christians added sacred writings about Jesus and his followers—the Gospels, along with the letters of early missionaries—to form the Christian Bible, or New Testament. Some Jewish practices, such as the observance of the Sabbath, or holy day of rest, became part of Christian practice, while other holy days were established to celebrate the life of Christ. The holiday of Christmas, for example, commemorates Christ's birth, while at Easter, Christians remember Christ's death and the idea of his resurrection. By C.E. 200, Church leaders had formally agreed on the major texts that belonged to the Christian Bible, with the exceptions of Hebrews and Revelations. The work of scholars such as Origen, who in 231 compiled six parallel translations of the

books of the Old Testament into several languages, made Christian belief more accessible through written commentaries that could be communicated and studied.

The Christian tenets of love and mercy, charity toward the poor, patience in the face of persecution and suffering, the message of salvation, and the sense of community between members continued to attract people to the church. What had at first been considered a small superstition by the Roman world soon developed into an influential religion with many followers. The place of Christianity in the Roman Empire changed profoundly during the reign of Emperor Constantine I (ca. C.E. 280–337), who became a powerful patron of the early Church.

Until the fourth century, Christianity was illegal in the Roman Empire. In C.E. 313, however, the Roman emperor Constantine (r. C.E. 306–337) passed an Edict of Toleration (also known as the Edict of Milan), granting freedom to all religions. He publicly supported Christianity, granting bishops equal authority with state officers and building churches such as the one at Constantinople, the city he made his capital. Constantine's conversion to Christianity in 337 inspired the conversion of large numbers of pagan Romans and spurred the rapid growth of Christianity in the late Roman Empire.

As the Church developed, leaders met in councils to determine the **doctrine**, or beliefs, that guided the growing institution. For instance, for those who believed, the Council of Nicea in C.E. 325 affirmed the divinity of Christ and the tripartite nature of God as containing God the Father, Jesus the Son, and the Holy Spirit. Writers like Augustine (C.E. 354–430), a bishop of Hippo, also helped formulate Christian belief.

Emperor Theodosius I (C.E. 339–397) made Christianity the official religion of the Roman Empire. After the empire split into western and eastern halves in 395, the churches at Rome and Constantinople developed different practices of Christianity, although the church did not actually split until 1054 and both institutions exerted substantial influence on the kingdoms of medieval Europe. St. Jerome's Latin translation of the Christian Bible (ca. C.E. 405) became the most important document for much of western Europe in the Middle Ages. Patrons such as Pope Leo the Great (r. C.E. 440–461) in the west and the Emperor Justinian I (C.E. 483–565) in the east helped consolidate the power of the church and sent missionaries to the pagan, or non-Christian, peoples of Europe. By 1000, all the kingdoms of Europe were Christian and Christianity remained a fundamental influence on the culture of Europe.

See also: Justinian I; Latin; Religion; Rome.

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Classical Age

See Greece.

Crete

Island in the Mediterranean Sea that served in ancient times as an important trading center for Europe, Asia Minor (modern-day Turkey), and Africa. Crete was also home to the influential Minoan civilization that flourished between 2600 and 1400 B.C.E.

Evidence of agriculture on Crete dates to the seventh millennium B.C.E. Waves of people migrated from Asia Minor to Crete over the next 3,000 years, building settlements of mud and brick and raising cereals, vegetables, goats, cattle, and pigs. The limited area available for farming encouraged the Cretans to pursue sea trade, and the island's location south of the Aegean Sea made it a natural meeting place for Mediterranean trade routes. Contacts with Anatolia, Egypt, and the Near East introduced bronzeworking technology to Crete around 2600 B.C.E., well before the rest of Europe.

By 2000 B.C.E., the inhabitants of the island had developed new metalworking techniques and distinctive art and architecture. Their prosperous cities featured broad streets, spacious houses, and enormous palaces that functioned as centers of entertainment, storehouses for food, and homes for the wealthy. Cretan farmers grew wine and olives, while **artisans** produced wool and woven **textiles**, jewelry, pottery, gems, and other items that they exported. Cretans went to Cyprus to obtain copper and to Spain or Britain for tin. From Egypt came wheat, gold, ivory, papyrus, and also the inspiration for Cretan art, writing, and religion.

The vases, frescoes, statues, and jewels found in the palaces at Knossos, Phaistos, and Kato Zakros suggest that wealthy Minoans enjoyed a gracious, leisurely lifestyle, surrounded with beautiful objects. In addition to Minoan achievements in architecture, and in crafts such as metalworking and pottery, the earliest forms of writing and the earliest code of law to be found in Europe come from the Minoan ruins on Crete.

Although earthquakes regularly destroyed the elaborate palace of Knossos and other monumental Minoan palaces, the Minoans rebuilt Knossos each time on a grander scale, indicating to modern scholars the increasing wealth and power of the Minoan kings. In 1500 B.C.E., a volcanic eruption on the island of Thera (now Santorini) caused earthquakes and tsunamis that devastated the coastlines of Crete and presumably destroyed the Minoan navy. After the disaster, the Mycenaeans of early Greece occupied Crete. Around 1100 B.C.E., the palace at Knossos was finally destroyed by the Dorians, tribes from northern Greece who conquered the Mycenaeans and ruled Crete in the centuries to follow. In 67 B.C.E., the Romans invaded Crete and established a province there; in C.E. 324, Crete became part of the Eastern Roman Empire. By then, the once-great palaces had disappeared beneath other settlements, and only myths remained describing a fabulous civilization on Crete, ruled by the wealthy King Minos.

In 1900, the English archeologist Sir Arthur Evans rediscovered the palace at Knossos and revealed how, millennia before the **Classical** Age of Greece (480–323 B.C.E.), the heritage of Crete formed the cornerstone of European civilization.

See also: Archeological Discoveries; Art and Architecture; Culture and Traditions; Greece; Language and Writing; Minoan Civilization; Myths, Epics, and Sagas.

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Cro-Magnon Peoples

Earliest known species of modern human, or *Homo sapiens*, who appeared in Europe around 40,000 B.C.E. The name Cro-Magnon, derived from Old French and Latin, means "large cavity" and refers to the caves in southern France where their fossils were first discovered. Cro-Magnon remains have also been found throughout northern Spain, France, and Germany.

Cro-Magnon peoples are the ancestors of modern humans, sharing the same physical features, brain size, and capability for intelligence. Their fossils display the facial characteristics of modern-day Europeans, including a vertical forehead, flat (rather than protruding) face, and developed chin. Cro-Magnon peoples differed from the earlier Neanderthal peoples in that they were taller and more slender, with less-prominent brows and smaller teeth. The average Cro-Magnon male stood about six feet (1.8 m) tall.

Some anthropologists, scientists who study human origins and development, speculate that modern *Homo sapiens* migrated from Africa and replaced the existing populations of *Homo erectus*, an earlier species of human inhabiting Europe. Other anthropologists maintain that *Homo sapiens* began to migrate from Africa almost two million years ago and evolved independently but in similar ways in Europe, Africa, and Asia. Modern **genetics** provides evidence for the first theory. Moreover, while the fossil record shows that Neanderthal and Cro-Magnon peoples lived the same areas for a time, modern humans lack the facial structures and other anatomical features that distinguish Neanderthal peoples. Instead, the Cro-Magnon peoples, who had better tools, speech abilities, and the capacity for complex thought, replaced the Neanderthal populations entirely.

Improving on the traditional stone tools of the Neanderthals, the Cro-Magnons developed implements and weapons that allowed for better living conditions and greater cooperation within tribes. Using flint, bone, and wood to make weapons, such as a spear-thrower, or tools, such as a needle for tailoring clothing, Cro-Magnons were better equipped to endure and adapt to changes in climate and food supply. Surviving bits of jewelry, decorated tools, carved objects of bone or horn, and the startling cave paintings of France and Spain demonstrate the capacity for artistic expression.

Cro-Magnon tribes lived in rock shelters at the entrances of caves or in the open, constructing dwellings made of skin and hide pulled over wood or animal bones and lining their floors with river pebbles. Settling near rivers and springs that functioned as water sources as well as gathering places for animals, the Cro-Magnons hunted reindeer, bison, elk, wild ox, horse, boar, and mountain goat. Smaller animals, such as the arctic fox, wolf, beaver, and rabbits, provided meat as well as skins and fur, and birds and fish added to the diet. They learned methods of storing food to survive the long winters. During the warmer months, tribes would congregate with neighbors to arrange marriages and barter for tools and **artifacts**.

Around 12,000 B.C.E., as the climate of Europe began to warm and more land became available, Cro-Magnon peoples migrated across Europe and gradually formed settled communities. Scholars maintain that in terms of speech capability, inventiveness, artistic capacity, and intelligence, Cro-Magnon peoples are the direct ancestors of Europeans today.

See also: Agriculture; Archeological Discoveries; Cave Paintings; Ice Age; Neanderthal Peoples; Society; Tools and Weapons.

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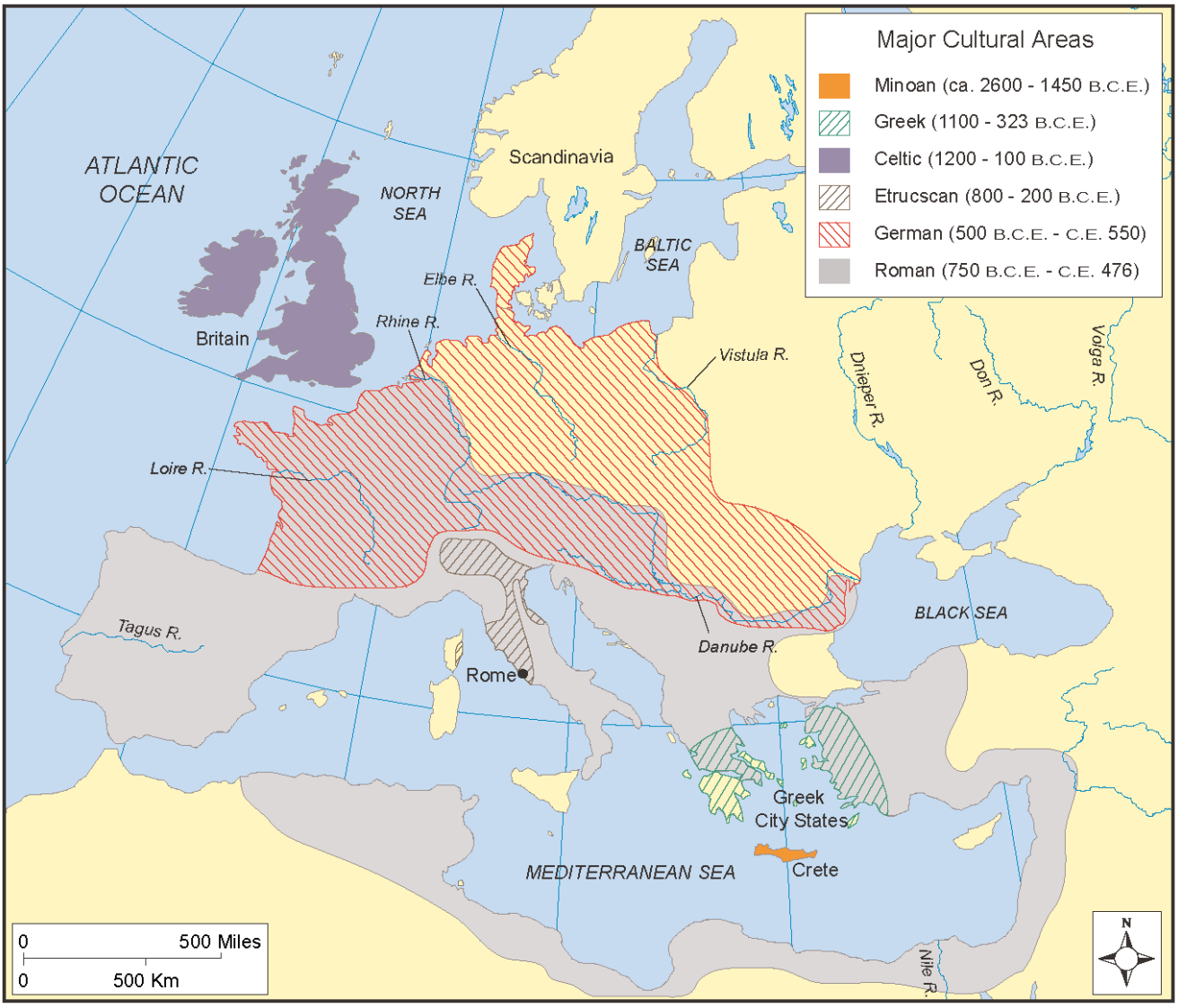
Culture and Traditions

Tracing the art, knowledge, beliefs, customs, government, values, and behavioral patterns that characterized early Europeans reveals the unique culture of each group. Traditions show how groups build a sense of communal identity and shared history.

MAJOR CULTURAL AREAS OF ANCIENT EUROPE

Minoan civilization on Crete reached its pinnacle around 1600 B.C.E. Beginning in the eighth century B.C.E., Etruscan civilization flourished in modern-day central Italy, while the first city-states were emerging in Greece. The Celts, who had once inhabited most of Europe, were eventually forced to Brittany, the fringes of Britain, and Ireland. Germanic groups living in Scandinavia and northern Germany migrated east and south, covering southern Europe and spanning from Britain and France in the west to the Balkans in the east.



PREHISTORIC CULTURES OF EUROPE

Archeological discoveries provide the main sources of information about the cultures of prehistoric Europe. Throughout the **Stone Age**, which lasted until the second or third millennium B.C.E., depending on the part of Europe, cultures differed primarily in their technology and inventions.

Stone sculptures of female figures, such as this example found near Willendorf, Austria, which was carved approximately 25,000 years ago and is about four inches (11 cm) high, are thought to have held a powerful religious meaning for Stone Age Europeans. (Erich Lessing/Art Resource, NY)

Archeologists classify cultures of the Stone Age by the tools and weapons they used and frequently name cultures after the sites where the first **artifacts** are found.

Paleolithic Period

Some of the earliest dwellers in Europe belonged to the Clactonian culture, characterized by the use of a crude flint tool called a chopper. The Acheulian culture improved upon this basic implement by sharpening both sides of the flint, producing the more efficient hand axe. Both of these cultures existed during the Lower **Paleolithic Period**, between 450,000 and 100,000 B.C.E.

The Mousterian culture of the Neanderthal peoples dates to the Middle Paleolithic Period (ca. 100,000–40,000 B.C.E.). Members of this culture used flint flakes to make tools and had simple bone implements like spear tips. Grave goods such as tools, animal bones, and even flowers might have been meant to accompany the deceased in the afterlife.

In the Upper Paleolithic Period, beginning around 40,000 B.C.E., diverse cultures emerge in Europe. These Cro-Magnon peoples gradually replaced the Neanderthals who had previously dominated the continent. The Aurignacian culture (ca. 34,000–23,000 B.C.E.) takes its name from the village of Aurignac in southern France, where archeologists found fine flint blades, pendants, bracelets, and ivory beads. The Magdalenian cultures of western Europe (ca. 18,000–10,000 B.C.E.) made art out of bone, antler, and ivory, strung necklaces of sea shells and animal teeth, carved figurines such as the female forms called Venuses, and made the cave paintings at Lascaux and Altamira.

Mesolithic and Neolithic Periods

During the **Mesolithic Period**, many tribes living in Europe abandoned the hunter-gatherer lifestyle in favor of a seminomadic one as they developed fishing practices, made better tools, and gradually domesticated both plants and animals. The earliest

domesticated plants included grains and fruits and, in southern parts of Europe, vine crops such as olives and grapes. Domesticated animals included first the dog and then sheep, goats, pigs, and cows. Mesolithic peoples also had to adapt to a changing climate as the **Ice Age** ended and animal herds diminished. The abundance of mollusk shells in the middens, or refuse piles, of the Ertebolle culture of Denmark shows an increased reliance on fishing.

European culture changed significantly in the **Neolithic Period** with the introduction of agriculture, which arrived around 6000 B.C.E. in parts of Greece and as late as 4000 B.C.E. in outlying areas such as Britain. With the advent of farming, many early European tribes settled land, cultivated farms, raised livestock, and enjoyed such inventions as pottery, weaving, and the wheel. Many Neolithic cultures of Europe are named for the style of pottery they produced, showing the importance of this invention to their ways of life. The Cardium Pottery culture, extending around the Mediterranean in the sixth millennium B.C.E., takes its name from the mollusk used to decorate jars by pressing the shells into the wet clay.

BRONZE AGE AND BEYOND

In the third and second millennia B.C.E., Indo-European tribes began to migrate from their homeland in the Caucasus Mountains. Speaking a language referred to as proto-Indo-European (now lost, but reconstructed using similarities in the languages that developed in the regions they settled), the Indo-Europeans introduced a distinct culture across Europe and into Asia as far as India. Indo-European groups raised cattle and other domesticated animals and adopted the horse as both a means of transport and a military weapon. Theirs was a **patriarchal** culture, where men exerted the chief authority, and their religion featured a series of gods and goddesses who lived in the sky and influenced human events. Most of the existing cultures of Europe have an Indo-European heritage.

The Minoans

The **Bronze Age** in Europe began around 3000 B.C.E. when peoples living near the Mediterranean Sea developed techniques of smelting tin and copper to create bronze. The first true civilization in Europe developed at this time. On the Cyclades, a group of islands in the Aegean Sea, artists worked with the native marble to create severe, abstract sculptures used most frequently in burials, whereas on Crete, the center of Minoan civilization, a palace culture evolved with administrative activities, artist workshops, religious **rituals**, and the royal apartments all housed under one expansive roof. Although daily life for the average Minoan subject was still rather harsh, archeological discoveries indicate that wealthier citizens lived in fine two-story houses, had an abundance of food and wine, and enjoyed musical performances on the lyre or flute or watched young athletes engaged in the sport of bull-leaping.

The culture of Mycenaean Greece supplanted the Minoan civilization; customs and beliefs of this Bronze Age society persisted in tales about the Trojan War and furnished a heroic past for the Greeks of the eighth century B.C.E. as various cities acquired territory and evolved into political entities known as city-states. For the next several centuries, the Greeks thrived as the most sophisticated culture in Europe, leaving their mark on all areas of human endeavor.

The Greeks

Although the governments of Greek city-states varied in type, daily life throughout ancient Greece looked much the same. Extended families lived in small brick houses built around a central courtyard where children could play and, in good weather, food could be cooked outside. Staples of the Greek diet consisted of bread, vegetables, fruit, olives, figs, cheese, and fish. Everyone drank wine, mixed with water, and ate with their hands. The rooms where the ladies of the house lived were separate from the public room where the men entertained guests. The men of the house might hold dinner parties that the women did not attend but at which the children might be invited to entertain guests with music or dance. Girls were educated at home and were expected to bear children who would hopefully survive infancy. Boys typically went to school at age seven. At age 18 they served a required time in the military.

In city-states such as Sparta, where the military played a larger role in the culture, boys began their military training at age seven and did not leave the barracks until age 30. In democratic city-states such as Athens, boys attended schools like Plato's Academy or the Lyceum of Aristotle and then, at 30, were allowed to participate in city government. In Athens, women spent most of their time at home, while Spartan women were allowed to appear in public, participate in the athletic games held to celebrate religious festivals, and inherit land.

The Celts

While the Greeks were flourishing on the Aegean peninsula, tribes of Celts evolved a shared culture throughout most of central, western, and eastern Europe beginning in 1200 B.C.E. Celtic families lived in timber roundhouses where a fireplace in the center was used for heat and cooking. Bread, salted or boiled meat, and seasonal vegetables comprised the Celtic diet, with water or beer for a beverage.

The majority of Celtic citizens were farmers, but tribal chieftains kept and trained a band of warriors to wage occasional raids and defend the village and its livestock. Celtic women were known to lead war bands and serve as queens on occasion. The Celts were great lovers of music and poetry, and no festival was complete without a recitation, preferably of a poem praising the heroic deeds of the tribe's warriors and the beauty of its women. The main Celtic holidays celebrated the changing seasons, welcoming in turn the spring planting, fall harvest, and the new year.

The Romans

Over the course of its history, ancient Rome developed from a small village of mud huts in the tenth century B.C.E. into a sprawling empire that dominated the Mediterranean world. In its earliest years, the native Latin culture of Rome incorporated many influences from the Etruscans, including irrigation methods, building techniques, and religious beliefs. The Romans also acquired an Etruscan love of luxury and ceremonial display.

LINK IN TIME

Celtic Samhain and Halloween Today

The distinction between the earthly and supernatural worlds was at best blurred in Celtic observance. At Samhain, the most important of the seasonal festivals, these borders disappeared entirely. Literally named for summer's end, the holiday, celebrated in early November, marked the beginning of winter, when herders brought animals in from the summer pasture and workers harvested the summer fields, storing food to provide for both humans and animals through the cold weather.

The Celts believed that the normal laws of nature did not apply during Samhain. On the eve of the festival, the dead were said to pass into the world of the living. Celts would leave food outside their homes the night before Samhain to satisfy the roaming spirits and keep them from bringing harm. Bonfires and feasts served as focal points for community-wide celebrations, often involving games and divinations using apples and nuts from the harvest.

The modern holiday of Halloween, or All Hallow's Eve, evolved from this Celtic **ritual**. Members of Christian religions replaced Samhain with the celebration of Hallowmas, or All Saint's Day, which commemorated the souls of new saints. For All Soul's Day parades, on November 2, participants would distribute pastries called soul cakes to those who promised to pray for the souls of dead relatives. This practice developed into the modern custom of trick-or-treating. Halloween is still considered a night when barriers between the natural and supernatural worlds disappear. The practice of dressing up in costume reflects an earlier belief that, if evil spirits come around, a disguise can keep a living person safe.

Under the Roman **monarchy**, which lasted from ca. 753 B.C.E. until 509 B.C.E., much of Rome was organized by extended family, or *gens*. A *curia*, or council of representatives from each family, selected the king, while a senate advised the monarch. The Etruscan king Servius Tullius (r. 578–535 B.C.E.) reorganized Roman society into distinct units called centuries, which served as voting bodies from which he recruited men for the army. The supreme office in the Roman **Republic** was consul, a position shared by two men elected each year. The chief governing body, the senate, had about 300 members. Class struggles between the patrician, or **aristocratic**, citizens and the commoners, or plebeians, were resolved by allowing both classes representation in the senate.

During the second century B.C.E., conquest of the Greek city-states brought Greek cultural achievements into the Roman world. Roman artists and writers developed a body of literature and visual and performing arts following **Hellenistic** models, which included adopting many Greek myths under Roman names. Roman orators such as Cicero (106–43 B.C.E.) raised the art of rhetoric to new levels of sophistication, while historians including Livy (59 B.C.E.–C.E. 17) and poets such as Virgil (70–19 B.C.E.) glorified Rome's militaristic background.

During the early years of the Roman Empire, Romans enjoyed their most stable period. Daily life revolved around the *villa*, a country estate, or the *domus*, the city house. As head of an extended family, Roman fathers exercised supreme domestic authority, holding the power of life or death over their wives, children, and slaves. With few exceptions, Roman women rarely participated in public events.

Poorer Roman residents crowded into multistoried apartment buildings made of wood, where fire was always a hazard. Even though Roman cities featured baths that were free to all male citizens, conditions elsewhere in the cities were rarely sanitary. The harsh conditions under which most Roman citizens lived produced dissatisfaction and, often, civil unrest. Roman leaders frequently tried to deal with these problems by distributing free bread to the poor or hosting chariot racing or gladiatorial combats in the public amphitheaters. By the later days of the empire, much of the public treasury was spent on diversions and public relief intended to placate the masses. In addition, the Roman calendar kept acquiring feast days until, by the fall of the western empire in C.E. 476, there were more holidays than there were days on which legal action or commerce was conducted. Nevertheless, even after the final collapse of the empire in C.E. 476, many kingdoms of medieval Europe retained Roman customs, language, law, and administrative practices in an effort to emulate the glory of imperial Rome.

See also: Archeological Discoveries; Art and Architecture; Cave Paintings; Language and Writing; Myths, Epics, and Sagas; Religion; Slavery; Society; Technology and Inventions; Tools and Weapons.

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Druids

Among the ancient Celts, an influential class of people who served as priests, philosophers, judges, diviners, astronomers, and mediators with the gods. Druids largely practiced within the Celtic tribes inhabiting Ireland, Britain, and Gaul during the **Iron Age** (ca. 750–100 B.C.E.), and many Druid sanctuaries were discovered in these areas.

The word *Druid* comes from a Celtic word for oak, a tree featured in Celtic religious observance; oak groves often functioned as Celtic holy places. Because of their long training and the importance of their contributions, Druids occupied a privileged place in Celtic society. For example, they were not required to serve in the military or pay taxes. Druids advised kings and often served as ambassadors to settle disputes between families or tribes. Along with bards and seers, Druids preserved the unwritten lore surrounding astronomy, techniques of divination, and tribal history and traditions. They performed the major **rituals** of Celtic religious practice and were consulted as prophets who could divine the will of the gods through omens that manifested in natural patterns or through animal sacrifice. Roman historians attest that the Druids sometimes presided over human sacrifices.

Druid priests were also teachers and healers. They preserved the codes of law and served as judges to resolve disputes or punish crimes. It is possible that women could perform the functions of Druids, but no real evidence for female Druids exists.

Druid training was rigorous and required learning verses, laws, histories, and other traditions. Julius Caesar (100–44 B.C.E.), a Roman general who encountered the Druids in his wars in Gaul, wrote that Druid novices often were sent to Britain for training that could last up to 20 years. Although they kept calendars to mark feasts and other important days, the Druids chose not to record their knowledge in written form. As a consequence, an aura of mystery surrounded their activities, and they were sometimes said to have magical powers, such as the ability to conjure an enchanted mist or turn into animals. Because of the lack of concrete evidence about them, Druid rituals have always been the subject of speculation. For example, although history shows that Stonehenge predates the Celts, it was once thought that Druids built the **megalith** structure there.

The Roman emperors were hostile to the Druids, perhaps because of the influence they wielded in Celtic society. As a result, Roman authorities made every effort to stamp out Druid practices inside the empire. Believing it a center for Druid schooling, Roman soldiers destroyed the

religious sanctuary on the British Isle of Mona in the first century C.E. Christianity also did not tolerate Druidism, and where the Druids survived in post-Roman Europe (for instance in Ireland), they became more like bards and historians and lost their religious significance.

See also: Celts; Culture and Traditions; Gauls; Religion; Rome.

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Etruscan Civilization

Culture in central Italy that flourished in the eighth through third centuries B.C.E. Etruscan civilization transformed the landscape of Italy, bringing a style of art, religion, and political organization that would influence the region for centuries to follow.

The precise origins of the Etruscans, who called themselves the *Rasenna*, are the subject of debate. Some scholars believe the Etruscans migrated from Asia Minor in the ninth century B.C.E. Others believe they were native to central and northwest Italy and simply absorbed outside influences. Etruscan art, architecture, burial customs, religious practices, and metalworking techniques all have parallels in the Near East. However, the Etruscan language is non-Indo-European, meaning it does not belong to the family of languages broadly shared through Europe and parts of Asia. Instead, the Etruscans adapted the Greek alphabet and used it for **inscriptions** made in tombs and sanctuaries or on pottery.

The 12 major Etruscan city-states, such as Veii, Pisae, and Tarquinia, in conjunction with a series of larger towns, organized themselves into a federation called the Twelve Peoples. The Etruscans followed a monarchic system of government, in which the highest authority was the priest-king, who inherited his rule and was supported by an **aristocratic** class. The king served as chief judge, military leader, and priest of religious ceremonies. The monarch was chosen from among the noblest families, and great ceremony attended his public appearances. During the seventh and sixth centuries B.C.E., Etruscan civilization reached its height of influence and sophistication.

ART AND ARCHITECTURE

The Etruscans were great architects. Their towns had markets, streets, shops, temples, public buildings, and residential homes. The Etruscan house was built around an atrium, a central space with rooms branching to the left and right. Their cities had wells and underground systems of pipes that supplied drinking water.

The Etruscans built paved roads, some of them broad funerary ways leading to the necropolis, the "city of the dead." They built enormous chamber tombs made of stone and covered them with earth to form large mounds, or *tumuli*. Examples that can still be seen at Cerveteri, outside of Rome, measure up to 130 feet (40 m) in diameter. These underground houses had hallways with doors, false windows, ceilings supported by columns, and rooms furnished with couches and chairs.

Etruscan religious temples were massive and square, fronted by columns. The life-size statues

Colorful paintings, such as these found in the Tomb of the Triclinium at Tarquinia, dated to 470 B.C.E., were meant to help the deceased enjoy favorite pastimes like partaking in banquets, hunting, dancing, and listening to music in the afterlife. (Nimatallah/Art Resource, NY)

of the gods inside were brightly painted, and many had fearsome appearances. Like the Greeks, the Etruscans pictured their gods as having human form.

Etruscan art shows influence from the eastern Mediterranean, Asia, and Egypt. Their figures of gold, silver, bronze, and ivory take the shape of lions, panthers, leopards, ostriches, monkeys, palm trees, and lotus flowers, none of which are native to Italy. Images of mythical creatures, such as the griffin, sphinx, chimera, or winged bull, were also imported from the Near East. In Etruscan tombs, terracotta portraits and wall frescoes—paintings made on wet plaster—portray realistic figures reclining at elaborate banquets, a favorite pastime for a pleasure-loving society. Etruscan **artisans** made gold jewelry using a process of granulation or connecting tiny balls of gold. This skill at detailed work also had practical applications: The Etruscans were experts at dentistry. Some people buried in Etruscan tombs had false teeth or even dentures.

LIFE

The Etruscans also introduced new methods of cultivation and irrigation. They cleared forests and drained swamps to make room for fields of wheat, flax, millet, rye, oats, or grape vines. They fished the coasts and raised sheep, horses, and pigs. To supplement their diet they hunted hare, birds, deer, or black boar. Like many agricultural societies, they used a lunar calendar to keep time and record religious festivals.

The Etruscans enjoyed wealth and finery; they traded their distinctive glossy black pottery called *buchero* for luxury goods from the Greeks, Phoenicians, Egyptians, and Carthaginians. Their clothing was elegant and colorful. Women wore long embroidered dresses draped with cloaks and jewelry; men wore belted jerkins (sleeveless jackets) or togas with cloaks. Hats and footwear in the form of boots or sandals completed the costume.

Etruscan paintings indicate, among other things, the importance of music to Etruscan culture. Instruments depicted in these paintings include horns, such as the trumpet, and stringed instruments, such as the lyre, but the most popular instrument was the flute. The flute accompanied all aspects of life: work, meals, play, and even hunting. The Etruscans also enjoyed games and would host grand spectacles with boxers, wrestlers, javelin- and discus-throwers, dancing, and horse- and chariot-races.

GREAT LIVES

Tarquin

Tarquin was the family name of a dynasty of Etruscan kings who ruled Rome until 509 B.C.E. while it was still a growing city-state. The city, called Tarquinii in Latin, located in central Italy, was a center of prosperous commerce with the Greek colonies on the Italian Peninsula, trading precious metals for objects made of pottery and glass. The Tarquin clan did not originate in the region called Etruria; the father of the first king supposedly came to Tarquinii from Corinth, a Greek city, and married an Etruscan noblewoman. Their son Lucumo moved to Rome with his wife Tanaquil, also of the Etruscan aristocracy. In 616 B.C.E., Lucumo became Rome's king. Taking the name Lucius Tarquinius Priscus, Tarquin the Elder brought the region of Latium under Roman control and introduced into Roman life many aspects of Etruscan civilization, including certain political practices, religious elements, and ceremonial practices and art forms.

Following the first Tarquin's assassination in 579 B.C.E., Tanaquil engineered the rise of her Etruscan son-in-law, Servius Tullius, to the throne. Previously, the citizens of Rome had elected their king. Servius Tullius expanded the military, reorganized the political administration of Rome, and expanded the borders of the city to encompass several of the neighboring hills. He also began the practice of taking a census, or counting the population, to assess Rome's military capabilities. To celebrate his good fortune, Servius commissioned a grand temple to the Roman goddess Diana. Nevertheless, malcontents assassinated him in 535 B.C.E. in a conspiracy headed by his brother-in-law Tarquinius Superbus, son of Tarquin the Elder, and his own daughter Tullia, Tarquinius' wife.

Tarquin II, known to history as Tarquinius Superbus or Tarquin the Proud, and the most infamous of Tarquin kings, ruled the most powerful kingdom in Italy. He extended his territories, demanded tribute from Rome's neighbors, and commissioned public works, including a temple dedicated to the Roman god Jupiter and a sewage system for the capital city. Tarquin II also famously disregarded the advice of the senate, the body of noblemen whose duty it was to advise the king, which inevitably led to revolt.

In 509 B.C.E., a group of aristocrats banded together and expelled Tarquin the Proud from the city. The exiled king enlisted the support of the King of Etruria to help him return to power, but the bid failed. The triumphant nobles established the Roman Republic, which survived until another rebellion in 27 B.C.E.

Given that much of the early history of Rome is undocumented, scholars question many aspects of the Tarquin family story. Many view the legends as political propaganda designed to enhance the reputation of the Republic. According to the Roman historian Livy (59 B.C.E.–C.E. 17), the rebellion began when Tarquin II's son, Sextus Tarquinius, raped a noblewoman named Lucretia, the wife of a powerful Roman lord. After revealing what had happened, Lucretia stabbed herself, and the tragedy spurred her outraged family to demand justice. Many subsequent works of literature took the rape of Lucrece (Lucretia in Latin) as their subject, and the legacy of Etruscan civilization persisted long after Etruria had fallen to the might of Rome. Later historians regarded the overthrow of the Roman monarchy in favor of a republic as a pivotal moment in European history.

DECLINE

From about the late ninth century B.C.E. to the late sixth century B.C.E., the Etruscans had a significant naval presence, sharing the Mediterranean Sea with the Phoenicians and Greeks. In the sixth century B.C.E., a series of Etruscan kings ruled

Roman prince Tarquinus Sextus leaves his post at Ardea to meet Lucretia, the wife of a senator. Roman historians cited Sextus's assault on Lucretia as the reason Roman citizens exiled their king and established the Republic. (Cameraphoto Arte, Venice/Art Resource, NY)

Rome, a growing city to the south. In 509 B.C.E., however, the Roman populace banished King Tarquin the Proud and set up a **republic**. In the fifth century B.C.E., the Etruscans started losing battles for trade rights to the Greek colonies in the south of Italy. Beginning in the fourth century, they suffered invasions from Roman tribes in the south and from Celts in the north. The great alliance of the Twelve Peoples began to break apart into independent city-states. In 396 B.C.E., the Romans captured the Etruscan city of Veii, about 12 miles (20 km) north of Rome. Thereafter, the Roman Republic expanded at the expense of the Etruscan city-states.

As the Romans took over Etruscan lands, they absorbed elements of Etruscan culture, including architecture, religion, entertainments, and even dress. By the beginning of the Roman Empire (27 B.C.E.), the Etruscan language was no longer spoken. The Etruscans had all but disappeared, leaving only their art and their monuments as clues to the first advanced culture in Italy.

See also: Art and Architecture; Culture and Traditions; Language and Writing; Religion; Rome.

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Franks

Germanic group that settled in what is now France after the decline of the Gauls in about C.E. 400. Merging the legacies of imperial Rome and the practice of Christianity with native traditions, Frankish rulers established one of the most influential kingdoms of early medieval Europe.

The first Franks are documented as living near the Rhine River in the second century C.E. Roman sources referred to them as a loose confederation of tribes who banded together out of political necessity and probably called themselves Franks after their word for "brave" (and later, "free"). The early Franks resisted the spread of the Roman Empire, but throughout the fourth century C.E., Franks served in the Roman military and as officials in Roman government. In the mid-fourth century, the Roman emperor Julian settled a group of Franks in the Netherlands as a buffer state between the Roman province and its challengers.

As Roman power weakened, the Franks spread further into Belgium and northern France, developing a culture that combined Germanic customs with Roman influence. In the mid-fifth century, the Frankish chieftain Chlodio led uprisings that gained the adherence of other Frankish groups. A kinsman of Chlodio, Merovich, gave his name to the dynasty—the Merovingian dynasty—established by his successor, Childeric I (r. C.E. 460–482). The members of the family distinguished themselves by not cutting their hair; thus, the Merovingians were called the "long-haired" kings.

Childeric's son Clovis (r. C.E. 481–511) won military victories that brought other Germanic groups under the leadership of the Franks. Frankish rule patterned its offices and systems of administration, such as tax collection, on pre-existing Roman models. Around C.E. 510, Clovis issued the Salic Law, a codification written in Latin and borrowing from Roman legal tradition. A large portion of this code aims to restrict feuds or revenge by establishing fines and penalties for offenses, rather than calling for physical retribution against offenders.

Apart from his legal efforts, Clovis's tactics for keeping control often included killing relatives who displeased him. This helped establish the precedent of the king's absolute power, exercised despite the advice of a council. The unquestioned authority of kings—most of whom claimed that their power was an expression of the will of God, or "divine right"—became a mark of the system of feudalism in the European Middle Ages. The Franks essentially viewed the kingdom as the property of a powerful man, who could distribute it among his heirs.

In addition to leading military conquests and maintaining a centralized form of government, Clovis took control of southern Gaul in C.E. 507 when he defeated the Visigoth king Alaric II. Clovis converted to Christianity to gain the support of the Christian Gallo-Romans, extending his control, as well as Roman tradition, throughout France. Winning various military engagements, Clovis's heirs added to Frankish possessions in modern-day Belgium, Germany, and Austria.

The Frankish empire reached the height of its extent and influence under Charles the Great, known as Charlemagne (r. ca. C.E. 768–814). By this time, various legends had arisen to describe the history of the Franks. In one version, the first tribe migrated to France from the Black Sea under the leadership of a chieftain named Franko around II B.C.E. In another version, the Franks were descendants from exiles of the Trojan War.

See also: Gauls; Germanic Groups; Huns; Religion; Rome.

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Gauls

Ancient Celtic groups that populated modern-day France between about 500 and 50 B.C.E. Gaul became a chief province of the Roman Empire and the blend of Gallic and Roman culture influenced the later peoples of France, including the Franks.

Groups of Celts migrated into modern-day France in the first millennium B.C.E. and integrated with the prehistoric peoples who lived there. They established villages and built trade routes with towns along the Mediterranean Sea, including the Greek colony of Massilia (Marseille), founded around 600 B.C.E. Although they shared similarities in language, art, and religion, the various tribes were often at war with one another. The capitals of these tribes evolved into the first Gallic towns; Paris, for instance, took its name from the Parisii people. Gallic art shows the influence of the **classical** world, and the Gauls began to circulate coinage in the third century B.C.E. Gaul was full of sites for Celtic worship, wherein Druids presided over sacred **rituals**.

In 390 B.C.E., Gauls under the leadership of Brennus laid siege to Rome, whose citizens, legend has it, bought them off with a thousand pounds of gold. During the following centuries, Gauls fought several battles against the Romans. In 218 B.C.E., many Gauls joined the march of the Carthaginian general Hannibal as he advanced on Rome during the Second Punic War.

The Romans established a province in southern France after a Gallic defeat in 121 B.C.E. Julius Caesar's seven-year-long Gallic wars, beginning in 58 B.C.E., resulted in making all of Gaul a Roman province. After Caesar shattered Gallic resistance by killing the young leader Vercingetorix, the new province of Gaul expanded to include modern-day France, southern Holland, Belgium, most of Switzerland, and Germany west of the Rhine River.

Roman occupation of Gaul lasted for five centuries, during which the province became one of the most profitable territories of the empire. Under Roman influence, the Celtic models of hereditary kingship transformed to an organization of elected magistrates and councils. The Romans introduced a new legal system, a standing army, a network of roads, and a capital (in Lyons). They established the villa structure, wherein extensive farmlands surrounded a great house, or villa, and they turned the native capitals into great cities. The Romans also brought a common language; all of Gaul came to speak Latin, which replaced the earlier Celtic speech.

For the most part, Rome tolerated the native religion in Gaul by associating the local divinities with Roman ones. Greek missionaries brought Christianity during the first and second centuries C.E. The first organized Christian community appeared in Lyons, but during the second and third centuries it suffered persecution from the emperors Marcus Aurelius and

GREAT LIVES

Hannibal

Hannibal Barca became known as "the Great" for the military genius he displayed in fighting against the Roman army in the second of the Punic Wars (218–202 B.C.E.). Hannibal was born in 247 B.C.E. and his family moved to Spain, which then belonged to Carthage, a powerful city in North Africa. In 221 B.C.E., Hannibal became general of the Spanish forces, and in 218 B.C.E., he crossed the Alps and marched into Gaul (modern-day France) with a company of troops and elephants to make war on Rome, the enemy of Carthage. In the battles to follow, Hannibal was never defeated, but he was eventually called home after Carthage was attacked by the Roman general Scipio Africanus. Hannibal retreated to the east, and in 182 B.C.E., he committed suicide by drinking poison to avoid capture by Roman soldiers. Hannibal's military strategies and his ability to win loyalty from his troops led to his being considered one of the greatest generals in European history.

Septimus Severus. Despite these hardships, the Christian church survived in Gaul, growing steadily after Emperor Constantine the Great (r. C.E. 306–337) issued the Edict of Milan in 313, which proclaimed official toleration of all religions in the empire.

When Roman garrisons withdrew in the early fifth century C.E. to resist attacks in the south, Gaul was invaded by Tartars and Huns from the Balkans, Goths and Visigoths from eastern Germany, Allemani and Burgundians from southern German and Switzerland, and the Salian Franks from northern Holland. In a treaty made in 475, the Visigoth ruler Euric was made ruler of Gaul not as a Roman federate but as an independent state. Subsequently, Gaul became part of the Frankish empire, but its **material culture** and political and civil organization remained patterned after Roman models well into the Middle Ages.

See also: Caesar, Gaius Julius; Celts; Culture and Traditions; Druids; Franks; Greece; Religion; Rome.

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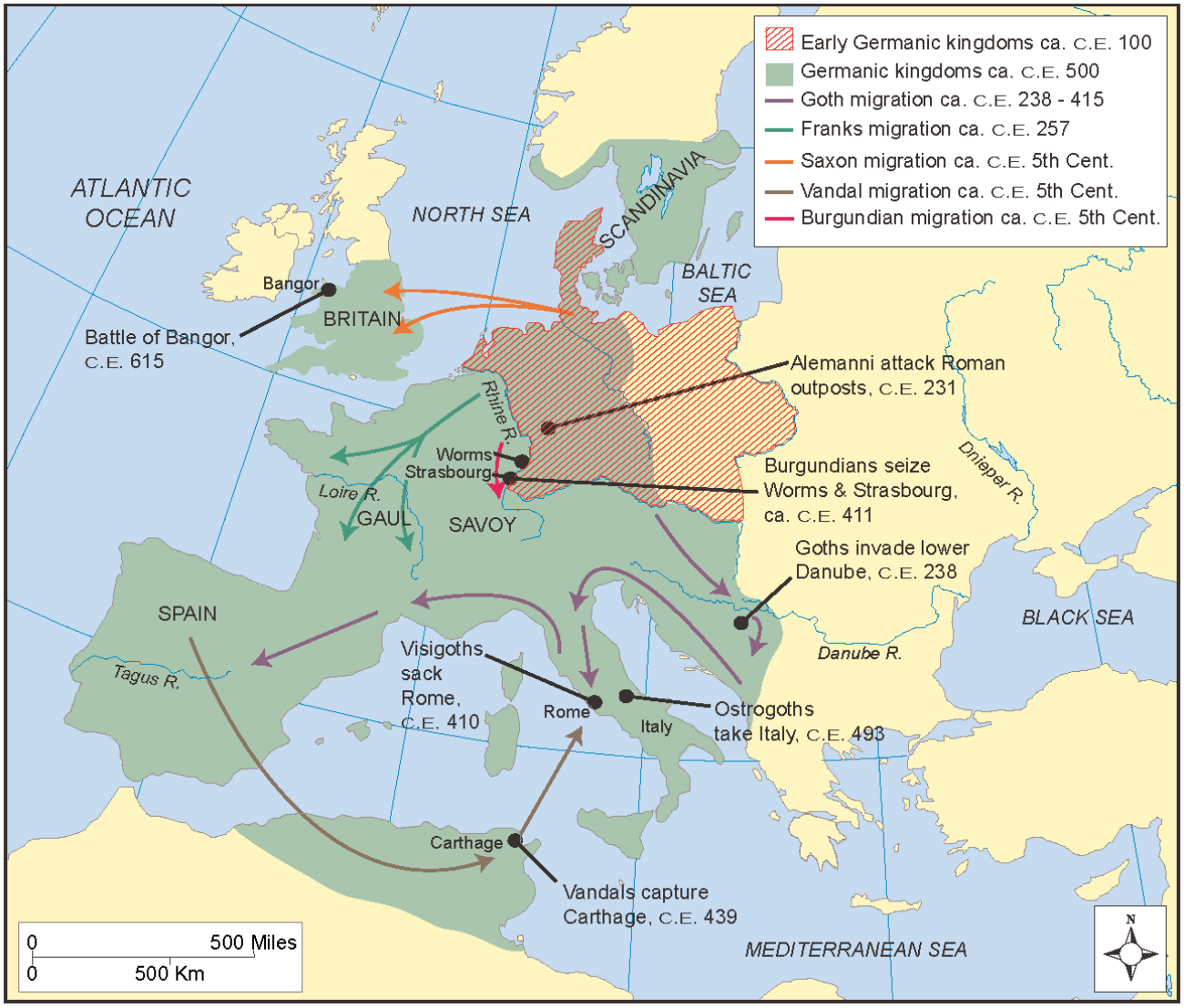
Germanic Groups

Ancient tribes populating central and northern Europe from about 2000 B.C.E. that shared a similar language, political organization, set of religious beliefs, and **material culture**. After the Roman Empire collapsed in C.E. 476, Germanic groups took over the western provinces of Rome and established the new empires of the European Middle Ages.

The Germanic groups generally are classified by region: the North Germanic peoples inhabited Scandinavia; the East Germanic peoples included the Goths, Burgundians, and Vandals; and the West Germanic peoples included the Franks, Saxons, Bavarians, and Alemanni. The Germanic groups first came into conflict with Rome in the late first century B.C.E., resisting the spread of Roman influence in Gaul (modern-day France) and Iberia (modern-day Spain). Germanic soldiers were often hired into the Roman army as mercenaries because of their fighting abilities.

MIGRATIONS OF GERMANIC GROUPS: *The Germanic groups proved uneasy neighbors to the ambitious Roman empire. In the third century C.E., groups of Goths, Franks, and Alemanni attacked Roman outposts in Gaul and Germania. By C.E. 500, all the lands once belonging to the western Roman Empire had become home to migrating Germanic groups such as the Saxons, Vandals, Burgundians, Visigoths, and Ostrogoths.*



Evidence of Germanic languages in southern Scandinavia dates to about 2000 B.C.E., suggesting that the tribes originated in this region. By 1200 B.C.E., Germanic settlements were established in modern-day Denmark and northern Germany. By the beginning of the **Iron Age** in northern Europe (ca. 600 B.C.E.), Germanic peoples occupied the plain between the Rhine and Oder rivers. The Jastorf culture in this area, named after an archeological find near the town of Jastorf in northwestern Germany, shared similarities in art and ironworking with the Celtic cultures in southern and western Germany. Beginning in 500 B.C.E., Germanic tribes began to migrate south and east. These migrations

continued throughout the rise and fall of the Roman Empire, spurred sometimes by internal conflicts or by pressures from outside forces, such as invasions by the Huns in the fourth and fifth centuries C.E.

The tribes referred to as the Germanic groups did not share a sense of collective identity. When necessary, clans or tribes would unite to share resources or fight a common enemy, but for the most part clans had separate identities and called themselves by different names. Individual groups or tribes were united by ties of family or friendship and often believed in a shared ancestor, usually a deity.

DAILY LIFE

The chief occupations among most of the Germanic groups were cattle-raising and ironworking, similar to those of their neighbors the Celts. In a typical Germanic settlement, people constructed villages of timber houses where they and their domestic animals lived under the same roof. Farmers planted crops of grains, legumes, and flax and raised pigs, sheep, goats, horses, and other livestock. Wild animals such as deer, boar, and wild cattle provided meat, hides, and horns. The number of cattle a family possessed was a mark of social prestige, indicating wealth and status.

In their everyday lives, the Germanic peoples used ceramic bowls and utensils, shaping handworked clay to make pots, ladles, and jars of various sizes, which they ornamented with simple geometric designs and fired over open wood fires. Women were mainly responsible for domestic tasks and the making of household implements as well as weaving, spinning, and producing clothing. Women typically wore long, sleeveless gowns over a blouse and undergarments. The gown fastened at the shoulder with a brooch and at the waist with a belt. Men wore trousers, smocks, and cloaks. Both men and women wore fur wraps or cloaks fastened with a brooch called a *fibula*. Leather was used to make shoes and caps.

The most sophisticated craft of the Germanic peoples was ironworking. The ability to smelt iron and work it into weapons meant that most Germanic men could be armed, an important feature in a society whose economy and identity were based on warfare. Most of the Germanic groups produced only those goods needed to be self-sufficient and did not manufacture goods for trade. Commerce took place between individuals and groups in the form of gift-giving, which reinforced prestige and power. It was more important to be able to give gifts than to receive them.

Germanic warriors also gained prestige through raiding and warfare, primarily stealing cattle and slaves. Raiding went on between tribes and between feuding clans within tribes. Clans were related through blood ties that forbade marrying or feuding with close kin. Between clans, however, disputes were often settled through revenge and feuding. Warriors were obligated to participate in interclan warfare on behalf of their kin, and had to exact revenge if a member of the family was injured or killed. In some cases, the injury was settled by paying a fine or man-price called *wergild*. Feuds were forbidden during religious holidays, during tribal gatherings or assemblies, and during military expeditions. Anyone who violated these rules would be declared an outlaw, literally outside the protection of the clan.

Political organization varied among tribes, but in most cases the warriors selected a prince or king from one of the leading families. The king combined the authority of military chief and religious head and ruled along with a democratic assembly of warriors. Assemblies of free male warriors were called upon when necessary to resolve disputes. During the *thing* (the name given to the meeting of the assembly), conflicts were resolved and tribal ties reinforced.

Free men and women comprised the largest class in Germanic society. Men served as the heads of families, clans, and tribes, and fathers had authority over their wife, children, and slaves. Some men had multiple wives if they could afford to support them. Prisoners of war served as slaves, producing food and **textiles**, tending cattle, and working as household domestic servants.

GERMANIC GROUPS AND THE ROMAN EMPIRE

ca. 2000 B.C.E. Germanic peoples settle in southern Scandinavia

ca. 1200 B.C.E. Germanic groups established in modern-day Denmark

ca. 1000 B.C.E. Jastorf culture established in northern Germany

ca. 500 B.C.E. Germanic groups begin migrating south and east

ca. 200 B.C.E. First contact between Germanic groups and Roman Republic

ca. 100 B.C.E. German groups repelled from Roman Italy

C.E. 9 Germanic revolt fixes Roman borders at Rhine

C.E. 268 Alemanni invade northern Gaul

C.E. 355 Roman general and future emperor Julian grants land to the Franks

ca. C.E. 370 Ostrogoths fall under control of Huns

C.E. 406 Mixed Germanic groups launch combined invasion of Roman Empire

C.E. 410 Visigoths sack Rome

ca. C.E. 454 Theodoric the Great, future king of Ostrogoths, born

C.E. 455 Vandals sack Rome

C.E. 476 Odoacer forces Emperor Romulus Augustulus to abdicate; end of Roman Empire in the West

THE GERMANIC GROUPS AND ROME

Contacts between the Germanic world and Rome began in the second century B.C.E. Roman governors exported iron, grain, and luxury goods to the Germanic tribes in return for military service. Roman officials often hired German warriors to fight in the army or paid Germanic tribes, like the Franks, to act as buffer states on the edge of the expanding Roman Empire. Despite frequent battles, the Roman armies never succeeded in subduing or civilizing the peoples they referred to as barbarians.

By the third century C.E., German mercenaries comprised the bulk of the Roman army. Germanic invasions of Italy became more frequent; an attack by mixed Germanic groups in C.E. 406 was followed four years later by the sacking of Rome at the hands of the Visigoths. A Germanic group called the Vandals sacked the city again in 455. After a dictate by the Roman emperor displeased them, German mercenaries elected their own king, Odoacer, who forced Emperor Romulus Augustulus to abdicate in 476. This brought an end to the Roman Empire in the west. By the sixth century, all of the western provinces of the Roman Empire had become Germanic kingdoms.

See also: Culture and Traditions; Franks; Language and Writing; Myths, Epics, and Sagas; Norsemen; Odoacer; Rome; Society; Tools and Weapons.

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Goths *See* Germanic Groups.

Greece

Based around the Aegean Sea, the ancient region that covered the Aegean peninsula, its islands, and the coast of modern-day Turkey. Reaching the height of its influence in the first millennium B.C.E., Greek civilization had a profound effect on later Western culture. Many of the principles underlying European ideas about art, literature, philosophy, architecture, education, science, and political organization had their origins in **classical** Greece.

THE FIRST GREEKS

The first inhabitants of Greece, the Achaeans, descended from Indo-European tribes that originally inhabited the Caucasus and what is now northern Iran. The Achaeans first settled in Greece around 1900 B.C.E. From their capital at Mycenae, they traded with the Minoan civilization on Crete, and with Cyprus, Egypt, Scandinavia, and Britain. Mycenaean civilization flourished between 1600 and 1100 B.C.E., a period sometimes referred to as the Heroic Age of Greece.

Around 1100 B.C.E., Mycenae fell to attacks from the Dorians, a warrior people to the north whose horses, fighting chariots, and iron weapons made them superior in combat to the **Bronze Age** Mycenaeans. Following the Dorian invasions, the Phoenicians became the leading naval power of the Mediterranean Sea, while Greece entered a time known as the Dark Age, marked by a relative decline in art, architecture, and the production of jewelry, pottery, and other domestic objects.

Around 750 B.C.E., Greece experienced a rebirth in economic activity. Cities grew in size as trade in pottery, **textiles**, and weapons expanded through the Mediterranean. Greeks migrated from the mainland to the Aegean islands and the western coast of Asia Minor, called Ionia. Greek settlers also established colonies in Italy, Sicily, around the Black Sea, and in Macedonia and Thrace, territories to the north and northwest of Greece. During the eighth century B.C.E., many scholars believe, Homer composed his epic poems the *Iliad*—about the Trojan War—and the *Odyssey*—about the adventures of the hero Odysseus after the Trojan War. By 500 B.C.E., Greeks—who called themselves *Hellenes*—had settled all around the Mediterranean Sea, from the Strait of Gibraltar to the Black Sea. The word *Greek* comes from the Roman word *Graeci*.

THE ARCHAIC AGE

Traditionally, recorded Greek history begins in 776 B.C.E., the year of the first Olympiad, the games held to honor the chief Greek god, Zeus. The interval from the first Olympiad to the end of the Persian Wars in 480 B.C.E. is often called the Archaic Age, based on the style of art and architecture that evolved during this time. These years witnessed the evolution of the Greek *polis* or city-state, a political entity comprised of a city and its surrounding territory. City-states were ruled independently as monarchies, oligarchies run by wealthy nobles, or, in the case of Athens, democracies where political officials were elected by the *demos* or voting public. Increased trade spurred the growth of the merchant class within the various city-states. Meanwhile, **artisans** began to gain influence as more people had wealth and leisure time to indulge in luxuries as a result of the widespread use of slaves.

TURNING POINT

Democracy in Athens

The *polis*, or city-state, was a political body that evolved in ancient Greece and that consisted of a city and its surrounding territory. Greek cities were notoriously independent and had various forms of self-government. In the fourth century B.C.E., more than 1,000 Greek communities had some version of self-rule concentrated either in the hands of rich, **aristocratic** nobles (an oligarchy) or the people (the *demos*).

Athens was the first city-state to develop a system of democracy. In 594 B.C.E., the head of the Athenian government, Solon (ca. 638–559 B.C.E.), made it possible for middle- and lower-class citizens to vote in the People's Assembly. He also organized a ruling council open to more classes and set up a court system where defendants were heard by a jury of their peers.

The People's Assembly served as the governing body of democratic Athens and was open to all adult male citizens. The assembly met up to 40 times a year to debate and vote on the agenda prepared by the council, a committee of 500 who carried out the decisions of the assembly. Councils were chosen by lot among qualifying citizens who served for one year. Ten military generals were also elected each year.

The success of the democracy depended on its balance of power. Anyone suspected of ambition would be ostracized, a decision whereby the assembly voted to banish someone from the city for 10 years. When Sparta defeated Athens in the Peloponnesian War (431–404 B.C.E.), **oligarchy** replaced Athenian democracy. Democratic institutions disappeared as the Greek world came under the rule of Alexander III, the Great (356–323 B.C.E.), and did not reappear in Europe until the Renaissance.

The Classical Age of Greece (480–323 B.C.E.) is also called the Golden Age because of the cultural advancements made during this period. Athens in particular became home to many of the finest Greek authors, historians, teachers, orators, and politicians. Their aesthetic ideals and achievements in philosophy, literature and drama, visual art, and political thought would have an indelible influence on Western civilization.

During this Golden Age, Hippocrates (460–377 B.C.E.) revolutionized medicine with his careful study of the human body and his belief that illnesses had physical, not supernatural, causes. The arts and literature flourished; dramatists Aeschylus (525–456 B.C.E.), Sophocles (496–406 B.C.E.), and Euripides (480–406 B.C.E.) wrote their great tragedies; Pindar (518–438 B.C.E.) his poetry; and Herodotus (fifth century B.C.E.) and Thucydides (ca. 460–ca. 400 B.C.E.) their histories. People of classical Greece enjoyed the performing arts, sports, and other entertainments. The architecture of theaters, temples, and public spaces reflected the classical ideals of symmetry and balance. The circulation of currency encouraged trade, and Athens in particular built a powerful navy.

Religion played an important role in daily life. The Greeks believed that a diverse **pantheon** of gods, goddesses, and other powerful spirits influenced all aspects of life, and frequent **rituals**, festivals, and special offerings were conducted to seek the gods' favor. Elaborate temples were dedicated to the particular patron of a town; for example, the Parthenon in Athens glorified Athena, goddess of wisdom. The **oracle** at Delphi, dating to 1400 B.C.E., was for centuries the most famous and important shrine in Greece. During the Classical Age, scholars and pilgrims came from all over Europe to consult the priestess there, who was said to be in the service of Apollo, the god of the sun as well as music and poetry, and who would answer questions with mysterious prophecies.

HELLENISTIC AGE AND BEYOND

In 338 B.C.E., the Macedonian king Philip II (382–336 B.C.E.) defeated a coalition of Greek forces and

During the Golden Age, the splendid Acropolis functioned as the center of public and religious life for Athenian citizens. The marble Parthenon, dedicated to the goddess Athena, remains an eloquent example of the architecture of classical Greece. (George Grigoriou/Stone/Getty Images)

brought an end to the independence of the city-states. The rule of Philip's son, Alexander III, the Great (356–323 B.C.E.), introduced the **Hellenistic** age. Alexander's conquests spread Greek culture into Egypt and Persia, but after his death, the fates of the city-states fluctuated with the dynastic struggles between Alexander's successors.

Following Macedonian rule, with the destruction of Corinth in 146 B.C.E., all of Greece was conquered by the growing **republic** of Rome. Romans adopted the language, alphabet, art, and learning of the Greeks, spreading these ideals as far in the west as Alexander had in the east. Under Roman rule, the Greek economy stabilized and the ravaged province enjoyed the effects of the *Pax Romana*, or Roman Peace (27 B.C.E.–C.E. 180).

In C.E. 330, the Roman Emperor Constantine the Great (ca. C.E. 280–337) made the Greek city of Byzantium his capital, renaming it Constantinople. When the Roman Empire split into halves in 395, Constantinople remained the capital of the eastern Roman Empire and gradually transformed into the Byzantine Empire, where Greek language, literature, and culture exerted a strong influence into the Middle Ages.

See also: Alexander III, the Great; Aristotle; Crete; Culture and Traditions; Language and Writing; Minoan Civilization; Myths, Epics, and Sagas; Peloponnesian War; Persian Wars; Religion; Slavery; Society; Trojan War.

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Homer *See* Trojan War.

Huns

Nomadic tribe whose entry into Europe in the fourth century c.e. disrupted the borders of the Roman Empire. The Huns, who fought on horseback, developed a reputation for being fearsome and destructive raiders who would strike and retreat quickly. Under their great general Attila (ca. c.e. 406–453), the Huns won tribute from the Roman emperors and ruled over a large part of central and eastern Europe.

Some historians identify the Huns with the Hsiung-nu, the invaders who prompted the emperors of the Han dynasty to begin building the Great Wall in the third century b.c.e. In the first three centuries c.e., the Huns migrated from Turkestan, moving westward across what is now Russia to the Hungarian plain. In c.e. 372, they invaded the Volga River valley, displacing the tribes of Goths who lived there and spurring widespread migrations among the Germanic groups.

With their small, sturdy horses, the Huns moved rapidly. Their short reflex bow could fire several arrows in quick succession, thus decimating their opponents' ranks. They also fought with lances and lassos. Roman historians reported that the Huns ate, negotiated treaties, and sometimes even slept on their horses. According to Roman authors, the Huns purposely scarred their faces to look more intimidating.

Attila became king of the Huns in c.e. 434, ruling jointly with his brother Bleda until the latter's death in 445. Following his accession to the throne, Attila signed a treaty in c.e. 443 with the Emperor Theodosius II (r. c.e. 408–450) to remain out of Roman territory. However, by 440 the Huns were back at the Roman border, and over the next three years Attila overran most of the Balkans. In 443, Theodosius paid a ransom of 6,000 pounds of gold to deter an attack on Constantinople.

Attila was a legend even in his own time. Ambassadors who visited him reported that while he entertained guests with lavish food and drink, he dressed simply, sat on a wooden chair, and ate from a wooden plate. He had no decoration on his sword or his horse's bridle, even though such was the custom. He was close friends with the Roman general Aetius, who had been a hostage of the Huns, and the two men enjoyed a mutual respect for their prowess as military leaders.

In c.e. 450, the new eastern Roman Emperor Marcian (c.e. 392–457) refused to pay the Huns the annual tribute. The Roman emperor in the West, Valentinian III (ca. c.e. 419–455), likewise refused to pay. In response, Attila gathered a force of more than 500,000 soldiers and marched into Gaul (modern-day France), causing widespread destruction.

Near Châlons, Aetius came forward to oppose his friend and check the Hun's advance. After a fierce battle, Attila withdrew. The next year, an invasion of Italy brought no better results. In c.e. 453, Attila died on his marriage night to a young, new bride. A severe defeat the following year by a combined force of Germanic groups convinced the Huns to retreat. Attila's kingdom, which had covered a large part of central and eastern Europe, disintegrated. Some Huns returned to Russia, while others stayed in eastern Europe, giving their name to modern-day Hungary.

See also: Gauls; Germanic Groups; Rome.

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Ice Age

Period of geological history marked by a freezing global climate and glaciations, when large sheets of ice called glaciers covered the land. The most recent Ice Age in Europe began around 1.6 million years ago and has alternated with 10,000- to 15,000-year intervals of warmer weather called interglacial periods.

The term "Ice Age" commonly refers to the last period of glaciation, which began in Europe about 100,000 to 40,000 years ago and ended around 12,000 B.C.E. During this last Ice Age, enormous animals roamed the frozen stretches of Europe, providing food for human ancestors, the Neanderthal and Cro-Magnon peoples.

The last Ice Age peaked in terms of coldest temperature and furthest glacial extent around 20,000 B.C.E. All of northern Europe and Eurasia was covered with an ice sheet, and glaciers crept slowly through the upland areas of central Europe. Animals such as the cave bear, mammoth, woolly rhinoceros, reindeer, and wild horse populated a treeless, tundralike landscape. Cave paintings dating from ca. 18,000 B.C.E. show how humans survived by taking shelter from the cold in caves and hunting these animals for food and clothing. The use of fire, and the ability to make tools for hunting and to fashion clothing, allowed humans to adapt to the cold and thus survive in a climate where winters lasted for nine months.

After the melting of the last glaciers in northern Europe, people formed more settled communities. The animals of the Ice Age slowly became extinct, perhaps due to climatic conditions or to overhunting by growing human populations. People began to supplement their diet by hunting smaller animals, fishing, and learning to farm. The development of agriculture eventually replaced the hunter-gatherer lifestyles of the Ice Age. Geologists believe the earth is currently in an interglacial period and that another Ice Age will return.

See also: Archeological Discoveries; Cave Paintings; Cro-Magnon Peoples; Neanderthal Peoples; Technology and Inventions; Tools and Weapons.

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ICE AGE PEAKS, CA. 20,000 B.C.E.

Sheets of solid ice once covered modern-day Britain and Scandinavia, while smaller ice caps formed in the Pyrenees and Alps. Due to the water locked in these massive glaciers, the sea level dropped, giving the ancient European coastline a much different appearance than it has today. Most of Europe was a tundralike landscape roamed by reindeer, woolly mammoths, woolly rhinoceroses, and musk oxen.

Indo-Europeans

See Culture and Traditions; Language and Writing.

Justinian I (c.e. 483–565)

Emperor of the eastern portion of the late Roman Empire, the ruler who briefly restored the glory of imperial Rome. Justinian's reign was marked by military successes, improvements in the legal system, and great public works such as the building of the Hagia Sophia church in Byzantium (modern-day Istanbul, Turkey). Scholars view Justinian's reign as a turning point from the culture and ideals of Rome to that of Byzantine civilization, which would prevail in the eastern empire for the next thousand years.

Justinian was born in the village of Tauresium and was adopted by his uncle, the emperor Justin (r. c.e. 518–527), as his son. In c.e. 521, Justinian became consul and shortly thereafter married Theodora. Because she was believed to have been of a lower class than he, the marriage shocked the sensibilities of the upper class. In 527, on the death of Justin, Justinian became emperor.

Justinian's actions as emperor showed a desire to restore the former glory of the Roman Empire by reuniting its split western and eastern halves. To this end, he launched military expeditions to reclaim North Africa from the Vandals and to wrest Italy from the kingship of the Ostrogoths, who had been its rulers since the German king Odoacer forced the last western emperor, Romulus Augustulus, to abdicate in c.e. 476. Justinian succeeded in taking Italy in 562, three years before his death. At the same time, ongoing wars with Persia occupied the military, and defenses against Bulgar and Slav attacks on the northern provinces were ultimately unsuccessful.

Justinian was a staunch supporter of the Eastern Orthodox Church and passed legislation against those who did not practice Christianity. He prevented non-Christians from holding office and expelled those teachers from the Academy at Athens, Greece, who did not adhere to Christian practices.

Justinian's chief accomplishment was his codification of the laws, which he updated and made more coherent. In c.e. 533, he issued the codification, known as the *Digest of Justinian*, followed by a legal textbook called the *Institutes*. In 534, he issued the *Codex*, which collected imperial laws dating back to c.e. 120. The works were written in Latin, the official language of the Roman Empire. Together, they documented the legal system of the empire.

The reign of Justinian was a landmark of late **antiquity**. His legal codes provided stability, and their rediscovery in Italy during the twelfth century c.e. inspired sweeping civil reforms. The architecture he

supported survives to this day, inspiring citizens and visitors with its beauty. His reign marked the last flowering of Roman culture before Europe entered the Middle Ages.

See also: Christianity; Greece; Latin; Rome.

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Kievan Rus

State that predates modern-day Ukraine and Russia and that flourished between the tenth and thirteenth centuries C.E. According to tradition, the state dates to the Varangarian chieftain Oleg's seizure of the city of Kiev sometime between C.E. 862 and 882. Because the Varangarians were also known as Rus, the state Oleg established was called Kievan Rus. By uniting the eastern Slavs, the princes of Kievan Rus created a kingdom of political, commercial, and cultural importance that stretched from the Baltic to the Black Sea.

The Slavic people evolved from the Indo-European tribes who migrated into the Ukraine at the end of the last Ice Age, around 12,000 B.C.E. In the seventh century C.E., the Slavs spread north to the Oka and upper Volga Rivers, west to northern Germany, and south to the Balkans. These regions developed their own customs and languages. The eastern Slavic languages, for instance, turned into modern Ukrainian, Russian, and Belorussian.

The eastern Slavs tended to live in small villages. Central, fortified areas served as strongholds and meeting places for tribal events and religious worship. Rather than a central authority, tribes had individual leaders and were linked through shared religious customs and similar language. Extended families held land and livestock in common. In war, the eastern Slavs were known to be tenacious fighters. They traded honey, wax, furs, and slaves with Muslim Arabs, who provided **textiles**, jewelry, and precious metals in return. In the eighth century, they traded also with the Turkish Khazars, who settled around the lower Volga river and Caspian Sea.

In the eighth and ninth centuries, migrating tribes of Norsemen, later called Varangarians or Rus, built settlements along the Baltic coast and near Novgorod. These cities thrived as centers for craftspeople and merchants, as the Rus opened trade routes to the Islamic and Byzantine worlds, sailing all the way to Constantinople and Baghdad. After Oleg established himself in Kiev, he began to link the vital culture of the eastern Slavs through commerce as well as a system of tribute designed to fund wars against the Khazars and a campaign against Constantinople. Oleg's successors were defeated in their attacks on the city when the Byzantines repelled them using a deadly weapon called Greek fire, a destructive compound that ignited on impact. Later rulers, including Olga (r. C.E. 945–962), consolidated the kingdom through military conquest and a standardized system of tribute.

Christianity came to Kievan Rus during the reign of Vladimir the Great (r. C.E. 980–1015) through contacts with the Greek Orthodox Church. The kingdom peaked in extent and cultural activity during the reign of Yaroslav the Wise (r. C.E. 1036–1054), who secured the borders, supported monasteries and built churches, and codified the laws into the *Ruska Pravda*, or Rus Justice. During the twelfth and thirteenth centuries, wars between Yaroslav's successors, a decline in trade, and invasions by the Cumans, an East Turkic people migrating into south

Russia, led to the political fragmentation of Kievan Rus. The once-great kingdom dissolved under the Mongol invasions between 1237 and 1240.

See also: Culture and Traditions; Norsemen; Persian Wars.

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Language and Writing

Most written European languages share common origins, but evidence of language in ancient Europe long predates the appearance of writing. Indications that ancient peoples used language—a uniquely human ability—were first discovered in the pictorial and symbolic representations of communication seen in the cave paintings of the Ice Age. However, these early forms of writing, based on **glyphs** or **pictographs**—pictorial representations of a word or idea—often bear no resemblance to spoken language. The evolution of an alphabet or **syllabary**, in which a written character represents a spoken sound, results in writing as we know it.

SPOKEN LANGUAGE

The similarity of words and structural rules among various European languages has led scholars to suspect that these spoken languages evolved from a shared dialect. This hypothetical language is often called proto-Indo-European because it was presumably spoken among the Indo-Europeans, a tribe or group of tribes who lived around the Caucasus Mountains, between Anatolia and the west Russian steppe. The Indo-Europeans began to migrate throughout Europe beginning in the second and third millennia B.C.E. As groups settled in different areas and began to evolve distinct societies, their language changed and developed.

Although the proto-Indo-European language was never written down, **linguists** have managed to reconstruct a hypothetical lexicon, or vocabulary, based on similarities between the various Indo-European tongues. Shared words for trees, animals, agriculture and stock-breeding, familial relationships, counting systems, and religious concepts have allowed linguists to infer the culture and traditions of these early people.

Indo-European Languages

Among the Indo-European languages, the Greek family became one of the most diverse in Europe, although it borrowed some non-Indo-European elements from neighbors like the Minoans (ca. 2600–1450 B.C.E.). Two other major languages contemporary with early Greek, the Thracian and Illyrian tongues spoken in the Balkans, are now extinct. North of the Balkans, the Slavic and Baltic language groups developed. The early form of Slavic remained intact for a long period and did not begin to diverge into its modern branches until about C.E. 400.

The remaining three Indo-European language groups were spoken by the Celts, Germanic groups, and peoples of Italy. In prehistoric times, Celtic speakers predominated in western, central, and eastern Europe. The extent of the language sharply declined with the Germanic migrations and expansion of the Roman Empire between the second century B.C.E. and first century C.E. Before the Latin alphabet was introduced, the early Germanic groups used a written alphabet of signs, or characters, called runes. Latin first emerged among the Italic peoples and became the parent of

MAJOR LINGUISTIC GROUPS OF ANCIENT EUROPE, ca. 2000 B.C.E.

By 2000 B.C.E. the language spoken by the Indo-European groups that had settled throughout Europe began to diversify, and by around 1000 B.C.E , distinct languages had appeared. Although people in some parts of Europe spoke Altaic, Semitic, or Uralic languages, or other non-Indo-European languages such as Etruscan or Basque, most European languages belonged to the Indo-European family.

the modern Romance languages, including French, Italian, Spanish, Portuguese, and Romanian.

Non-Indo-European Languages

Not all peoples in ancient Europe spoke an Indo-European language. Groups in the Middle East and North Africa who spoke Semitic languages, a major subfamily of Afro-Asiatic languages, also settled in Europe at various times. Estonian, Finnish, and Hungarian belong to the Uralic family of languages, which originated around the Ural Mountains of central Russia. Speakers of Altaic languages in Bulgaria, Romania, and other Balkan states also reflect early migrations from the east.

In addition, certain isolated languages with no obvious relationship to others originated or were spoken in various parts of ancient Europe. The Etruscan civilization, which flourished in central Italy between 800 and 200 B.C.E., used a non-Indo-European language, although writers adopted characters from the Greek alphabet for **inscriptions** on monuments or to label burial items.

EVOLUTION OF EUROPEAN LANGUAGE AND WRITING

ca. 20,000 B.C.E. Cave paintings record symbols and signs

ca. 2000 B.C.E. Indo-European tribes settled throughout Europe; languages begin to diverge from proto-Indo-European

ca. 1450 B.C.E. Linear A script used by Minoan culture on Crete

ca. 1300 B.C.E. Linear B script develops in Mycenaean Greece

ca. 1100 B.C.E. Phoenician alphabet develops

ca. 1100–750 B.C.E. Greeks adopt Phoenician characters for Greek alphabet

ca. 800–750 B.C.E. Homer writes *Iliad* and *Odyssey*

ca. 700 B.C.E. Earliest inscriptions in Etruscan language, using Greek characters

ca. 400 B.C.E. Ionic script adopted as standard Greek

ca. 200 B.C.E.–C.E. 100 Decline of Celtic language due to Germanic migrations and Roman expansion

ca. C.E. 400 Early Slavic languages begin to branch into modern language families

Iberian was spoken in parts of Spain before its conquest by Rome in the third century B.C.E. Like the Etruscan language, Iberian survives only in scattered inscriptions. Some speculate that Iberian was the language of the earliest inhabitants of Europe, the cave painters of Lascaux and similar places.

Basque, a language still spoken in areas of northern Spain and southwestern France, has been variously linked to Iberian or North African languages but seems to be independent of any known linguistic family. Scholars wonder if it may be the last surviving language of the earliest humans in Europe, those who preceded the Indo-Europeans.

EMERGENCE OF WRITTEN LANGUAGE

The introduction of writing marks the transition from "prehistory" to "history." The first civilization in Europe with a recorded system of writing was the Minoan culture of Crete. Minoan writing moved through several phases. The two distinct scripts discovered on Crete and in other areas under Minoan influence have been classified as Linear A and Linear B. The scripts demonstrate the difference between graphic systems based on **logograms**, written characters representing an action, object, or concept, and those based on phonograms, written characters that represent a spoken sound. Systems of **hieroglyphics**, such as Linear A, use logograms, while syllabaries, or alphabets, like that of Linear B, use phonograms. In the earliest forms of writing, people often used logograms to communicate, and these picture scripts varied widely across cultures. In contrast, syllabaries are more limited and are often exchanged between cultures. In this way, the alphabets of all the major languages in Europe derive from the 22-character alphabet developed by the Phoenicians around 1100 B.C.E.

Picture Scripts

Linear A, the earliest written language used in Europe, has never been satisfactorily deciphered. The first traces appear in seals and inscriptions on clay tablets dating between 2100 and 1700 B.C.E. In this script, an assortment of **pictograms** and hieroglyphs represents objects and concepts. Scholars believe that some of the hieroglyphs might have been borrowed from Egypt. In time the pictorial script evolved into a syllabary, which was used on later tablets and seals, between 1700 and 1450 B.C.E. Evidence suggests that the script was used less as a system of writing and more as a system of counting. Just as the earliest scripts in Egypt and Sumer were used by palace administrators and scribes, scholars suspect that Linear A

Before they adopted the Latin alphabet, the Germanic peoples of northern and central Europe used characters called runes to keep records, carve inscriptions, and write poetry. Runic symbols were also used for magical purposes such as divination. (Kai Honkanen/PhotoAlto/Getty Images)

evolved as a way to record the collection and distribution of supplies, a key function of the Minoan government.

The Evolution of the Alphabet

The Linear A script eventually evolved into Linear B, which is sometimes called early or proto-Greek and which developed around 1450 B.C.E. Like Linear A, Linear B functioned largely as a script for keeping records. Palace administrators used the script to record economic transactions on clay tablets and to label containers of foodstuffs such as jars of olive oil. These archival tablets and labels have been found at Pylos, Tiryns, and Myceanae in the Peloponnese, at Thebes in central Greece, and at Chania and Knossus in Crete. Written symbols were supplemented with ideograms or logograms where necessary. A purely utilitarian script, Linear B was non-Indo-European and proved inadequate for representing many of the sounds in the Greek language. After Mycenaean civilization fell to the Dorian invaders around 1100 B.C.E., Linear B fell out of use.

TURNING POINT

The Iliad and the Odyssey

Tradition has it that these two epic poems were written by a rhapsode (an oral performer who recites or sings verse) named Homer, an Ionian Greek, sometime between 800 B.C.E. and 750 B.C.E. The stories describe events during and after the Trojan War, said to have occurred around 1250 B.C.E. The tales were passed down through oral storytelling until Homer wrote them down. Historians debate whether a single man named Homer ever existed or if a series of singers composed the epics over time. The epic poems are examples of oral formulaic verse, wherein a composer draws on a stock of repeated lines and phrases as he works with a traditional story. This makes it likely that the earliest recorded versions of the *Iliad* and the *Odyssey* had already been retold many times.

The *Iliad*'s account of the Trojan War and the *Odyssey*'s story of the Greek hero Odysseus's 10-year voyage home from the war were enormously popular and became two of the most influential texts in Greek literature. Aside from their artistic beauty, they abound in the myths that formed the basis of the Greek religion and provided the Greeks of Homer's day and later with an antique, heroic heritage. The poems also incorporate details about Greek life and customs in eighth century B.C.E. The *Iliad* and the *Odyssey* inspired imitations of all types and today are considered pinnacles of achievement in world literature.

Instead, the Greeks adopted the alphabet of the Phoenicians, modifying it for their own needs. The process of adapting the alphabet spanned the next 500 years; different scripts were used at different times, and versions of a Greek alphabet were as different as the areas that developed them. The earliest inscriptions on monuments reflect no fixed rules for the direction or rotation of letters; the writing flows up, down, from left to right or vice-versa, and sometimes tilted sideways. The language of Homer and Hesiod, Greek poets thought to have lived in the eighth century B.C.E., is written in only one of several variant alphabets. By 403 B.C.E., this language, called the Ionic script because it developed in Ionia on the coast of Asia Minor, became generally adopted by the Greek city-states.

The Romans received the Greek alphabet in the sixth century B.C.E. through trade and interaction with the Etruscans and the Greek colonies on the Italian peninsula. While the Greek alphabet would give rise to the Cyrillic alphabets of the east, the Romans disseminated their Latin alphabet throughout the west.

Runes

Early Germanic and Norse groups used an alphabet based on a system of signs or characters called runes. Like other alphabets, each rune represented a different sound. The Goths first began to use runes in the first century C.E. Some scholars believe that they borrowed runic characters from the Greek or Latin alphabets. The word "rune" also meant "secret" in the Gothic language, and runic writing were used for religious and mystical purposes as well as for inscriptions on coins, monuments, and other **artifacts**.

Occasionally composed in verse, these inscriptions, written on wood or stone, most frequently commemorate voyages, legal agreements, and deaths. Ogam, the runic script of the Celts, was also used for both writing and divination. Like the Phoenician alphabet, the runic alphabet maintained a fixed order, but runic inscriptions read from right to left.

Because runes were also used for divination, Christian authorities frowned upon their use. After these groups adopted the Latin alphabet for recording their written language, runes and ogam gradually fell out of use.

SPREAD OF WRITING THROUGHOUT EUROPE

The preliterate peoples of Europe found the alphabet an efficient means of translating their spoken languages into written script. Groups absorbed by the Roman Empire used Latin to communicate with the government, adapting the Latin alphabet to their native or vernacular tongues. After coming into contact with the Roman Empire during the second century B.C.E., many Germanic groups adopted the Latin alphabet. The earliest document written in Gothic, a translation of the Christian Bible by the scholar Ulfias made around C.E. 376, uses the Latin alphabet to represent the Gothic tongue.

After the collapse of the western Roman Empire in C.E. 476, the extent of learning and the circulation of literature in western Europe declined sharply, leading some historians to refer to the following centuries as the Dark Ages. However, Latin remained the language of the Christian Church and the language of government, administration, and higher education, as well as the language used by the **aristocratic** classes in areas formerly under Roman rule. In addition, Greek literature and the arts continued to flourish in the eastern half of the Roman realm—what became the Byzantine Empire—for many centuries following the fall of the west.

See also: Art and Architecture; Christianity; Culture and Traditions; Etruscan Civilization; Greece; Latin; Minoan Civilization; Myths, Epics, and Sagas; Religion; Rome; Society.

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Latin

The culture and language of early Latium, the region of Italy in which Roman culture originated. The term later evolved to refer also the language and culture of Rome itself, which eventually spread to all areas that fell under the influence of the Roman **Republic** and later the empire. Latin persisted as the language of the educated class throughout the Middle Ages in Western Europe and as the language of the Christian Church to the present day.

The Latin language belongs to the Italic branch of the Indo-European family of languages. Related languages—such as those used by the Celts, Germanic groups, and Greeks—may have played a part in the evolution of early Latin, which appeared around the eighth century B.C.E. Absorbing linguistic influences from the Etruscan civilization to the north, which provided a series of early Roman kings, Latin emerged as the language of Rome. As the city expanded in power and influence, eventually conquering the Etruscan city-states, the language, law, customs, and culture of Rome spread to its colonies throughout the Italian peninsula and beyond. This helped to establish a shared means of communication and provided a common currency for the exchange of ideas.

In about 100 B.C.E., archaic or Early Latin evolved into classical Latin, the tongue of the government, literature, and philosophies of the Roman Empire (27 B.C.E.–C.E. 476). In the last days of the republic and the early days of the empire, Greek was considered the language of the educated classes in Rome. As the empire expanded, however, it introduced the Latin language into its various provinces. Although Roman officials did not suppress the use of native languages, classical Latin became the written form for all administrative correspondence and scholarly works. When spoken, Latin could take different forms; colloquial Latin, spoken by the upper classes, differed from vulgar Latin, which was used by the lower and uneducated classes.

After the Roman Emperor Theodosius I (C.E. 339–397) adopted Christianity as the official religion of Rome in C.E. 380, writings and sermons associated with the Catholic Church were conducted in Latin. As the Roman Empire dissolved, Latin persisted among the groups previously subjected to Roman rule—people who had learned it as the language of the state. The Dark Age kingdoms that emerged from the ruins of the Roman Empire continued to use Latin for government documents, literature, and as the spoken tongue of the educated ruling classes.

Latin survived as the everyday language of the Roman Catholic Church until well into the thirteenth and fourteenth centuries C.E., and it is still the Vatican's official language. Classical Latin ultimately evolved into the modern Romance languages, including Italian and French.

See also: Christianity; Language and Writing; Rome.

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Megalith Culture

See Art and Architecture.

Minoan Civilization

Based on the island of Crete in the Mediterranean Sea, an ancient culture that flourished between 2600 and 1450 B.C.E. Named after King Minos of Greek myth, Minoan civilization was the first European society to enter the **Bronze Age**. Minoans established a prosperous society based on farming and trade, controlled sea routes throughout the Mediterranean with a powerful navy, and developed highly sophisticated art and architecture millennia before the better known civilizations of **classical** Greece and Rome.

Crete functioned as a trading center even in the late **Neolithic** Period, and by 2600 B.C.E. its residents had mastered techniques of making bronze tools and weapons. Crafts, such as ceramic pottery, stone bowls, sealstones, and clay figurines, were marketed along with exports of wine and olives. A large navy rid the sea of pirates, and Minoan ships traded from the Nile in Egypt to the Bosporus, a strait that connects the Black Sea to the Mediterranean. A temple wall at Thebes, a city of ancient Egypt, depicts a scene where visitors from Crete offer the pharaoh gifts, proving the extent of Minoan commerce and prosperity.

LIFE AND SOCIETY

Agriculture on Crete depended on the cultivation of wheat, olives, and grapes for wine. Olive oil was used for cooking, cleaning the body, and providing light. Figs, honey, and various fruits and vegetables rounded out the Minoan diet. Livestock, such as cattle, sheep, pigs, and goats, provided meat, and fish and shellfish were abundant. Although people who worked on the land often led short and difficult lives, most people tended to live in the growing towns.

The palace of the king formed the focal point of city life. The palace functioned as an economic center where foodstuffs such as wine, corn, and oil were gathered, stored in enormous clay pots, and redistributed among the population. A large administrative class of scribes kept economic accounts, supervised agricultural production and manufacturing, and collected taxes. Writing evolved mainly as a way to keep tallies of stores recorded on soft clay tablets. The Minoans also developed a system of standardized weights and currency.

Artisans kept workshops near the palace where they produced high-quality jewelry, metalwork, ceramics, and faience, pottery decorated with a colored glaze. Minoan art, as reflected in the paintings,

The excavation and discovery of the Minoan palace at Knossos, on the Greek island of Crete, with its frescos such as this one depicting dolphins and painted on the Queen's chamber walls, proved that the fabled Minoan civilization had a historical basis. (Guy Vanderelst/Photographer's Choice/Getty Images)

statues, and even everyday items uncovered by archeologists, displays a delight in beauty and splendor. Surviving frescoes, paintings made on wet plaster walls and ceilings, show naturalistic representations of plants, animals, fish, and humans.

Minoan cities were broad and spacious, with paved roads. The middle class lived in small mansions, and even the poorer dwellings had six or eight rooms. Minoan palaces were enormous; the one in Kato Zakros had 250 rooms, tiled floors, and a swimming pool. These multistoried structures had systems of baths, water ducts, and drainage that served as indoor plumbing. The palaces contained rooms for guests, ceremonial halls and temples, living quarters for palace staff, workshops, and storehouses. The palace also housed the priest-king, the chief authority of the city. For most of the Minoan period, each city had its own ruler; later the ruler at Knossos gained power over the others. Although common people were buried in caves, important figures, such as kings, were interred in *tholos*-style tombs, huge beehive-like structures made of overlapping rings of stone.

The Minoans delighted in sports, especially boxing and bull-leaping, a sport that apparently involved young athletes performing acrobatics with or around a live bull. Minoan architects built stone theaters inside the palaces to stage music, dancing, running matches, and other entertainments. Frescoes suggest that women participated as freely as men in all aspects of Minoan life; there were even female bullfighters and boxers. Males in the frescoes typically wear a loincloth belted as a kilt or a pair of shorts around the waist, which may reflect everyday attire, while women are portrayed in long skirts knotted around the waist. Men and women of all ranks adored jewelry.

The focus of Minoan worship was the Earth Goddess, whom the Greeks later referred to as Rhea, mother of Zeus. The mother goddess was the source and controller of all things. Other aspects of Minoan religion involved worship of birds and animals (particularly the snake and the dove), sacred trees, and sacred objects like the bull's horns and double-headed axe. Sanctuaries on mountaintops, in caves, or in temples were tended by priestesses. Religious observance typically included offerings, most likely in the form of oil, figs, honey, and sometimes animals.

DISAPPEARANCE

The Minoans influenced their neighbors through trade, not warfare. Their palaces and cities had no fortified walls, perhaps indicating an absence of

ANCIENT WEAPONS

Metallurgy

Ancient civilizations such as the Egyptians in Africa and the Sumerians in western Asia knew metallurgy, or procedures for mining precious metals such as gold, silver, and copper and making **artifacts** with them. Late in the **Neolithic Period**, inhabitants of Europe accustomed to using stone tools and weapons began to experiment with using weapons made of metal, especially copper. The use of metals for tools and implements marks the emergence of a civilization from the Stone Age, which happened in southeast Europe ca. 3000 B.C.E.

Precious metals in their pure form rarely occur in nature; rather, they appear as a compound or ore that can be extracted from the rock or ground. Around 5000 B.C.E., the Sumerians learned the technique of copper smelting, a process of refining the pure metal from other compounds, such as malachite or azurite. In the fourth millennium B.C.E., these techniques spread to Europe, where the earliest copper artifacts date to ca. 3200 B.C.E. The frozen "Iceman" found in the Alps, who died ca. 3300 B.C.E., carried a flint knife, a number of flint-tipped arrows, and an axe made of copper.

As the first metalworkers found, gold and silver proved too soft to hold an edge and thus were only adequate for precious objects or ornamental weapons. Copper, when hammered or ground in the manner used for making stone tools, would become brittle and break. Heating and then slowly cooling the metal, a process called annealing, helped make the copper stronger. In time smelters discovered that adding other substances to the metal as it heated created an alloy, a stronger blended metal. Copper alloys blended with arsenic appeared throughout western Asia and made their way, through trade, to southern Europe.

Then Egyptian metalworkers discovered that adding a small amount of tin when smelting copper made the metal stronger and easier to cast into shapes such as blades and axe heads. This resulting alloy, called bronze, so completely surpassed stone in its usefulness in ornaments, tools, and weapons that the metal ushered in a new era—the Bronze Age.

Bronze tools and weapons first came into use in southern Europe in the civilizations around the Aegean Sea ca. 3000. The Cyclades, a series of islands off the Aegean peninsula, and the growing settlements on Crete prospered first in trading and then in producing bronze implements. The most abundant copper mines appeared on Cyprus, a large island in the eastern half of the Mediterranean Sea. During the third millennium B.C.E., traders discovered tin mines in modern-day Great Britain. The healthy commerce that emerged from the making and trading of bronze ornaments and weaponry added to the wealth of the Minoan civilization based on Crete that reached the peak of its prosperity and influence between 2600 and 1450 B.C.E. The Bronze Age spread north through the rest of Europe, reaching central Europe around 2500 B.C.E. By 2000 B.C.E., populations in Scandinavia and the British Isles had the use of bronze tools.

concern for internal or external strife. Earthquakes posed a constant threat, however, and a violent eruption on the volcanic island of Thera (now Santorini), around 1500 B.C.E., caused widespread devastation on Crete and may also have ruined the Minoan navy.

After 1500 B.C.E., the Minoan kings lost power to the Mycenaeans of mainland Greece, a more warlike culture that borrowed art and weaponry extensively from the Minoans. Minoan culture continued, although under Mycenaean leadership, until about 1100 B.C.E., when new invaders from mainland Greece, the Dorians, leveled the great palace of Knossos and brought the already weakened Minoan civilization to an abrupt end.

After the fall of Mycenae, stories about Minoan culture persisted in orally transmitted legends such as that of Theseus and the Minotaur, a monstrous half-bull, half-man figure who lived on Crete in a labyrinth fashioned by the legendary Greek inventor Daedalus.

In C.E. 1900, Sir Arthur Evans, a British archeologist, uncovered the palace at Knossos. Bits and pieces of frescoes emerged with pictures of griffins, dolphins, and flowers in vivid settings of deep blue and gold. Numerous decorated vases, detailed jewelry, and clay jars, still holding wine and oil, attested to the level of prosperity, artistic accomplishment, and bureaucratic control that signified Minoan life on Crete.

See also: Archeological Discoveries; Art and Architecture; Crete; Culture and Traditions; Greece; Language and Writing; Myths, Epics, and Sagas.

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Mycenaeans

See Greece.

Myths, Epics, and Sagas

Traditional stories that ancient Europeans told about their origins, supernatural beings, legendary heroes, or other **primitive** aspects of the past in order to help explain the mysteries of life. The epics and sagas of ancient Greek, Roman, and Scandinavian cultures are written stories, while the myths of ancient Europe were circulated through oral, or spoken, traditions.

Myths, epics, and sagas preserve the culture and traditions of a society, pass along moral wisdom, and sometimes recall actual events, such as the Trojan War. Thus, these stories form an important part of the literary, cultural, and historical heritage of the ancient peoples of Europe.

While epics and sagas frequently describe the doings of historical or legendary characters, myths function as metaphorical, or symbolic, tales that convey a truth about a personal struggle, a human event, or the state of the natural world. In all cultures, myths generally seek to explain or celebrate the mysteries of human existence. For example, the myth of the Greek god Zeus's abduction of the Phoenician princess Europa might symbolically explain how the fusion of native and eastern influences formed the Minoan civilization (ca. 2600–1450 B.C.E.) as well as describe how the continent of Europe got its name.

The myths of preliterate societies, societies that existed without the use of writing, often serve as a type of religion. In the case of the pre-Roman Celts, for example, the gods and goddesses described in myth were the same deities they worshipped in temples and sanctuaries. Religion, which also involves belief in and reverence of a supernatural power, often employs **doctrines**, or organized beliefs, and follows set **rituals**. Thus, whereas scholars refer to a belief such as Christianity as a religion, they consider stories about the Greek gods to be myths.

MYTHS

No records of the myths of the **Stone Age** peoples of Europe survive. The cave paintings executed by

Cro-Magnon peoples, most of which date between 18,000 and 10,000 B.C.E., might have had religious significance. Archeological discoveries have unearthed a variety of statues in female form, called Venuses, which leads some scholars to believe that these ancient societies worshipped a fertility goddess.

The earliest myths known to modern Europeans originate with the Minoan civilization on Crete. The religion of early Crete remains mysterious, although the double-headed axe, snakes, and bulls all seem to have held deep importance. The Mycenaean Greeks, who replaced the Minoans, also appropriated many of their myths. Their tales say that the chief of the Greek gods, Zeus, was born on Crete and credit Crete as the source of many of the cultural innovations and technological advancements that the Mycenaeans adopted. Also, legends of the wealthy king Minos and how his monstrous half-bull son, the Minotaur, was slain by the Greek hero Theseus seem to pay tribute to Greek superiority.

Myths often encode information about the origins of a people and help to establish a historical basis for the true beginning of an ancient civilization. The many similarities among Celtic, Greek, Roman, and Germanic myths reflect a shared ancestry in the tribes of Indo-Europeans who migrated from the region of the Caucasus Mountains and settled across Europe between 4000 and 2000 B.C.E. For instance, the thunder god of the Indo-Europeans became Zeus to the Greeks, Woden to the Germanic groups, and Odin to the Norsemen. Indo-European gods of agriculture, warfare, crafts, and the underworld also took on different personalities as the earliest tribes settled and evolved.

Greek Myths

The oldest surviving Greco-Roman myths date to the **Bronze Age**, which began around 3000 B.C.E. in Greece, although the stories may have circulated earlier. The deeds of Achilles, the abduction of Helen, and the labors of Hercules all have their roots in Indo-European traditions. The myth that Zeus fought giants called Titans and overthrew his

MYTHS, EPICS, AND SAGAS

ca. 18,000 B.C.E. Cave paintings proliferate in Europe, some featuring animals already extinct

ca. 3000 B.C.E. Beginning of Bronze Age in Europe; trade brings Europeans in contact with Africa and Near East

ca. 1600 B.C.E. Peak of civilization on Crete, ruled by legendary King Minos

ca. 1500 B.C.E. Volcanic eruption destroys island of Thera, giving rise to legends of Atlantis

1180 B.C.E. Traditional date of the fall of Troy

753 B.C.E. Traditional founding of Rome by Romulus and Remus

ca. 750 B.C.E. Homer composes Greek epics *Iliad* and *Odyssey*

ca. 700 B.C.E. Hesiod compiles *Theogony*, a collection of several Greek myths

406 B.C.E. Deaths of dramatists Euripides and Sophocles, whose tragedies incorporated Greek mythology

ca. 200 B.C.E. Apollonios of Rhodes writes *Argonautika*, describing Jason's quest for the Golden Fleece

19 B.C.E. Roman poet Virgil begins the *Aeneid*

C.E. 520 Death of Hygelac, character in the English epic *Beowulf*

C.E. 537 Welsh annals record the death of Arthur, legendary king of Britain

ca. C.E. 1190 Composition of the epic tale of *Nibelungenlied*, describing the ancient Germanic hero Siegfried, prince of the Netherlands, Norway, and Nibelungenlied

C.E. 1241 Death of Snorri Sturluson, Icelandic poet, historian, and mythographer

This eighteenth-century C.E. fresco depicts a scene from Homer's epic poem of ancient Greece, the *Iliad*, written during the eighth century B.C.E. The legendary Trojan War proved a popular subject of art and literature throughout European history. (Giovanni Battista Tiepolo/The Bridgeman Art Library/Getty Images)

father, Cronos, to take control of Mount Olympus might reflect the struggles of these early settlers with pre-existing populations.

Myths also may communicate the evolution of early European social orders. For example, in earliest Greece, Hera was revered as a great goddess and became the center of a widespread religious cult. By the thirteenth century B.C.E., worship of Zeus began to erode Hera's power. In later Greek myth, Zeus marries Hera but is never faithful to her, so in time this once-powerful goddess became little more than the jealous, vengeful wife of a misbehaving husband.

As they settled around the Aegean Sea, the Greeks also incorporated myths from their neighbors in Asia Minor and Mesopotamia. They borrowed Aphrodite, the goddess of love, from the Phoenicians and turned the Cretan sea-god into Poseidon, the brother of Zeus. As Greek colonies expanded, they incorporated native traditions and renamed existing gods, which accounts for the many complexities and contradictions in the mythology.

The Greeks imagined their gods as anthropomorphic—having the appearance and behavior of humans—and attributed human motivations and desires to them. Greek myths furnished material for poetry, visual art, and dramatic plays. Centuries after the legendary Trojan War, which the Greeks regarded as part of their history, heroes like Hector, Achilles, Odysseus, and Ajax still decorated the pottery.

The interpretation of myths changed as Greek society changed. While the quarreling gods had been largely responsible for the outcome of the Trojan War, the later Greek dramatists focused more on human subjects and their personal conflicts. To some, the Greek gods played as important a role in life as they did in myth. The Macedonian king Alexander III, the Great (356–323 B.C.E.) believed himself the son of the Greek god Dionysus and thus, like Achilles and Hercules before him, semi-divine. Alexander's impressive conquests in Greece and Persia certainly helped reinforce this assumption.

Roman Myths

Like the Greeks, the Romans adapted the myths of surrounding cultures. The earliest Roman myths described the founding of cities, such as the story of how the twin brothers Romulus and Remus, nursed by a wild wolf, founded the city of Rome.

The Romans went on to borrow many influences from Etruscan civilization (ca. 800–200 B.C.E.), among them the worship of a wise warrior-goddess associated with healing, childbirth, and the moon, whom the Romans called Diana. The Etruscan king Servius Tullius (r. 578–535 B.C.E.) built elaborate temples to Diana and the sky-god Jupiter. Long after the citizens of Rome had expelled their kings and established a **republic**, they continued to seek the patronage of these two deities.

Later contacts with the Greeks spurred the Romans to adopt all Greek myth and religious practices, simply associating the earlier Greek divinities with existing Roman gods and goddesses. Thus, Jupiter assumed many of the duties and stories of the Greek god Zeus, while his wife Hera became Juno. The Roman god of war, Mars, replaced the Greek Ares and grew in influence and importance, while the smith-god Hephaestus (Vulcan to the Romans) had less to do. Roman art and architecture often featured stories that originated in Greek myth, such as the story of Aeneas, a Trojan prince, guiding a number of exiles to Italy after the famous war.

Just as Roman religion absorbed the gods and goddesses of the territories they conquered, such as the Egyptian mother-goddess Isis or the Persian sun-god Mithras, Romans expanding into Europe often assimilated the myths of the Celts. Usually, they renamed the native Celtic deities with the names of the Roman divinities they most resembled. For example, Celtic war-gods were frequently associated with Mars and goddesses of wisdom and healing with Minerva.

For European groups outside of Roman influence, like the early Germanic groups, the Huns, and the Slavs of Kievan Rus, myths never were written down. Literacy came instead with the Christian missionaries who taught that native beliefs were untrue and possibly evil. As a result, many stories of these pre-Christian societies simply disappeared.

Celtic Myths

While in most areas of Europe the mythology of the Celts was absorbed into Roman stories and practices, the inhabitants of Ireland, which remained free of Roman **colonization**, preserved a lively and complex mythology untouched by Roman influence. Myths from the region began as oral tales and were eventually written down, perhaps in the sixth century. Irish myth cycles describe how Ireland had first been populated by the Dananns, descendants of the goddess Danu. Brigid, the granddaughter of Danu, was regarded as the goddess of healing and fertility, crafts such as metalworking, and also fire and poetry. Other Irish myths reflect the values of a society built and protected by warfare. For example, the hero Cú Chulainn excelled in battle and also in stealing cattle.

The myths of other Celtic groups throughout Europe also described the doings of gods, goddesses, and other supernatural beings that inhabited an enchanted otherworld (or underworld) where things did not change or die. Many stories told of gods and goddesses crossing into the living world to test, trick, or seduce humans, sometimes taking shape as animals such as white deer or sows to do so. Spirits called fairies watched and occasionally interfered with human events, for instance switching a healthy human infant for a sick fairy child when a mother was not vigilant.

Celtic deities often varied by tribe. Unlike the Greeks, who pictured their gods living above the human realm, the Celts located their divinities in specific geographic regions. A goddess of healing springs, known as Sidona among the Gauls, appeared as Sulis to the Celts, living near Bath in Britain. Celtic groups living around the Rhine revered a river goddess named Sequana, known as Coventina to Celts living near Hadrian's Wall in the north of Britain. Serving as patrons of war, agriculture, healing, and various crafts, Celtic gods and goddesses presided over all aspects of life. The beauty of the Celtic otherworlds greatly influenced western European storytelling traditions, notably the later medieval tales of King Arthur.

EPICS

Traditional epics began as oral poems about heroes, warriors, and divine figures, which were eventually written down. European examples include the *Iliad* and the *Odyssey*, attributed to the

Greek poet Homer, writing around 750 B.C.E. The legendary events of the Trojan War contributed the subject for most epic Greek poetry, although other authors such as Apollonios of Rhodes wrote about the voyages of Jason or the labors of the Greek demigod Hercules. The epics idealized a heroic code that inspired Greek art as well as life; it was said that Alexander III, the Great, ruler of ancient Macedon from 336 to 323 B.C.E., slept with a copy of the *Iliad* beneath his pillow.

The Romans continued the tradition of celebrating their gods and heroes and preserving their national history with epic poetry. The poet Virgil (70–19 B.C.E.) described the career of Aeneas in the *Aeneid*; Statius, writing between C.E. 80 and 92, recorded the deeds of Theseus, including his conquest of the Amazon queen Hippolyta. As Christianity brought Latin language and learning to the new kingdoms of early medieval Europe, other cultures blended heroic and mythical elements into poetry in the fashion of the Greek and Roman models. Thus, the Old English poem *Beowulf* and later works about the British hero Arthur valorize their heroes in epic style.

SAGAS

The term *saga* generally refers to the prose stories and myths of the Norsemen. Sagas were told orally until about the twelfth century C.E. , when authors began writing them down. The Norse began to populate Iceland in C.E. 870, and there the early oral myths survived in their purest form. When the Norse countries converted to Christianity around 1100, authors began recording the native myths and legends of Norway, Denmark, and Sweden in skaldic poetry (named for the Norse word skald, or composer, and referring to work by a known poet as opposed to poetry by anonymous composers known collectively as the Edda) as a way to memorialize the deeds of historical kings and heroes, adding touches of the magical to the true seafaring accomplishments of the people known as the Vikings. These tales are known as the "kings' sagas."

LINK TO PLACE

Viking Sagas and the Norse Landing in North America

In Icelandic, the verb *vikingr* means to sail, whether in search of new lands to plunder or to trade. Between C.E. 800 and 1000, the Norse sailed across the North Atlantic, settling in Iceland and then Greenland. Seafaring played a key role in the economy of Norse society, and other European peoples feared the swift attacks of the men they called Vikings, seafaring warriors who sacked churches and burned cities that did not pay them tribute.

Sailing in a longship from Baffin Bay in Greenland, the Norse explorer Leif Eriksson landed along the coast of central Labrador in Canada between C.E. 997 and 1003. Son of Erik the Red, Leif had heard stories from a fellow mariner who had been blown off course while sailing from Greenland to Iceland. Finding the land rich in timber and pasture for animals, Leif decided to begin a settlement and named it Vinland for the grapes he found growing there.

The *Vinland Sagas*, written in Iceland during the thirteenth century C.E., describe several voyages across the North Atlantic that, beginning around C.E. 1000, resulted in contacts with the peoples of America. Because the Norse settlement of North America was not permanent, history for centuries has credited Christopher Columbus with the first European landing in the Americas. Then, in 1960, a Norwegian archeologist found traces of a Viking settlement at L'Anse aux Meadows in Newfoundland. While no other settlements have been discovered, the spread of Norse **artifacts** throughout the Arctic regions of eastern Canada suggests a prolonged presence and influence among the first American settlers whom the Norse encountered there.

The greatest of the sagas were written in Iceland in the thirteenth century C.E. and are known as the "Icelandic sagas"; they describe events up until the time of the Christian conversion. Like epics, sagas blend myth with history and concern the ethical values that govern society. The heroes of the Norse sagas are most often wealthy farmers, cunning pilgrims, or resourceful outlaws. Women frequent the sagas, sharing the heroic virtues of courage, fortitude, and honor.

Many of the sagas detail family conflicts (the "family sagas") or the main character's encounters with the law. Rather than relying on fantastical elements or the intervention of gods, the sagas instead highlight the wit and ingenuity of their protagonists. Full of comedic elements, the sagas provide insight into the political, legal, and moral life of the ordinary citizen, making available to modern audiences telling information about pre-Christian belief and society. In this respect, sagas are unique among the bulk of the literature produced during the Middle Ages in Europe.

See also: Art and Architecture; Culture and Traditions; Language and Writing; Norsemen; Religion; Society; Trojan War.

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Neanderthal Peoples

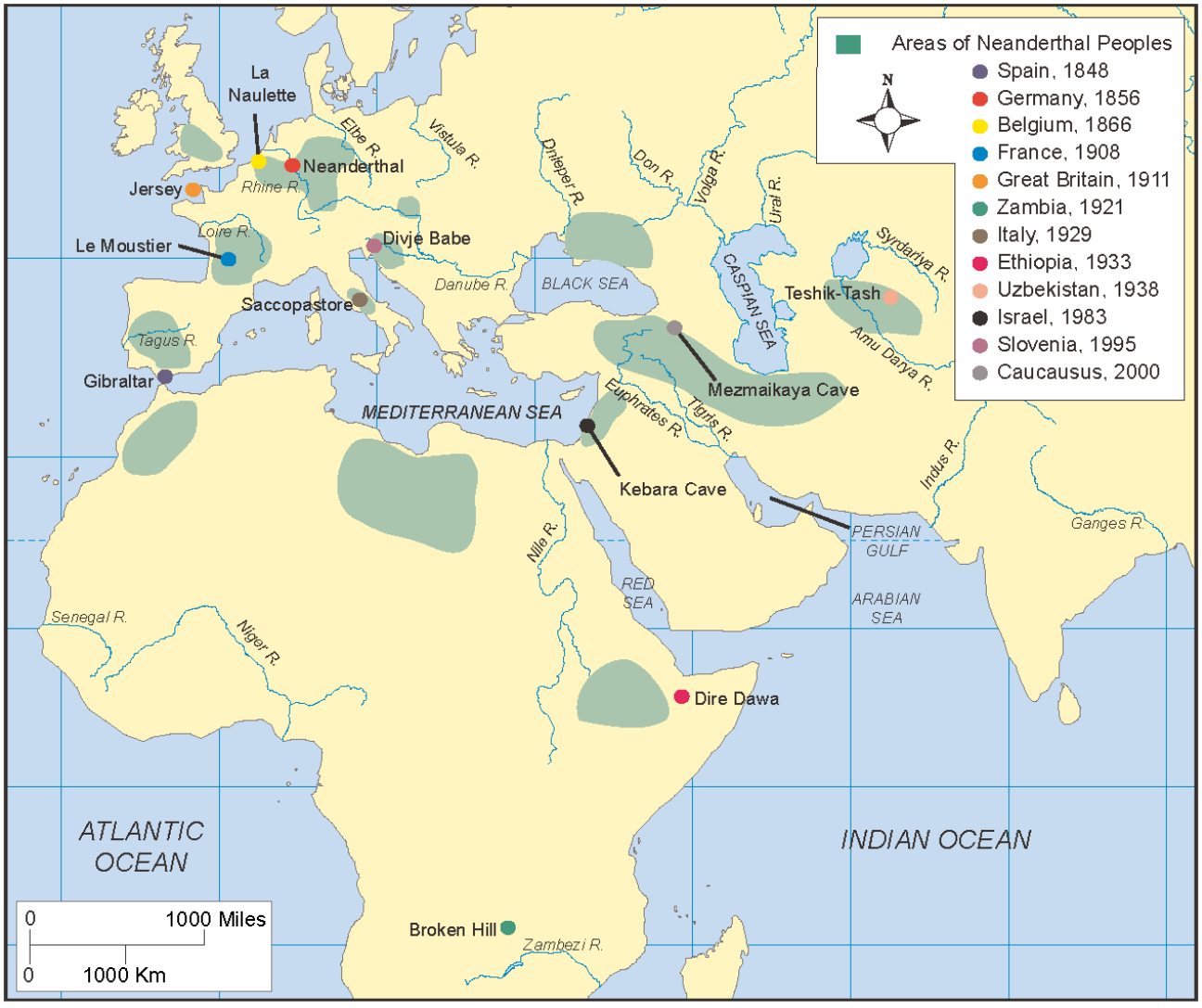
Humans inhabiting Europe from about 130,000 B.C.E. to 30,000 B.C.E., the middle of the last Ice Age. Neanderthals were more evolved than the first human family, *Homo erectus*, but did not share the same features as modern humans, or *Homo sapiens*. A long skull, flat forehead, and prominent brow ridges characterize Neanderthal remains. Like the Cro-Magnon peoples to follow, however, Neanderthals had large brains, suggesting that they had the capabilities for language and complex thought. Where the Neanderthal peoples were once thought to be the so-called "missing link" between modern and more **primitive** types of humans, science now suggests that *Homo sapiens* evolved independently and that the Neanderthal disappeared after 30,000 B.C.E.

Although Neanderthals are known to have occupied the Near East, western Asia, and north Africa, most Neanderthal fossils have been found in Europe. The Neanderthal peoples probably evolved from an earlier species called *Homo heidelbergensis*, which developed from the earliest humans who migrated from Africa to the European continent almost a million years ago.

The Neanderthal peoples are so named because the first fossil remains were found in the Neander Valley in Germany (*Tal* is the German word for valley) in C.E. 1856. The skeletons suggest that Neanderthal peoples were short and had robust bodies, wide shoulders, broad hips, and short, sturdy limbs, suited to the cold climate in which they lived. Neanderthal skulls have receding foreheads, large teeth, and powerful jaws. Males were on average about 5'5" tall (165 cm) and weighed around

NEANDERTHAL SETTLEMENTS

Neanderthal remains have been found throughout modern-day Europe as well as in Israel and Uzbekistan. The heaviest concentration of fossils has surfaced in western France. By 30,000 B.C.E., the Neanderthals had largely disappeared. This map shows the important sites of Neanderthal settlements, and the legend indicates when those settlements were discovered.



200 pounds (91 kilograms), whereas females were slightly smaller.

Neanderthal tools included a stone lance and wooden spears with stone points, which they used to hunt the large Ice Age animals that populated the tundra. Neanderthals used fire to provide warmth and cook food. They also seem to have had some form of spoken communication, though examination of the fossils suggests that the Neanderthal's speech organs were not as sophisticated as that of the modern human.

Neanderthal peoples lived in small tribes and took care of weak or sick individuals in the family. Because they lived during the last Ice Age, they often took refuge from the cold in deep caves, where they constructed tents to house individual

families. For this reason, Neanderthals are popularly depicted as cave dwellers, although it may simply be the case that evidence of open-air Neanderthal settlements has not survived. Neanderthals lived relatively long lives, sometimes more than 50 years. Grave offerings of food, flint tools, and sometimes flowers may have had a religious significance.

Beginning around 50,000 years ago, Neanderthal populations began to disappear, apparently because of competition with *Homo sapiens* for resources and habitats. Archeological evidence suggests that for many thousands of years Neanderthals, and *Homo sapiens* lived side by side, but evolution favored the Cro-Magnon peoples, and, in time, the Neanderthals disappeared entirely.

See also: Archeological Discoveries; Cro-Magnon Peoples; Culture and Traditions; Ice Age; Technology and Inventions; Tools and Weapons.

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Norsemen

Seafaring warriors of Scandinavian descent known for their travels and conquests. The ancient Norsemen, or "Men of the North," lived in Denmark, Norway, Sweden, and Finland, and also settled in Russia, and parts of England, France, Ireland, and Germany between the fifth and tenth centuries C.E.

Norse sailors traveled widely and established trade routes with the new lands they explored. In this way the Norse stimulated commerce throughout Europe and furthered European contact with the Islamic and Byzantine worlds to the south. They also sailed several times across the Atlantic Ocean, founding colonies in Greenland, Iceland, and North America.

SETTLING SCANDINAVIA

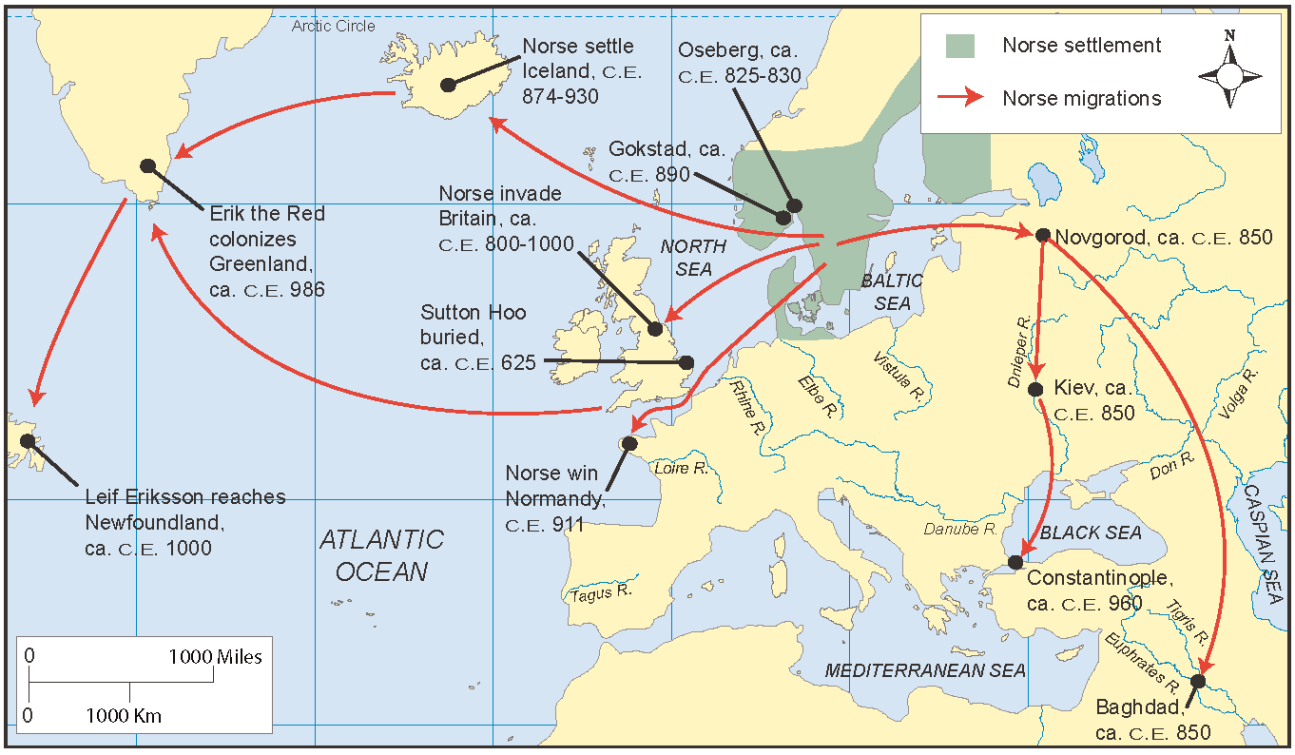
After 12,000 B.C.E., when the glaciers receded and the last Ice Age ended, human habitation became possible in Scandinavia. The people who migrated into the area hunted reindeer and seal using tools of bone and flint. They supplemented their diet by fishing and capturing game birds along the coasts, and they evolved **textile** and pottery-making techniques. Rock carvings with naturalistic representations of animals show the importance of hunting to their way of life. These earliest inhabitants called themselves Sami.

Around 2,000 B.C.E., Germanic groups began to migrate into the area later called Scandinavia. These new settlers subsisted mainly through agriculture and animal husbandry, the practice of raising domesticated animals. Using a tool called the boat-axe, the Scandinavians cleared forests, planted fields, and mined amber. Permanent settlements emerged as families built houses and tended farmland that they would later pass to their children.

During the **Bronze Age**, which lasted in northern and central Europe between 1500 and 500 B.C.E., the Scandinavians traded fur, slaves, and amber to central Europeans for the copper and tin to make bronze tools, weapons, and cooking implements. In time, trade contacts with the Celts and Greeks introduced the use of iron tools and weapons into Scandinavia. Despite their frequent contact with other cultures, the Norsemen retained a sense of common ancestry with the other Germanic groups, such as the Goths and Saxons.

PATHS OF NORSE INFLUENCE, 2000 B.C.E –C.E. 1000

From their homelands in Scandinavia, Norse sailors ventured east, west, and south, raiding or establishing trading routes as far as Constantinople and Baghdad. Modern archeologists excavating at Sutton Hoo, Oseberg, and Gokstad uncovered remains of the longboats that Norse adventurers used to sail the seas far beyond Europe, colonizing England, Iceland, and Greenland and eventually reaching North America.



SOCIETY AND DAILY LIFE

Most Norse people lived in longhouses, which featured one main room that provided fireplaces for warmth or cooking and space for sleeping, storage, and housing the farm animals. Clusters of houses might be enclosed with a defensive wall to form a hill fort. Larger towns developed on seacoasts where natural harbors allowed ships access. Drinking vessels and tableware of gold, glass, and silver attest to frequent trade between the Norse and the Roman Empire.

The practice of burying people in ships, along with food, clothing, weapons, and other possessions, demonstrates the central value of seafaring abilities to this society. Examples of ship burials are the Sutton Hoo site in England or the mounds at Gokstad and Oseberg in Norway. Ship burials were reserved for royal or otherwise important men (usually warriors) and women. Ordinary people were cremated or buried in simple graves.

The highest class in Norse society was composed of wealthy nobles called earls, or *jarls*, who acted as political leaders and provided protection to neighboring families or clans with whom they had bonds of friendship or kinship. A *jarl*'s wealth took the form of estates, ships, treasure, and followers in the form of a household army, or warband. The most influential *jarl*, or earl, in a region often became king, or chieftain, through popular consent. The spacious hall of the chieftain provided a central gathering-place for feasts and ceremonies. The *jarl*'s generosity in giving gifts reinforced the loyalty of his retainers.

The middle class, or *karls*, were freemen, landowners, merchants, or craftspeople. Freemen often

A dragon's head decorating the prow of a Viking longboat draws on the fierce qualities of this mythical creature, common in Norse mythology, to embolden the hearts of its sailors engaged in trade, exploration, or war. (Werner Forman/Art Resource, NY)

worked for landowners or had other occupations, like fishing. Slaves, beggars, and outlaws composed the lowest class. Slaves might be captives from a raid or battle, although a free man could be enslaved if he committed a crime or could not pay a debt.

Because the Scandinavians did not have a written language, oral communication in the form of oaths, vows, boasts, and other speeches held great significance. Laws were memorized and transmitted at assemblies called *things*. All free men and women who were legal citizens attended the *thing*, where they voted on laws and submitted disputes to the king for judgment.

The Old English epic poem *Beowulf* preserves the flavor of life in sixth-century C.E. Scandinavia, especially the atmosphere of frequent war and the emphasis on the heroic warrior code. The sagas of

ANCIENT WEAPONS

Longboats

The extensive coastline, large glacial lakes, and numerous islands of Scandinavia led the inhabitants to develop sea travel for fishing, trade, and **colonization**. Early examples, such as the Hjortspring boat, found in a peat bog named Hjortspring Mose in the southern portion of the Jutland peninsula in Denmark and dating to 350 B.C.E., used the clinker construction common to early Germanic groups. Clinker boats ranged from 60 to 80 feet (19 to 24 m) long, with a bottom made from a hollowed-out tree trunk and sides made of two broad, overlapping planks. The ribs were spaced to accommodate men rowing the twelve to fourteen pairs of oars.

Longboats followed clinker construction with two improvements: a fixed side rudder and, in the eighth century C.E,, a sail. Planks of oak or pine were fastened with iron rivets or sometimes lashed to the ribs with spruce roots, which allowed the hull to remain light, flexible, and strong. Walrus- or sealskin ropes raised the mast and sails made of interwoven strips of woolen cloth painted with a checkered pattern. Chroniclers called the longboats dragon ships not just for their speed and flexibility, but for the ferocity of the well-armed warriors they carried. One longboat, made in C.E. 1060 and discovered near Dublin, Ireland, was 100 feet (30.5 m) long, had 30 pairs of oars, and could carry 100 men.

Norse sailors navigated by the sun and stars, and predicted the weather by observing winds and currents. In C.E. 1893, a replica of a longboat found at Gokstad, outside Oslo, sailed from Norway to Newfoundland in less than a month, duplicating one of the most impressive achievements of the Norsemen.

About C.E. 1000, Viking explorers led by Leif Eriksson reached Newfoundland, 500 years before Christopher Columbus arrived in America. This artist depicts the Norsemen wearing thick clothing, necessary to endure the cold voyage from Greenland to Canada. (Art Resource, NY)

the Old Norse, recorded after C.E. 1100, stress the values of courage, strength, loyalty, and a sense of honor, best displayed during battle. The Norse religion included a **pantheon** of gods and goddesses ruling weather, warfare, and agriculture. According to the sagas, the gods fought frequently and preserved a special afterlife for warriors who died in battle.

THE VIKINGS

Beginning in the fifth century C.E., Norse warriors set sail to find new lands to settle. These voyages provided ways to gain wealth and enhance a warrior's reputation through brave deeds in battle. The difficult ocean voyages prompted improvements in shipbuilding techniques which led to the development of the longboat.

With the support of the longboat, the warrior culture that sought wealth and celebrated valor in battle developed the occupation that made the Norsemen feared and famous throughout the European world. In medieval Scandinavian languages, *viking* means the act of going raiding overseas. Dwellers in English and French towns along coasts and rivers regularly prayed "may God deliver us from the fury of the Northmen," referring to the Vikings who sacked monasteries for the wealth of the Christian church.

However, raiding was not the only pursuit of the Norse. They expanded trade routes, explored new lands from Iceland to North America, and developed sophisticated art in the form of ornamental carvings and skaldic poetry. By the ninth century C.E., the Norse controlled two-thirds of England and the duchy of Normandy in France. By 1000, when Norse settlements had been established in Iceland, Greenland, and Russia, trade became more lucrative than piracy and the famed Viking Age came to an end.

See also: Christianity; Germanic Groups; Kievan Rus; Language and Writing; Myths, Epics, and Sagas.

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Odoacer (oh-doh-AY-sehr) (C.E. 435–493)

Germanic king who forced the last of the Roman emperors to abdicate in C.E. 476, bringing an end to the Roman Empire in the west and ushering in the Middle Ages in Europe.

Odoacer was born of one of the Germanic groups whose migrations in the fifth century C.E. put pressure on the disintegrating boundaries of imperial Rome. His father served Attila (ca. C.E. 406–453), king of the Huns. Odoacer's birthplace and the identity of his mother are unknown. Because his early history is shrouded in mystery, he may be the Adovacrius recorded as leading a band of Saxons against the town of Angers in Gaul (modern-day France) in the mid-460s C.E. In the mid-470s, Odoacer distinguished himself as a general in the Roman army and became a member of the emperor's bodyguard.

By this time, most of the Roman army was composed of mercenaries of Germanic origin. In C.E. 476, when the Roman Emperor Romulus Augustulus (ca. C.E. 461–520) refused to grant their request for lands to settle, a group of mercenaries rebelled against the emperor and declared Odoacer their king. Odoacer marched on Ravenna, at that time the capital of the Roman Empire in the west, and forced the 16-year-old emperor to abdicate. He spared the emperor's life but forced him to leave the city.

The once-glorious Roman Empire had been decimated. The Franks controlled Gaul, the Visigoths and Sueves occupied Spain, and Angles and Saxons migrated into Britain. The one province left to the western Empire was Italy, and Odoacer was now its king.

Odoacer struck a treaty with Zeno, emperor of the Eastern Roman Empire, agreeing to rule in the emperor's name in return for control of Italy. Zeno elevated Odoacer to the rank of patrician, the **aristocratic** ruling class, but suggested that Odoacer act in the name of the previous emperor, Julius Nepos, who had himself been deposed in favor of Romulus Augustulus. Odoacer minted coins in the emperor's name but gave Nepos no real control over the government. In C.E. 480, Nepos,

who had been in control of the Roman province of Dalmatia, died. Odoacer added Dalmatia to his possessions and became the most powerful ruler in the west.

In C.E. 489, Theoderic the Great (ca. C.E. 454–526), king of the Ostrogoths, laid siege to Ravenna. Odoacer surrendered in 493 on the condition that the two kings rule Italy together. Shortly thereafter, Theodoric had Odoacer and his family murdered.

Although the Eastern Roman Empire survived until 1453, Odoacer's triumph over Romulus Augustulus marked the true fall of the Western Roman Empire, paving the way for new kingdoms, such as that established by the Franks. The legacy of Rome continued in the widespread use of the Latin language throughout Europe and in Rome's position as the administrative center of Christianity.

See also: Germanic Groups; Huns; Latin; Rome.

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Pax Romana (27 B.C.E.–C.E. 180)

The *Pax Romana*, or Roman Peace, is the name given to the two centuries of relative peace that followed the establishment of the Roman Empire. The *Pax Romana* began in 27 B.C.E. when Octavian (63 B.C.E.–C.E. 14), taking the name Caesar Augustus to honor his great-uncle Julius Caesar (100–44 B.C.E.), became the first Roman emperor. For this reason, the *Pax Romana* is sometimes called the *Pax Augusta*, or Peace of Augustus.

The peace lasted until C.E. 180, when the emperor Marcus Aurelius died. During the *Pax Romana*, the Roman Empire reached its furthest extent and Roman culture spread throughout many parts of Europe.

CHANGES UNDER THE PAX ROMANA

Augustus transformed the Roman state from a **republic** to an empire. He established the emperor's role as sole overseer of a system of governors and a large administrative staff. Augustus streamlined the senate, introduced a new judicial court system to make legal decisions, and organized executive committees to advise and guide Senate decisions. He oversaw the construction of several new marketplaces (*fora*), temples, and theaters and ordered the repair of **aqueducts**, bridges, and roads. In fact, Augustus is recorded as saying that he found Rome a city of brick and left it a city of marble. The art, architecture, and literature he commissioned draws heavily on models from **classical** and **Hellenistic** Greece.

Augustus also advocated a return to traditional morality and passed laws to protect and encourage families and thereby ensure social harmony. He set a precedent for the beneficent emperor who provided inexpensive food and lavish entertainments for the common people. However, the Roman satirist Juvenal, writing between C.E. 100 and 120, dubbed Augustus's policy as giving the people "bread and circuses" to distract them from real problems. With the emphasis on family life, upper-class Roman women had more freedom to participate in public events, becoming patrons of the arts and serving as priestesses in religious activities. Women of the middle and lower classes could pursue occupations as shopkeepers and grocers. Augustus also honored veterans in the Roman army and gave them land and Roman citizenship as a retirement package.

Under the *Pax Romana*, the changes introduced by Augustus spread throughout the Roman Empire. One set of laws prevailed everywhere. The Roman alphabet evolved and Latin became the shared language. Literature, the arts, and intellectual activity flourished. Architectural

LINK IN TIME

Pax Romana and Pax Britannia

The *Pax Britannia* refers to a 100-year period when the British Empire reached its point of greatest expansion. From the end of the Napoleonic Wars in 1814 to the beginning of World War I in 1914, the European island nation of Great Britain, with no more than 50 million inhabitants, acquired an empire that covered a quarter of the world's landmass.

Exploration, emigration, and wars served to further British influence and bring the comforts—as well as the distresses—of Western civilization to all areas of the globe. Organizations such as the East India and Hudson's Bay Companies not only mined the resources of Britain's colonies but also enslaved and exploited many of its subjects. The might of the British military, especially the navy, worked to eliminate piracy, stop the slave trade, and oppose local despots. First and foremost, however, it defended British commercial and interests and projected British military might.

The policy of the empire was to maintain a balance of power among continental powers such as France, Russia, Austria, and Prussia, limiting large-scale military conflict where possible. The British were interested in preserving the peace and ensuring a healthy environment for commerce, which was the driving force behind their power. Nevertheless, the use of British arms frequently became necessary to ensure this peace.

The *Pax Britannia*, also called the *Pax Britannica* (both meaning the British Peace), peaked during the reign of Queen Victoria (C.E. 1837–1901). Pomp and spectacle surrounding the queen helped establish the idea of the *Pax Britannia* as a moral as well as a technological turning point, bringing civilization and Christianity to the more than 372 million people who were British subjects. However, to many British—and Roman—subjects, the benefits of "civilization" were not always so obvious. Both empires were maintained primarily by force, and both dissolved when they could no longer impose their rule on foreign subjects.

As in the *Pax Romana* nearly two millennia earlier, sound communication and military strength gave the ruling power the means to impose its law upon a wide variety of diverse peoples. At the same time, despite often heated opposition to British rule, Britain's culture took root in its overseas possessions and fostered a sense of unity between the many far-flung colonies. By the time of its dissolution, the British Empire had created as impressive a stamp on modern history as the Romans had imposed on the ancient world.

accomplishments, such as public buildings, harbors, roads, and aqueducts, took shape in even the most remote cities of the empire. As many as 100 days per year were designated as "theater" days, on which, depending on the size of the amphitheatre, anywhere from 10,000 to 100,000 spectators trooped into the arena to watch plays, processions, games such as chariot races, gladiatorial combats, or public executions.

The Romans introduced their social customs and religion into the regions they ruled, but in many places Roman language and beliefs existed side-by-side with native customs. Although regarded at times with suspicion and at other times with outright hostility by Roman officials, Christianity spread throughout the provinces. Many emperors of the *Pax Romana* also encouraged education. Girls as well as boys were instructed in grammar, reading, and writing.

The Roman cities became bustling centers of trade as improved communications and sound roads made it possible for goods to travel from one end of the empire to the other. Human travelers could do the same, staying at inns and taverns

GREAT LIVES

Hadrian

The Roman emperor Hadrian reigned from C.E. 117 to 138 and helped further the *Pax Romana,* the famous Peace of Rome that prevailed in the empire between 27 B.C.E. and C.E. 180. Publius Aelius Hadrianus was born in C.E. 76, and after the death of his father in 85, he became the ward and later the heir of Emperor Trajan (r. C.E. 98–117). Hadrian received an early education in the army, serving in various regions throughout the Balkans and lower Germany.

When Trajan became emperor, Hadrian returned to Rome and married Vibia Sabina, the emperor's grandniece, in 100 C.E. He climbed steadily through the military ranks, serving first as staff officer, commander, and then as *praetor,* an elected position that gave him the ability to make and enforce laws. Next he served as governor of the province of Lower Pannonia, which included parts of present-day Hungary and the Balkan States. Later he became governor of Syria, and in C.E. 108, Hadrian was made consul, the highest office next to that of emperor. When Trajan died in 117, the Roman military and senate acknowledged Hadrian as the adopted heir and new emperor.

Faced with rebellions along the borders of his empire, Hadrian traveled widely, getting acquainted with his people and their problems. Between 121 and 132, Hadrian visited almost all of the empire's provinces, trying to link the many populations under his rule with a single Roman identity. Coins minted during his reign portray Hadrian as a restorer of the unique cultures of the provinces; most of the coins depict the beneficent emperor as lifting to his feet a kneeling female figure, who represents the local culture.

Rather than expanding the empire, as his predecessors had done, Hadrian looked to defense. He fortified borders, deployed permanent troops at the frontiers, and visited his legions personally to test their readiness. Hadrian's soldiers reportedly loved him for his personal attention to their living conditions, pay, and organization of duties. Among other defensive projects, Hadrian ordered the building of a 73-mile (118-km) wall to protect the northern border of Britain from the invading Picts. Built of stone bricks and lined with a series of ditches, Hadrian's Wall still stands in present-day Scotland as a testament to Roman might.

Few rebellions marked the years of Hadrian's reign. Rather, commerce developed within the fortified borders and some new frontier towns became prosperous. Hadrian helped improve the famous Roman law, establishing formal standards for courts and their authority or jurisdiction. A patron of the arts who himself painted and composed poetry, Hadrian also commissioned works of architecture, including a country palace called Hadrian's Villa and the Pantheon, a religious temple, which present-day travelers to Rome can still visit. Collectively, Hadrian's accomplishments exemplify the prosperity and grandeur achieved under the *Pax Romana*. After his death in C.E. 138, he was buried in the monumental mausoleum he had built, and, following Roman custom, the Senate voted to deify him, which meant Hadrian joined the ranks of the many Roman gods.

along the way. Grain, timber, and stone flowed into Rome to provide building material and food to support the expanding population. Luxury goods such as blown glass and household accessories ranging from combs to iron needles circulated through the provinces. About 20 percent of the population lived in cities; the rest lived on farms or in small towns.

The population of the empire during this period grew to perhaps 50 million or 60 million people, a quarter to a third of whom were held in slavery. Social classes were somewhat fluid as middle-class

citizens sometimes entered the senatorial or equestrian classes, the two highest landowning classes. The *Pax Romana* did not eliminate poverty among the lower classes or crime within the cities, but it did, on the whole, lead to a more comfortable life for a larger number of citizens.

The **era** of the *Pax Romana* was not without bloodshed. Rather, the peace referred to the lack of civil wars or major invasions from the outside. Troops were occasionally summoned to put down rebellions within the provinces, such as that led by Boudicca, the female warrior-queen who led a tribe of British Celts against the legions in Britain in C.E. 60. Roman legions continued to fight battles to extend the empire's borders in Britain to the north and in the east into Dacia (modern-day Romania and Moldava), Armenia, Mesopotamia, and eastern Asia Minor. In addition, five emperors during the years of the *Pax Romana* were assassinated, some for their excesses, such as Caligula (C.E. 12–41), who famously tried to name his horse a senator, and Domitian (C.E. 51–96), whose heavy taxes displeased many subjects.

END OF THE PAX ROMANA

The reign of Marcus Aurelius (C.E. 121–180) marked the end of military peace, as migrating Germanic groups pressed on the borders of the empire. After Aurelius's death, the empire suffered repeated invasions from displaced tribes, such as the Huns. At the same time, frequent internal strife arose as emperors vied for power. Military preparedness declined, populations in cities shrank, and the growing administrative bureaucracy became cumbersome and ineffective. Although the empire survived 300 years until its dissolution by the German leader Odoacer, the *Pax Romana* effectively ended with the death of Marcus Aurelius.

The two hundred years of relative peace and prosperity brought by the *Pax Romana* ensured the survival of the classical world. Blending Greek heritage with the ideals of Rome, the peace created a political, economic, social, and cultural stability. The *Pax Romana* offered a single rule for a rich and varied mixture of ethnic groups, cultures, and diverse peoples for a long stretch of time, something to which subsequent empires have aspired.

See also: Caesar, Gaius Julius; Culture and Traditions; Greece; Latin; Odoacer; Rome; Society; Slavery.

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Peloponnesian War (431–404 B.C.E.)

War between the **classical** Greek city-states of Athens and Sparta that led to the collapse of the Athenian empire and the dissolution of democracy in Athens. The war marked the end of the distinctive and independent way of life for the Greek city-states but also produced lasting works of literature. These include a *History of the Peloponnesian War* by the Greek historian Thucydides, the first enduring work of history and one that profoundly influenced the development of historical writing.

FIRST PELOPONNESIAN WAR

Athens and Sparta fought as allies in the wars against the Persian Empire between 490 and 479 B.C.E. Following the Persian Wars, however, leaders of the two city-states disagreed over which of them should lead the Delian League, an alliance the Greek city-states

had formed for self-protection. Sparta was governed by an **aristocratic** class who feared that the democratic ideals of the Athenians might encourage the Spartan underclass, the Helots, to revolt. In addition, the Athenian leader Pericles (ca. 495–429 B.C.E.) used the treasury of the Delian League to greatly expand the Athenian navy, which made Spartan leaders fear that he planned to rule all of Greece.

Resentment toward Athens grew when it formed alliances with Argos, a Spartan rival, and Megara, a city-state that could act as a buffer between Athens and the Peloponnesus, the southern part of Greece. An alliance of several Peloponnesian city-states formed to resist the growing control of the Delian League, which Athens now controlled. Sparta entered the conflict in 457 B.C.E., defeating the Athenian army at the Battle of Tanagra, but hostilities continued until a truce was declared in 451 B.C.E. These battles are sometimes referred to as the First Peloponnesian War.

SECOND OR "GREAT" PELOPONNESIAN WAR

Even after another truce with Sparta was negotiated in 445 B.C.E., Pericles continued his policies of expanding Athens's set of alliances and increasing the tribute paid to the Delian League. The city-states of Megara and Potidaea, both allies of Athens, rebelled from the League. In response, Pericles employed the Athenian military to impose blockades on the two city-states. Potidaea sought aid from Corinth, a Spartan ally and also a city-state with a navy at its command. In support of Corinth, Spartan leaders demanded that Athens lift the blockades, but Pericles refused.

The Spartan army then invaded Attica, the territory belonging to Athens. The Athenian navy took to the sea, and the citizens of Athens retreated behind the so-called Long Walls, a defensive structure that shielded access to the city from its port five miles (eight km) away, while the Spartan army ravaged the countryside. Since they did not have the equipment to lay siege to the city, the Spartans eventually withdrew. For protection the Athenians stayed behind the Long Walls, a decision that proved costly; plague spread in 430 B.C.E., killing up to a quarter of the city's population, including Pericles.

The Athenian navy continued to fight the Peloponnesian League and used force to intimidate its allies. In 428 B.C.E., when the city of Mitylene tried to free itself from the Athenian empire, Athens starved the residents of Mitylene into submission. These cruel tactics were partially suggested by the Athenian politician Cleon, who succeeded Pericles.

The Spartans fought best on land, while the Athenians had a powerful and skilled navy at their disposal. Military victories went first to one side, then the other. In 425 B.C.E., the Athenian army under the general Demosthenes fought the Spartans at Pylos and killed nearly one-third of their troops. The Spartans surrendered, but in 424 B.C.E. the Spartan general Brasidas captured Amphipolis, an ally of Athens located in northern Greece. Continuing to war over Amphipolis, both Brasidas and Cleon were killed in 422 B.C.E. Sparta and Athens then signed a treaty in 421 B.C.E. called the Peace of Nicias, which lasted until Athens attacked the island of Melos and claimed it as part of their empire in 416 B.C.E.

At the same time, Athenians sent part of their fleet to Sicily in an attempt to secure the island's grain resources. In 415 B.C.E., the Athenians launched another excursion, which was fiercely repelled by the residents of Syracuse, a city in eastern Sicily. The armies of Syracuse were aided by the Spartan commander, Gylippus, who also had in his employ a former Athenian general named Alcibiades, who had joined the Spartans. Of the 40,000 Athenian soldiers sent on campaign to Sicily, only 7,000 survived.

Despite the Sicilian disaster, Athens fought on. In 413 B.C.E., the Spartans made a permanent excursion into Athenian territory, fortifying a site at Decelea, about 13 miles (21 km) from Athens. This allowed the Spartan army to continue to destroy the countryside of Attica, making it necessary for Athens to import food. In the political turmoil that followed, Alcibiades was recalled to Athens to resume military command.

ANCIENT WEAPONS

Hoplites

Around 800 B.C.E., as Greece began to emerge from the Dark Ages into which it had fallen after the Mycenaean civilization celebrated in tales of the Trojan War collapsed, the Greek *polis* or city-state began to form. The bulk of citizens in the *polis* were farmers who owned small plots of land, perhaps no more than ten acres, with a single slave to help farm. These farmers decided the laws that ruled their communities and banded together to fight in times of war. The new type of infantry or foot soldier that evolved from this practice came to be called a hoplite warrior, after the round shield or *hoplon* the soldier carried, three feet (about one meter) in diameter.

Each farmer-warrior bought his own armor, which included a helmet, a breastplate or corselet usually made of bronze, greaves or shin coverings made of leather or bronze, and the round shield. The soldier carried a long bronze-headed spear designed for thrusting and, when the spear splintered, he relied on his short sword. Some might also carry a javelin, a light throwing spear.

Altogether, this equipage weighed up to 75 lbs (34 kg), which made it difficult for the warrior to maneuver. However, the strength of the hoplites rested in their ability to fight in close formation. Between 700 and 500 B.C.E., Greek city-states engaged in disputes over farmland or other rights often agreed to settle the dispute with a pitched battle between two columns of hoplites. The column that broke first lost the struggle. For larger disputes that required more fighters, soldiers formed a *phalanx*, a formation of several columns anywhere from eight to 36 men deep. Shields raised, spears bristling, the phalanx formed such a tight unit that the individual soldiers could scarcely hear or see. They simply pressed forward, stabbing with spear or sword, until the enemy line broke.

The heavy bronze armor of the hoplite could withstand almost any blow. Even when iron became available for weapons, hoplites favored bronze, the harder metal, for their breastplates, which ranged from a quarter to half an inch (1.3 cm) thick. To attack, hoplite soldiers aimed for the face, arms, or legs of their opponents. Most hoplite casualties resulted from trampling by friend and foe alike when a soldier had the misfortune to lose his footing. It was not unknown, in the confusion of battle, for hoplite warriors to mistake their fellow soldiers for the enemy.

In hoplite warfare, cavalry (warriors mounted on horses) and archers played a secondary function. Hoplite armies decided the outcome of the Persian Wars (490–479 B.C.E.) and the Peloponnesian War (431–404 B.C.E.). During the Battle of Salamis in 480 B.C.E., the first recorded naval battle in European history, the Greek ships served as little more than wooden fighting platforms for the hoplite armies. Hoplite soldiers remained a staple of Greek warfare into the fourth century B.C.E., until Philip II of Macedonia (382—336 B.C.E.), father of Alexander III, the Great, developed a new style of warfare that combined hoplite infantry with mounted cavalry and corps of archers, slingers, and javelin throwers.

In the following years, the Peloponnesian wars moved to the eastern Aegean as Athens increasingly went on the defense. The Delian League fell apart as a result of infighting among its members. Sparta, meanwhile, engaged an alliance with King Darius II of Persia (r. 423–404 B.C.E.). In return for money to expand its military, Sparta ceded the Greek communities of Asia Minor to the Persians. With the help of Persian funds, the Spartan general Lysander defeated the Athenian fleet at Notium in 407 B.C.E. The Athenians won a victory the next year, but in 405 B.C.E., Lysander ambushed and destroyed the

Athenian navy at Aegospotami. The Athenians retreated again to their city and, finding their grain supply from the Black Sea cut off, they surrendered the following year.

Sparta took control of the Athenian military and tore down the Long Walls. Although it continued in various battles with Sparta for control of the Greek city-states, Athens would never return to its status as the dominant power in Greece. In the next century, the Macedonian king Alexander III, the Great (356–323 B.C.E.) made the once independent city-states of Greece part of his vast empire.

See also: Greece; Persian Wars.

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Persian Wars (490–479 B.C.E.)

Wars in which the allied city-states of **classical** Greece resisted Persian invasion. The Persian Wars turned out to be a defining moment in classical Greek history, as the victory reinforced the superiority of Athenian culture and ideals and led to the dominance of the Athenian navy on the Aegean Sea.

ORIGINS

In the sixth century B.C.E., the Greek city-states in Asia Minor came under the control of the Lydian king Croesus (r. 560–547 B.C.E.). In 546 B.C.E., the Persian king Cyrus the Great conquered Lydia and took over the Greek territories. Persia appointed leaders called tyrants to rule the cities, taxed the citizens heavily, and conscripted young men to serve in the Persian Army.

The tyrant of Miletus, Aristagoras, began a rebellion in 499 B.C.E. and gained naval support from some of the mainland Greek city-states. In 498 B.C.E., troops from Athens conquered and burned Sardis, the capital of Lydia, and the Greek city-states of Asia Minor joined the rebellion. The Persian king Darius I (r. 522–486 B.C.E.) suppressed the revolt in 495 B.C.E.

To punish the Athenians, the Persians launched an attack against the city in 490 B.C.E. The Athenians sent for help from the neighboring city-state of Sparta, but the Spartans refused to deploy their impressive military power during a religious festival. In addition, Miltiades, the leader of the Athenian armies, had previously served in the Persian army and was familiar with its tactics. He marched to the Plain of Marathon, where his army met the Persians in a battle recorded in detail by the Greek historian Herodotus. The Athenians routed the Persian forces; more 6,000 Persian soldiers died in the battle, compared with only 192 Greeks. Had the Greeks lost, classical Greece would have become part of the Persian Empire. In winning, the Athenians proved that Persia, the preeminent world power at the time, was no longer invincible.

BATTLES OF SALAMIS AND PLATAEA

Conflicts elsewhere in the Persian Empire, including a dispute over the succession of the Persian king Xerxes (r. 485–465 B.C.E.), kept the Persians busy for the next ten years, but in 480 B.C.E. they attacked again. By this time, Athens had built a navy and formed an alliance with other Greek cities, including Sparta.

To cross the Bosporus, a narrow strait separating Europe from Asia Minor (modern-day Turkey), Xerxes ordered his men to build a bridge of boats fastened together. The Persians then marched

PERSIAN WARS, 490–479 B.C.E.

546 B.C.E. Persian king Cyrus conquers Lydia and sets up tyrants over Greek territories

499 B.C.E. Aristagoras of Miletus rebels against Persian policies

498 B.C.E. Athenians sack Sardis, capital of Lydia

495 B.C.E. Persian king Darius I ends Greek revolt

490 B.C.E. Athens repels Persian army in Battle of Marathon

481 B.C.E. Athenian navy grows to 200 ships

480 B.C.E. Persian king Xerxes crosses pass at Thermopylae

480 B.C.E. Persians defeated at sea in Battle of Salamis

479 B.C.E. Athenians defeat Persians in Battle of Plataea, ending the war

478 B.C.E. Delian league forms to resist further invasion

449 B.C.E. Peace of Callias bans Persian warships from Aegean Sea

down the Greek mainland from the north and the Greeks met them at the narrow pass of Thermopylae. The site was guarded by the Spartan King Leonidas (r. 489–480 B.C.E.) and his troops. Despite their smaller numbers, the Spartans held the Persian army at bay for several days. They thwarted the Persian attacks by luring the enemy forward into the cramped space of the pass where the Persians could not bring their entire force to bear, and then falling upon them.

As Herodotus tells it, however, the Greeks were betrayed. An informer told Xerxes about a goat path he could use through the mountains to get behind the Greek lines. The next morning, when Leonidas saw that the vast Persian Army had gotten behind his defenses, he sent most of his forces back to Sparta and remained with only a small guard, determined to fight to the death. The courage and fierceness of the remaining Spartans, who did indeed perish to the last man, delayed the Persian army from descending on Athens, where shipbuilders were hectically adding to the size of the Athenian fleet. As the Persian navy approached Athens, the Athenian commander, Themistocles, removed the city's inhabitants to the island of Salamis. When Xerxes reached the city, it was virtually deserted; furious, he burned it down.

Themistocles then lured the vast Persian fleet into a battle between the island and the mainland, where the Persians were outmaneuvered by the Athenian navy. The Battle of Salamis (480 B.C.E.), the first recorded naval battle, became one of the most famous in history as the outnumbered Athenians defeated the Persians. Xerxes sailed back to Persia, leaving the army under the command of Mardonius, who invaded the Greek mainland again in 479 B.C.E. This time the Persian forces met with the largest Greek army they had yet faced. The Greeks, led by the Spartan king Pausanius, defeated the Persians at battle of Plataea.

After the Persian forces withdrew, the Athenian fleet reigned as the new power of the Aegean Sea. In 478 B.C.E., the Greek city-states formed an alliance referred to as the Delian League. The member states contributed either ships or money to military defense, and Athens became the leading power in the alliance. As the Athenian military continued to grow in influence and power, the Greeks began to compete with Persian ships for access to major trade routes in the Mediterranean. Persia and Athens declared the truce of Callias in 449 B.C.E., proving that Athens, now the undisputed center of the Greek world, was at least the equal of the Persian Empire. In the second half of the fifth century B.C.E., Athenian culture flourished under the protection of the Delian League, adding to the accomplishments of classical Greece in arts, drama, and architecture that would be much admired by the later Western world.

GREAT LIVES

Herodotus

A Greek historian whose great work called *The History* earned him the term Father of History, Herodotus was born ca. 484 B.C.E. in Halicarnassus, a city in Asia Minor (modern-day Turkey), then part of the vast Persian Empire. As his family belonged to the upper class, Herodotus presumably enjoyed a thorough education in the three subjects that formed the foundation of Greek schooling: grammar, gymnastic education, and music. His writings show a comprehensive knowledge of Greek prose and poetry, including the epic poems written by Homer during the eighth century B.C.E. Herodotus traveled widely in Persia and Greece, visited islands throughout the Mediterranean, and stayed for a while in Egypt. In all of these places, he collected careful notes and observations that later made their way into his enormous *History*.

Around 457 B.C.E., Herodotus moved from Halicarnassus to Samos, an island under the protection of Athens, a Greek city-state at the height of its military power. Around 447, he moved to Athens itself, where the flowering of literature, drama, the arts and sciences, and architecture later led historians to call the period the Golden Age of **Classical** Greece. Herodotus shared portions of his history, then in progress, by reciting long passages to listeners. The citizens of Athens found *The History* promising enough to award him a stipend, and the young Thucydides (ca. 460—ca. 404 B.C.E.), who would go on to compose *A History of the Peloponnesian War*, was reportedly so moved by Herodotus' rhetoric that he burst into tears.

Around 444 B.C.E., Herodotus sailed with other Athenians to found a colony at Thurii, in southern Italy. His work indicates that he visited Athens again in 430, but after that, nothing of his life is known. He died in Thurii between 430 and 420 B.C.E., and his tomb became a public monument.

The History covers the events of the Persian Wars (490—479 B.C.E.) between Greece and Persia but contains many additions and digressions, not all of them factual. In attempting to capture the history of the conflict between Greece and Persia, Herodotus drew heavily on oral tradition, as had the epic poets before him. Although Thucydides earned recognition as the model of modern history for his factual rendering of dates and events, Herodotus freely wove folklore and myth into his tale.

In tracing the histories of Greece and Persia, Herodotus also dwelled upon the history, geography, customs, and climates of other powerful empires at the time, including Assyria, Babylonia, Lydia, and Egypt. His work comes alive with vivid descriptions, lively scenes and actions, and compelling characters. While by modern standards his factual accuracy, methods of inquiry, and philosophy of history can be called into question, Herodotus has inspired historians and storytellers throughout the centuries of Western civilization. Many scholars still rely on Herodotus for his eyewitness account of those customs practiced during the fifth century B.C.E. and for his information about the great battles of the Persian Wars.

See also: Greece; Peloponnesian War; Tools and Weapons.

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Plato *See* Aristotle.

Pompeii

Ancient Roman city devastated by the eruption of Mount Vesuvius in C.E. 79. Buried under thick layers of pumice, mud, and ash, the city of Pompeii was almost perfectly preserved until excavators uncovered it in 1748. Along with those of its neighboring city, Herculaneum, the ruins at Pompeii contributed a great deal to modern knowledge about everyday urban life in the early Roman Empire.

The town of Pompeii had a long and colorful history. The Greeks established a colony there in the eighth century B.C.E., and in the next century the town came under the influence of the Etruscans, who were building a thriving civilization in central Italy. After 420 B.C.E., the town reverted to the control of its native people, the Oscans, who adopted the Greek alphabet and took over existing trade. Around 310 B.C.E., the Oscans asked for help from Rome in defending against the Gauls, who were invading from the north. The Roman dictator Sulla (138–78

The excavated ancient city of Pompeii, buried under ash and pumice when Mount Vesuvius (seen in the distance) erupted in C.E. 79, preserves a record of art, architecture, and daily life in the early days of the Roman Empire. (Tony Waltham/Robert Harding World Imagery/Getty Images)

Archeologists excavating the city of Pompeii, buried in the volcanic eruption of Mount Vesuvius in C.E. 79, found that the rapidly falling ash had perfectly preserved the shapes of the victims it suffocated. (Bruno Morandi/Robert Harding World Imagery/Getty Images)

B.C.E.) made the city part of the Roman **Republic** around 89 B.C.E.

About 20,000 people lived in the city at the time of its destruction. An ancient defensive wall surrounded a city about 36 acres (64 hectares) in area. Narrow streets opened to broad public spaces, including a theater complex, a public square, or marketplace, called a *forum*, and temples to the Greek god Apollo and the Egyptian goddess Isis. Public buildings, business headquarters, baths, and the market clustered around the forum. Private houses contained gardens and openings in the roof to admit air. Colorful paintings decorated walls and ceilings both inside and outside buildings, while detailed mosaics depicting scenes from history, mythology, and daily life covered walls and floors.

All of these **artifacts** were almost perfectly preserved until excavations began in 1748. The disaster had caught people in the midst of their daily affairs. Tables were set for breakfast; shops were open for business. People died inside their houses or in the streets while trying to escape the falling rock, drifting ash, and poisonous fumes emitted by the volcano prior to its eruption.

In the years of the excavations, tourists flocked to the emerging city, struck by the beauty of the buildings and their artifacts as well as the tragedy of the human victims, many of whom had been preserved under layers of ash. The art and architecture of Pompeii inspired a **classical** revival throughout Europe during the late eighteenth century. At the same time, the details of everyday life preserved in Pompeii gave historians valuable insights into how people in an ancient Roman city lived.

See also: Archeological Discoveries; *Pax Romana*; Rome.

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Punic Wars

See Rome.

Religion

Religions of ancient Europe were diverse, often complex, and largely undocumented. Many questions remain about the precise nature of certain religious **rituals** such as those practiced by the Minoans, the function of **artifacts** found in archeological excavations, such as the graves of Neanderthal peoples, or the meaning of symbols carved into the massive stones of the burial mounds at Loughcrew and other **Neolithic** sites.

The religions of early European civilizations varied widely in their beliefs and expression, ranging from the few key gods of the Germanic groups to the highly populated **pantheon** of Greek and Roman divinities. Some groups, like the Celts, avoided documenting their religion, while others, like the followers of Judaism, kept careful written records, such as the Hebrew Bible, known as the Old Testament, begun hundreds of years before the time of Jesus and believed to have been completed some time in the first century C.E. Examining the earliest records of the religions of the various peoples of early Europe reveals a great deal about how they lived and what they most valued.

PREHISTORIC RELIGIONS

Most of what is known about the religions of prehistoric Europe comes from archeological discoveries. A large number of female figures called Venuses have been found at various sites throughout Europe. Historians surmise that the statues were carved to invoke the protection of a mother goddess thought to govern fertility and reproduction.

In a similar fashion, some historians have interpreted the cave paintings of the **Paleolithic Period** as having a magical or supernatural meaning, perhaps to ensure a successful hunt or request protection from powerful animal spirits. The **megalith** structures found across Europe dating to the Neolithic Period, of which Stonehenge is a famous example, might also have had a religious function.

The many broad similarities in the religious beliefs of the Celts, Germanic groups, Greeks, and Romans have been attributed to their shared descent from the Indo-European peoples who migrated across Europe in the second and third millennia B.C.E. **Linguists** who study the modern Indo-European languages have found similar words to describe gods, goddesses, and the practice of religion. From this, they have theorized a system of belief in which a sky-god reigns supreme, lesser gods and goddesses govern aspects of nature such as the dawn and sun, and the gods are honored with ritual observances such as a sacred meal or cattle sacrifice.

CELTIC RELIGION

The Celts believed in an enchanted and never-changing Otherworld that existed side-by-side with

the natural world. The families of gods, goddesses, and other beings dwelling in this Otherworld could easily access and influence the natural world. At certain times, humans might also enter the supernatural realm.

All Celtic tribes believed that life came from a mother goddess, either the ancestor of a group of people or the mother of the gods themselves. The goddess might appear as a maiden, representing the innocence and beauty of youth; as a nurturing and protective mother; or as the old woman, the crone, witch, or hag, representing death. In keeping with this understanding of the cyclic nature of life, Celtic festivals marked the turn of the seasons to spring, summer, fall, and winter.

Celtic rituals varied according to tribe, and most settlements worshipped a series of divinities associated with the geographical features of the region. Therefore, the Celtic gods—such as the goddesses Danu and Rhiannon, the mother of the Celtic gods and the Welsh goddess of fertility, respectively—might live in the mountains or the sea, near or within running water, or even inside trees. Water features prominently in Celtic myth, often taking on a sacred aspect. Shrines grew up around springs or next to lakes and rivers as visitors came for help and healing from the resident divinity. Druids, a priestly class who acted as intercessors between the gods and humanity, rarely used temples but rather conducted rituals in the open air, near sacred features of the landscape such as hilltops, springs, or forests. Oak groves often served as holy places.

Roman historians recorded human sacrifice among the Celts, and recent archeological discoveries of bodies preserved in bogs inhabited by early Celts lend credence to this belief. The means of death suggests a ritual killing, perhaps as punishment for a crime or perhaps to gain favor from the gods in times of crisis.

GERMANIC RELIGION

Like other Indo-European peoples, the Germanic groups believed in a family of gods who ruled, fought, connived, and meddled in events just as human families might. Tribal kings in early Germanic society often served as priests of the god Tiwaz, who protected the social order, upheld laws, and oversaw fertility and peace. The prominence of such a god reveals the importance of agriculture to the society. Later, as tribes became more militaristic, gods like Odin or Thor, the thunder god, grew in importance, while the god Frey and his sister Freya became patrons of agriculture and the arts. These deities are the Anglo-Saxon origin of our names of the days of the week: Tiwaz, Tuesday; Woden, Wednesday; Thor, Thursday; and Frey, Friday.

Germanic tribes frequently attributed their ancestry to a god. The Roman historian Tacitus observed that many Germanic tribes claimed descent from sons of the god Tuisto. Later Germanic groups, such as the Angles and Saxons who migrated to Britain in the fourth and fifth centuries C.E., traced

RELIGIOUS EXPRESSION IN ANCIENT EUROPE

ca. 25,000 B.C.E. "Venus" statues carved by prehistoric Europeans

ca. 2500 B.C.E. Indo-European migrations change patterns of religious belief in Europe

ca. 600 B.C.E. Roman king Servius Tullius builds temples to Jupiter and Juno

ca. 4 B.C.E. Birth of Jesus Christ

ca. C.E. 30 Death of Christ at Jerusalem

C.E. 70 Roman army destroys Jewish Second Temple at Jerusalem

ca. C.E. 90 Completion of the Hebrew Bible, or Old Testament, begun in about the ninth century B.C.E.

C.E. 313 Edict of Milan establishes religious tolerance throughout Roman Empire

C.E. 393 Roman emperor Theodosius declares Christianity official religion of Rome

their lineage to Woden. After centuries of contact with Latin language and literature, Germanic religion evolved to include the belief that Thor had actually been a prince of the ancient city of Troy who was exiled after the Trojan War.

The most complete information about the Germanic religion comes from the sagas of the Norsemen. These sagas describe in detail the creation of the world and the ongoing wars between the various families of gods. In Norse mythology, the gods live at the center of the world in a tower called Asgard, humans populate the region known as Middle Earth, and the sea surrounding the outlying boundaries of the world is held together by an enormous serpent.

GREEK RELIGION

Greek religion evolved from a variety of contacts and influences. The Minoan civilization of Crete worshipped a series of goddesses similar to those found in Asia Minor. Mycenaean Greeks in contact with Crete revered a sea-god called Poseidon, a mother goddess named Hera, and a goddess of

People traveled throughout the ancient world to consult the sacred Oracle at the Temple of Apollo in Delphi, Greece. The oracle, a resident priestess, uttered cryptic prophesies that supplicants believed foretold future events. (Grant V. Faint/Iconica/Getty Images)

wisdom and the arts called Athena. Later invaders who settled the Greek peninsula combined their native religion with the beliefs of those in their new home, thus developing a worship of twelve chief gods and goddesses. These gods dwelled on Mount Olympus and were ruled by Zeus, the all-powerful. Each god represented or ruled over a different quality or aspect of life and could be consulted for different things. Apollo, for instance, was the god of poetry, while his sister Artemis protected wild animals.

Almost all daily human activity involved paying homage to the gods in some form. Meals began with a libation, pouring out a small amount of wine or other liquid to honor the gods. Sacrifices such as burning a thigh taken from an animal preceded all important events or decisions. Those giving thanks for a welcome event, requesting a favor, or needing protection visited temples or shrines to make offerings of food, locks of hair, or personal possessions. Sacrifices might also be conducted before consulting **oracles** to learn the will of the gods. Different deities looked after every aspect of the home and household, many of them in the form of ancestral spirits belonging to that particular family.

In addition to the major, minor, and household gods, mystery cults evolved surrounding the figures of Orpheus, a musician who traveled to the underworld; Dionysus, the god of wine and revelry; and Demeter, mother of the earth and goddess of agriculture. Participants in the mystery cults could not share the secrets of their initiation, so little is known about the actual practices associated with these cults.

ROMAN RELIGION

The religion of Rome absorbed several influences from neighboring peoples and yet retained an individual character. Early Romans and other Italic peoples worshipped Mars as their chief deity. Mars, Jupiter, and Quirinus formed a triad served by trained priests. The Etruscans worshipped Tinia, a sky-god who shared many qualities with Jupiter. Under Etruscan rule, the Temple of Jupiter was built around 600 B.C.E. to house statues dedicated to Jupiter as well as Juno (in Etruscan, *uni*) and Minerva (Etruscan *menrva*).

As the growing Roman **Republic** came into contact with Greek colonies on the Italian peninsula and later Greece itself, Jupiter, Juno, and Minerva were identified with the Greek deities of Zeus, Hera, and Athena. This led Roman writers to adopt many Greek stories about these gods into their poetry and mythology. Like the Greeks, the Romans had domestic gods such as Vesta, goddess of the hearth, and also worshipped ancestral and household spirits called *lares* and *penates*. Roman mystery cults, modeled after Greek precedents, were dedicated to Bacchus, the god of wine, the Egyptian mother goddess Isis, or the Persian sun-god Mithras.

The Roman religion played an important role in public life. Priests or priestesses who performed sacrifices, led rituals, and upheld the cult of a god or goddess had a privileged place in society. The favor of the gods was regarded as crucial to personal success, and powerful people such as the Roman general Julius Caesar (100–44 B.C.E.) boasted of having a close relationship with the gods. As part of his efforts to reinstate peace and order, the Roman Emperor Augustus (63 B.C.E.–C.E. 14) reinforced the importance of religious observance in Roman life. Augustus deified his great-uncle Caesar, elevating him to the status of a god. Later emperors followed this practice of deifying their predecessors. The worship of Roman gods and deified human leaders became a state religion in the Roman Empire and all citizens were required to show respect in the form of offerings, sacrifices, and ritual observances.

Practicing the state religion of Rome, then, involved the patronage of several divinities. Adherents to monotheistic religions like Judaism and Christianity, both of which acknowledged only one true god, came into frequent conflict with Roman authorities. Jews and Christians suffered persecution under Roman rule until the Emperor Constantine paved the way for religious freedom by issuing the Edict of Milan in C.E. 313.

GREAT LIVES

Theodosius I, the Great (C.E. 346–395)

Theodosius I, coruler over the eastern portion of the Roman Empire from C.E. 379 to 395, earned the address "the Great" for his reputation as a fair lawgiver and for his making Christianity the official religion of the Roman Empire. Flavius Theodosius was born in modern-day Spain ca. 346. By 368, he served under his father, Theodosius the Elder, a general stationed in Britain. The younger Theodosius fought Germanic tribes in the Rhineland and served in 373 and 374 as governor of Upper Moesia, an eastern Roman province extending over modern-day southern Russia and the Balkans. Theodosius proved successful in battle, but, after his father was executed for treason in 376, he retired to his family's estate in Spain to avoid similar accusations.

In 378, the Western Emperor Gratian (C.E. 359–383) called Theodosius out of retirement and made him commander of the Roman legions on the Danube River. In 379, Theodosius became coemperor of the Roman Empire in the east, and for the next few years he fought against the Visigoths. In 382, he negotiated a treaty with the Visigoths which represented a key change from the policies of earlier governors. Theodosius allowed tribes of Visigoths to settle south of the Danube, inside Roman lands, as independent allies or *foederati*. The Visigoths owed allegiance to their own king, rather than to the Emperor, and they fought in the Roman army as allies, not Roman citizens.

In 380, Theodosius proclaimed Christianity the official state religion of the Eastern Empire. This policy had far-reaching effects on the Roman Empire and on Europe in the centuries to follow. In 391, he forbid pagan or non-Christian worship within the borders of the Roman Empire and officially closed all pagan temples, banning pagan rituals and sacrifices.

In 388, Theodosius ended an uprising led by Magnus Maximus, who had been proclaimed emperor by Roman troops in Britain. Maximus marched into Gaul (modern-day France), killing Gratian, and from there invaded Italy. After executing Maximus, Theodosius remained in Italy to reorganize the western half of the Empire. He appointed Gratian's brother Valentinian II emperor, but in 394, he had to move again to put down another puppet emperor and his commander, who had murdered Valentinian II. For a year, Theodosius ruled a united Roman Empire.

Theodosius died at Milan in 395, leaving the eastern portion of the empire to his son Arcadius, then 17, and the western portion to Honorius, who was ten. Following his death, the gradual disintegration of the western Empire began as Germanic groups acquired more influence and eventually deposed the reigning emperor in 476. However, Christianity survived the fall of the Western Empire and became a powerful institution in Europe during the Middle Ages.

See also: Art and Architecture; Celts; Christianity; Culture and Traditions; Druids; Etruscan Civilization; Germanic Groups; Greece; Language and Writing; Myths, Epics, and Sagas; *Pax Romana*; Rome; Society.

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TURNING POINT

The Edict of Milan

In the first three centuries after Christ's death (ca. C.E. 30), Roman authorities regarded Christians with hostility and frequently persecuted them. Non-Christians blamed them for everything from wars to earthquakes, saying they incurred the wrath of the Roman gods by not paying proper tribute. In C.E. 311, however, coemperors Constantine, Galerius, and Licinius issued the Edict of Serdica, granting freedom of worship to all Christians.

According to tradition, the impetus for this decision came the year before, while Constantine was at war with then coemperor Maxentius. The night before an important battle at a site called Milvian Bridge, Constantine reported having a dream in which he saw the image of a cross in the sky accompanied by the words, "In this sign you shall conquer." Constantine ordered his soldiers to paint the sign of Christ on their shields, and his armies won the day.

The following year, Constantine and Licinius issued a decree at Milan that granted freedom of worship to all citizens of the Roman Empire. The edict further declared that all property that had been seized from Christian individuals or the church would be restored.

After the Edict of Milan, the Christian Church became a major religious and political force within the empire. As its protector and patron, Constantine invigorated the young church with property and funds to build places of worship, inspiring an architectural revolution. The laws he passed to protect peasants, slaves, children, and prisoners reflected Christian ideals of charity, and he sponsored councils at Arles, in C.E. 314, and at Nicea, where church authorities formulated important elements of Christian **doctrine**. Constantine is thought to have supported the authority of the Bishop of Rome and also built a Christian presence in his new capital, the Greek city of Byzantium, which became Constantinople.

With the freedom granted them by Constantine, Christian communities grew in number and importance throughout the empire. In C.E. 380, the Emperor Theodosius declared Christianity the official religion of the eastern empire. By modern standards, this act is ill-regarded, as it legitimized the persecution of "heretics" and pagans by the state and church together.

Rome

City in Italy that evolved from a **monarchy**, into a **republic**, and finally into an empire that covered large parts of southern, central, and eastern Europe as well as encircling the Mediterranean Sea. During the time of the Roman Empire (27 B.C.E.–C.E. 476), Rome became the largest and most unified political and cultural influence in ancient Europe.

ORIGINS

The beginnings of Rome were quite modest: in the tenth century B.C.E., inhabitants of the region of Latium in south-central Italy settled along the Tiber River. Close to a water source and protected by a series of hills, these ironworking peoples built thatched huts, farmed the fields, and established marketplaces to trade cattle. They spoke Latin and built temples to their sky god, Jupiter. According to tradition, Rome was said to have been founded in 753 B.C.E. by the twin brothers Romulus and Remus, sons of the war-god Mars, who were raised by a she-wolf on the

hills. Later, the legend evolved that Aeneas, a hero of the Trojan War, had traveled from Asia Minor with a group of exiled Trojans to establish Rome.

Between 625 and 575 B.C.E., the Etruscan culture exerted significant influence over Rome. Tarquinius I (r. 616–579 B.C.E.) became the first Etruscan king of Rome, and his successor, Servius Tullius (r. 578–534 B.C.E.), expanded and reorganized the military. Blending its native Latin civilization with many elements borrowed from Etruscan society, Rome prospered. Trade with Greek colonies in Italy, Sicily, and Gaul (modern-day France) brought the Romans in contact with the religion and culture of **classical** Greece, which would significantly influence the Roman world.

The most powerful element in Roman society was the patrician class, an **aristocratic** nobility of landowners who had special religious privileges and held the highest political offices. The bulk of the population was comprised of the plebeians, or the common citizens. Due to a crime alledgedly committed against a noblewoman named Lucretia, the city expelled its last Etruscan king, Tarquinius Superbus, around 509 B.C.E. The citizens then established a republic ruled by appointed officials known as consuls and advised by two legislative bodies—the assembly, or *curia*, and the senate—comprised of both patricians and plebeians.

THE REPUBLIC

During the years of the republic (509–27 B.C.E.), Rome grew from a vital city to the dominant power of the entire Mediterranean. In the fifth and fourth centuries B.C.E., neighboring communities were annexed by warfare and, in 396 B.C.E., the Roman victory over the Etruscan city of Veii heralded the decline of Etruscan civilization. The Romans' next great rival took the form of Celtic Gauls who marched south and sacked Rome ca. 390 B.C.E., but the invaders were eventually repelled and the city recovered. By 275 B.C.E., Rome ruled most of the Italian peninsula and began to expand to the Mediterranean islands of Sicily, Sardinia, and Corsica.

The growing republic inevitably came into conflict with Carthage, a thriving city-state and seaport

TURNING POINT

Roman Law

The earliest Roman laws were codified in the Twelve Tables, recorded in about 450 B.C.E. during the days of the **republic**. The Tables established the norms by which the law would be applied. Priests served as the interpreters of the law, though later a specialized group of jurists or lawyers took over this task. In the Roman Republic, the assembly proposed new laws, while in the days of the empire this task fell to the senate. The body of laws applied universally to Roman citizens and governed both civil and criminal cases.

An elaborate system of courts developed in which magistrates, or *praetors*, acted as judges, hearing cases and settling disputes. In the provinces, governors and their staff usually handled cases. Punishments varied according to the severity of the crime and whether the offense was public or private. The Romans preferred banishment to imprisonment and either executed offenders or sent them to the mines or gladiator schools.

The formal oath of truth in legal proceedings, the legal contract, and the right of a citizen to appeal a court sentence were all Roman innovations. In addition, a profession dedicated to interpreting and upholding the law was previously unheard of. Roman law survived the dissolution of the empire. Emperor Theodosius II (C.E. 401–450) ordered a new codification in C.E. 438, and Emperor Justinian I (C.E. 483–565) collected the laws into an edition called the *Codex* around C.E. 540. Kingdoms developing in the former Roman provinces, such as that of the Franks, also incorporated elements of Roman law into their own codes. In this way, Roman law profoundly shaped the legal tradition of Europe and the West.

A large open square called a *forum*, lined with buildings used for political, administrative, and religious purposes, served as the center of Roman public life. The Roman Forum was the site of the assassination of Julius Caesar in 44 B.C.E. (Altrendo Panoramic/Altrendo/Getty Images)

in northern Africa whose navy controlled the Mediterranean Sea. Rome fought Carthage in a series of conflicts called the Punic Wars, lasting from 264 to 146 B.C.E., which resulted in Roman control of the western Mediterranean, North Africa, and Spain. Between the 140s and 120s B.C.E., Rome took control of the eastern Mediterranean and absorbed Greece and parts of southern France. New trade routes opened, currency circulated, and Rome grew wealthy.

THE EMPIRE

The republic's expanding military and cultural influence ushered in a new **era** in Rome's **political history**. As Rome grew richer and more powerful, its leaders' commitment to republican ideals began to erode. In the mid-first century B.C.E., the popular and successful Roman general Julius Caesar (100–44 B.C.E.) initiated a civil war when he marched his troops on Rome.

Caesar emerged as Rome's sole leader but enjoyed only a brief rule; his Senatorial adversaries assassinated him in 44 B.C.E., plunging the republic once again into civil war. Caesar's nephew and adopted son, Octavian (63 B.C.E.–C.E. 14), emerged from the conflict as the most powerful Roman citizen, taking the title of *imperator* and calling himself Caesar Augustus. His reign as the first Roman emperor (27 B.C.E.–C.E. 14) marked the beginning of the *Pax Romana*, a 200-year period of relative peace and stability throughout most of Europe. The Roman Empire itself would endure for almost 500 years.

Successive emperors expanded the boundaries of the Roman world, pushing the Celts, the tribes populating central Europe and Britain, to the far reaches of the British Isles. The Danube River provided a much-contested border with the Germanic groups on the empire's northern frontier, and Roman provinces stretched to the Black Sea, covering Asia Minor, Syria, and Egypt. Under the protection Rome's mighty legions, commerce flourished over land and sea routes. Roman customs, the Latin language, and Roman law linked a widely diverse group of peoples, and engineering achievements such as the **aqueduct** brought comfort to Roman cities.

In time, however, the Roman Empire became too large to maintain a central authority and protect its borders from attack by migrating tribes in search of land and resources. Gradually the empire split into two halves. The nominal capital of the empire remained at Rome, while the Emperor Constantine (ca. C.E. 280–337) established an eastern capital at the city of Byzantium, later called Constantinople.

Under able rulers such as Justinian I (C.E. 483–565), the eastern portion of the empire survived for another 1,000 years, but the west suffered steady decline. First, the outer provinces such as Britain and North Africa were lost to invading tribes of Saxons and Vandals between C.E. 380 and 450. The city

of Rome itself experienced successive invasions by the Goths and Huns between C.E. 407 and 451. In C.E. 476, German mercenaries in the Roman army made Odoacer (C.E. 435–493), a member of the emperor's bodyguard, their king. Odoacer forced the last Roman emperor of the west, Romulus Augustulus, to abdicate.

The former provinces of the western Empire eventually developed into separate kingdoms whose rulers kept Roman systems of administration and typically retained Latin as the language of government and high culture. Christianity, which had become the official religion of the empire after C.E. 380, preserved both Latin language and culture throughout the European Middle Ages.

See also: Caesar, Gaius Julius; Culture and Traditions; Etruscan Civilization; Latin; Myths, Epics, and Sagas; Odoacer; *Pax Romana*; Religion; Society.

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Slavery

Slavery was considered a natural state of affairs in ancient Europe. Virtually every ancient European society, including the Greeks, Romans, Germanic groups, and the Celts, enslaved captives taken in war. In the *Nicomachean Ethics*, the Greek philosopher Aristotle (384–322 B.C.E.) wrote that some people are born to be rulers and others to be subjects.

For the most part, slaves were captives from raids or warfare, citizens who were enslaved as a result of their crimes or debt, or children whose parents were slaves. Although they comprised about a quarter of the population in many early civilizations, slaves had no civic rights, were not paid wages, and did not have legally recognized children or marriages. In very rare instances, slaves of powerful individuals might rise to positions of influence. Most slaves, however, were subjected to hard labor on farms or in shops, in mines and quarries, and at sea.

Slavery in Greece resulted from pressure on landowners who could not sell their wheat because it was being imported at cheaper prices from outside colonies. Farmers turned to cultivating wine and olives, crops that needed more attention, and labor, which could be provided by slaves. People who could not honor their debts became slaves and were excluded from the voting body. Urban populations also provided a market for slave labor; even the average household had a handful of slaves to help with domestic chores.

The first recorded slave auction in Rome took place in 396 B.C.E. Expansion by the Roman **Republic** brought more territory under Roman rule, creating a market for slaves as domestic or agricultural labor. The first Roman slave market was established in 259 B.C.E. Slaves constituted up to 40 percent of the population of Rome. They farmed the estates that provided food for the city, worked the mines and the ships, and built the monumental architecture, such as roads, **aqueducts**, and amphitheaters, that Roman citizens enjoyed.

The practice of slavery declined in the later Roman Empire, as fewer wars for conquest resulted in fewer prisoners of war. After C.E. 400, the Roman provinces moved toward a system where slaves called *coloni* were bound to their work, forced to labor at the same activity in the same location their entire lives. After the fall of the Western Roman Empire in C.E. 476, the Roman system of *coloni* turned into a system of serfdom, in which families remained bound to the land they farmed but had some social rights.

See also: Culture and Traditions; Greece; Rome; Society.

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Slavs

See Kievan Rus.

Society

Over the course of early European history, various societies—or the shared institutions, relationships, and common culture and traditions that distinguish one group of people from another—changed in fundamental ways.

In prehistoric Europe, small tribes followed a hunter-gatherer lifestyle as they searched for food over the barren landscape of the Ice Age. Following the retreat of the glaciers, seminomadic lifestyles emerged among various tribes as they migrated across Europe. Especially when communities could depend on food sources furnished by fishing, domesticating animals, or gathering wild crops, more lasting settlements began to form.

After the introduction of agriculture around 6000 B.C.E., permanent settlements emerged across Europe as people claimed land for cultivating crops and raising animals and as societies became more complex. Trade ensured the exchange of ideas and led to the formation of different classes of society, each of which had different responsibilities and status. Wealthy towns grew into kingdoms, and urban civilizations began to appear. Although each of the major groups of early Europeans enjoyed a distinct culture, their political organization and patterns of social relations were often similar.

PREHISTORIC SOCIETY

European history before the introduction of writing is usually classified as the **Paleolithic Period** or **Stone Age**, the **Bronze Age**, and the **Iron Age**. In each **era**, survival-related activities such as procuring food, clothing, and shelter guided the ways in which early society organized itself.

Stone Age

The first humans in Europe, including the Neanderthal and Cro-Magnon peoples, were hunter-gatherers, dividing tasks according to gender: men hunted, while women gathered plants, nuts, berries, and wild grains to supplement the diet. Women also saw to such activities as food preparation and child rearing. Tribes consisted of small groups of families who led a nomadic existence, following their food source, the animal herds, as they moved from pastures to streams. After the last glaciers of the Ice Age melted around 12,000 B.C.E., more of Europe became habitable.

During this **Mesolithic Period**, roughly between 10,000 and 6000 B.C.E., societies in Europe began to domesticate animals such as cattle, sheep, and goats. Stock breeding led to a seminomadic lifestyle as the tribes either followed their roaming livestock or guided the animals to pasture. Slightly more **hierarchical** arrangements developed as groups felt the need to train and support warriors who could fight to claim grazing lands or protect the herd. Because men fought, they tended to make decisions for the tribe, and property frequently passed to sons. Warriors who protected the tribe were generally accorded a higher status.

In the **Neolithic Period**, the development of agriculture led to yet another lifestyle change as early societies had more control over their food supply. Access to fertile land for growing crops and

grazing livestock became an important issue. Agrarian cultures also needed warriors to protect them from people who wanted their land or, when necessary, to seize lands from other people.

With the growth of farming, people stopped living in caves, moved to plains, and began to build houses, creating the first villages and towns. Labor-saving inventions such as the wheel, plow, and sickle produced food surpluses, and a class of **artisans** emerged. A system of barter developed as a form of trade; farmers could exchange produce from their land for pottery, **textiles**, crafts, or other supplies that they did not make themselves.

Bronze and Iron Ages

A three-class social system emerged in most of the societies of ancient Europe. The largest class, the farmers and stock breeders, ensured the food supply. A middle class of artisans produced implements for household use, weapons and armor for fighting, and luxury goods such as jewelry or decorated vessels. The third and highest class included the priests who administered the religion, and the kings or chieftains who maintained authority and offered protection.

Throughout the Iron Age (ca. 750–100 B.C.E.), most Europeans maintained an agrarian economy based on farming and raising cattle or other livestock. They engaged in trade to acquire useful items and waged war when it was necessary to acquire slaves and other wealth, defend their homelands, or seek new lands when drought or famine made their homelands uninhabitable. For the most part, people lived in small villages made up of related families. Tribes identified themselves on the basis of shared ancestry, language, cultural practices, or beliefs, but frequent warfare and intermarriage kept tribal boundaries fluid, especially among the Germanic groups.

Women in these societies left their own tribe when they married and joined their husband's tribe, bringing a small bit of property called a dowry with them. Women continued to be in charge of domestic tasks. Councils of warriors headed by the tribal chieftain made most of the decisions relating to the government of the clan, with the advice of priests or, sometimes, priestesses. The chieftain served as the highest secular authority, maintaining laws, administering punishment, and leading the tribe to war when necessary.

URBAN SOCIETY

The **social history** of southern Europe acquired a distinct character beginning with the Bronze Age, around 3000 B.C.E. Access to the Mediterranean Sea and a favorable climate allowed the societies in this area to produce food and other items for exchange, and a market economy developed. Powerful civilizations grew out of cities that functioned as important trade centers.

Early Crete and Greece

The location of Crete in the western Mediterranean Sea made it a logical site for the development of a society based on sea trade, and the Minoan civilization was that society, emerging around 2600 B.C.E. The Minoans traded farm produce for bronze weapons and other luxury items that were then sold for a profit, making the Minoan king enormously wealthy and influential. The leaders of the most important Minoan cities built elaborate palaces that functioned as the focal points of civic life as well as centers for the collection and redistribution of food. This highly centralized government required a staff of administrators who could collect fees and taxes, keep records, and enforce the king's decrees.

The assurance of a stable food supply and a surplus of wealth supported an artisan class who furnished pottery, paintings, textiles, and other luxury goods. Minoans with leisure time at their disposal engaged in entertainments such as feasts, musical performances, and athletic competitions that attracted large audiences. Minoan art and architecture reflected a refined culture devoted to the appreciation of fine things.

The Minoans with their island civilization had little need for defense and therefore had no military besides the navy that guarded their interests at sea. In contrast, the Mycenaean culture developing on the Greek mainland built large defensive fortresses

LINK TO PLACE

Citizenship in Ancient Greece and in the United States Today

In the ancient Greek *polis*, or city-state, the rules for citizenship varied as individual city-states tended to be autonomous and independent. For the most part, the only citizens who could play a role in government were males over the age of 18 whose parents were also citizens. Females, children, resident foreigners, and slaves had no public power. In democratic city-states such as Athens, all citizens assembled to elect leaders who made policy decisions, formed legislation, and performed judicial roles. Men who had served a term in the highest assembly were not eligible for reelection, a measure that prevented any one person from gaining too much power or influence.

The United States is a **republic** similar to that of early Rome in that it has two chief legislative bodies, a separate legal branch, and a president who, with the help of advisors and staff, makes executive decisions. A system of checks and balances prevents any branch of the government from gaining too much power. In the United States today, all citizens age 18 or older are allowed to vote in public elections. Citizenship is automatically granted if a child is born within U.S. borders or to parents who are U.S. citizens. Amendments to the U.S. Constitution have established that all citizens, regardless of sex, race, religious faith, or physical ability, should have full rights under the law.

and gained its wealth through military expeditions. This society too organized itself around the leadership of a system of kings and their warriors.

Settlements around these protective fortresses led eventually to the city-states of Greece, each of which had an independent form of government and a separate identity. This independence led to a great differentiation in the power, culture, and political role of the various Greek states of the Archaic and **Classical** Ages (ca. 700–323 B.C.E.). Some city-states instituted an oligarchy, where political decisions were made by a few important men. Others established a democracy, where all citizens participated in making political decisions. The city-state of Athens grew into an empire during the Classical Age, leading later scholars and historians to attribute the city's strength and influence to its democratic ideals.

Men in classical Greece served as statesmen, judges, teachers, and playwrights, and only men could vote in the assemblies. Each male citizen's class was determined by the rank of his father, and girls were mainly trained to oversee the household. Women could also be educated but participated rarely in Greek public life.

Etruscan and Roman Societies

The Etruscan civilization, like those of the Greeks and Minoans, was hierarchical and urban, and the economy depended on large farms worked by slaves. The highest authority was the monarch, or absolute ruler, but government also included citizen assemblies, in which commoners were allowed to vote. Males were required to perform military duties—**aristocratic** men served in the cavalry, an innovation that later inspired the Roman equestrian class—and common people served in the infantry. Individual city-states often formed alliances for mutual protection and to advance trade.

The family home in the Etruscan world had a sacred aspect, as the ancestral gods were believed to live under the hearthstone. When she married, a young girl had to **ritually** sever herself from the gods of her household and join herself to her husband's gods. Unlike in most societies in the ancient Mediterranean, Etruscan women participated in public events, including banquets involving elaborate food preparation, music, games, and other performances.

Surpassing and then absorbing the city-states of Etruria, Rome grew from a small village into a vast empire that imposed its culture and traditions on

an enormous variety of people. While earliest Rome was governed by a **monarchy**, Rome moved to a **republican** system of government after expelling its last king around 509 B.C.E. Roman society fell into two main classes, the plebeians or common people and the patricians or aristocrats. Although the plebeians could hold certain offices, the patricians retained control of the senate and the military, thus protecting the interests of their class.

Roman law, codified around 450 B.C.E., outlined how crimes would be judged and punished and applied to all Roman citizens. These laws, as well as the religious institutions and administrative structures of Rome, came to govern a widely heterogeneous mix of people. Indeed, part of Rome's growth rested on its identifying subjected peoples as Roman citizens, thus drawing them into Roman society. However, not all foreigners were granted citizenship. Slaves comprised more than a third of the population in some areas, serving as everything from menial laborers to valued personal attendants.

Rome, too, was a strongly **patriarchal** society. A Roman father had the power to punish his wife if she disobeyed him and to dispose of his children as he wished. Roman girls were rarely educated and married in their early teens, spending their mature life tending to the household. Although they participated little in public events, Roman women could own property and could also have their dowry returned to them if they decided to divorce.

More than the other ancient societies of Europe, Rome influenced the medieval kingdoms that emerged after the fall of the Roman Empire in the west. Kings like Clovis of the Franks (ca. C.E. 465–511) adopted Christianity (the religion of Rome), Latin (the language of Rome), and Roman class structures, administrative networks, legal customs, and family values in an attempt to reclaim the glory of the great empire.

See also: Art and Architecture; Culture and Traditions; Etruscan Civilization; Germanic Groups; Greece; Language and Writing; Minoan Civilization; Myths, Epics, and Sagas; Religion; Rome; Technology and Inventions; Tools and Weapons.

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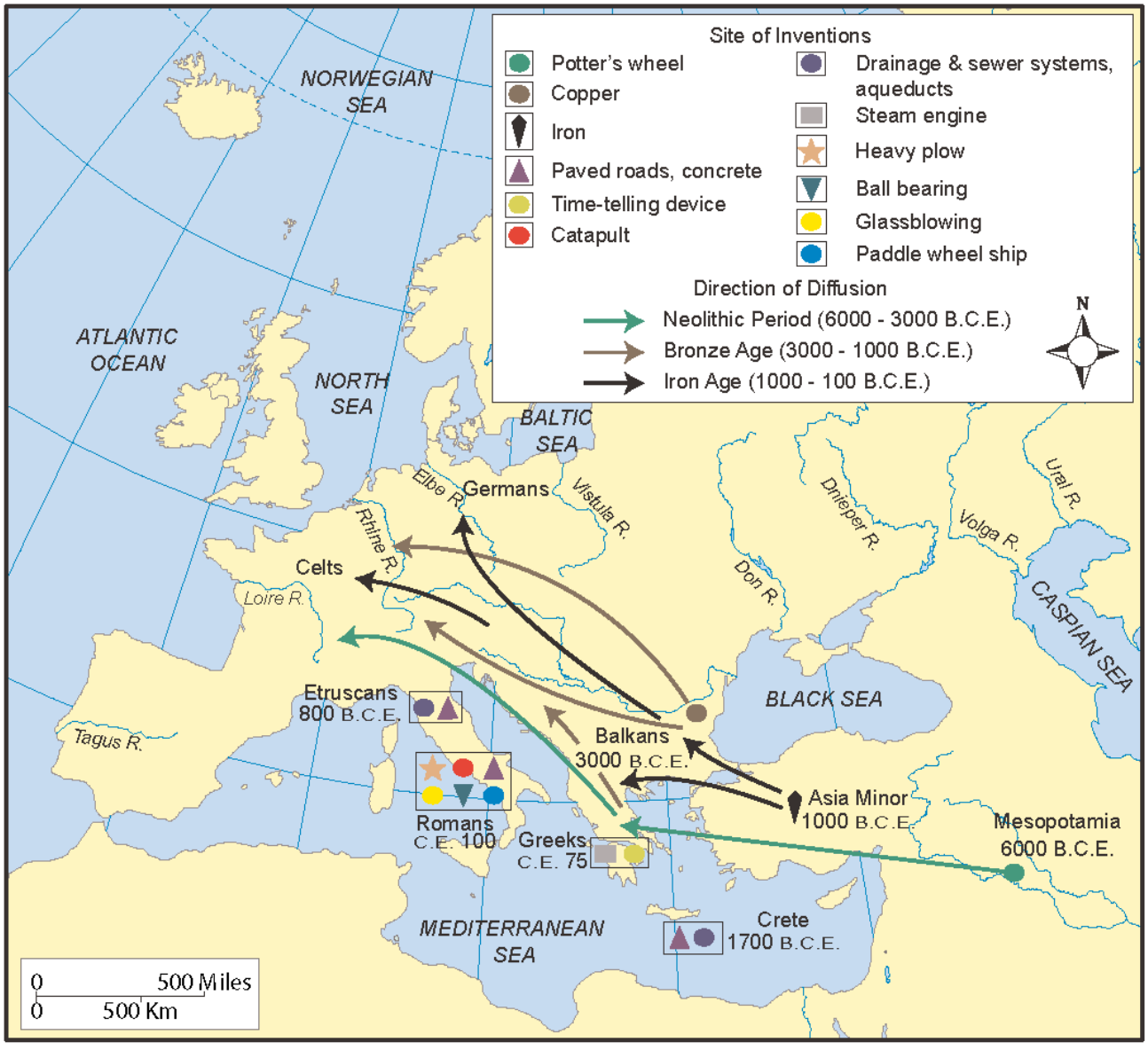
Technology and Inventions

Technology, or the application of scientific method to innovation, particularly to devices that aid or enable human activity, underlies human evolution and had a direct impact on the survival or decline of the civilizations of ancient Europe.

In the **Neolithic Period**, inventions such as the wheel, techniques of farming, weaving, and pottery spread throughout Europe, leading to permanent settlements and labor-saving devices, such as the plow, which helped secure a food supply for growing populations. While metalworking technologies enabled the expansion of the earliest urban civilizations on Crete and in ancient

SPREAD OF TECHNOLOGY, CA. 6000 B.C.E.–C.E. 75

In prehistoric times, technological inventions entered southeastern Europe from the Middle and Near Eastern civilizations of Mesopotamia. Ancient Greek civilizations spanning 2600 to 30 B.C.E., Etruscan civilization flourishing between 800 and 200 B.C.E., and the Roman Empire, C.E. 14–476, developed technological innovations that spread to other parts of Europe by various routes.



Greece, the possession of iron weapons aided the migrations of Celts and Germanic groups and, later, the Huns. **Classical** Greece might have disappeared in the Persian Wars (490–479 B.C.E.) had the Athenians not invented a type of boat that also served as a fighting platform. Imperial Rome (27 B.C.E.–C.E. 476) would not have covered so much of Europe without military machines to support the army that warred with the Celts and Germanic groups.

TECHNOLOGY AND INVENTIONS

ca. 100,000 B.C.E. Neanderthals use flake technique to make tools and bone implements

ca. 40,000 B.C.E. *Homo sapiens* migrate into Europe, using throwing spears to hunt

ca. 25,000 B.C.E. Storage pits in use in Ukraine

ca. 17,000 B.C.E. Cave artists use lamps burning animal fat

ca. 10,000 B.C.E. Bow and arrow come into use in Europe

ca. 6000 B.C.E. First signs of farming communities appear in southern Europe

ca. 4500 B.C.E. Agriculture spreads through Europe

ca. 4200 B.C.E. Earliest megalith tombs built in Portugal

ca. 3000 B.C.E. Bronze implements in use around Mediterranean

ca. 2500 B.C.E. Central and western Europe enter Bronze Age

ca. 1700 B.C.E. Minoan palaces built featuring multiple stories and plumbing systems

ca. 1600 B.C.E. Mycenaean Greeks build bridges, fortified palaces, and beehive-shaped tombs

ca. 1500 B.C.E. Eastern and northern Europe enter Bronze Age

ca. 1000 B.C.E. Ironworking techniques spread from Asia Minor to southern Europe

ca. 750 B.C.E. Ironworking techniques in use by Celts in central Europe

ca. 700 B.C.E. Etruscans build aqueducts and irrigation systems; invent the arch

ca. 300 B.C.E. Celtic smiths invent chain mail, armor made from tiny interlocking iron rings

ca. C.E. 20 Roman architects use lead pipe for plumbing systems

ca. C.E. 75 Heron of Alexandria builds first documented steam engine

ca. C.E. 370 Roman engineers build a paddle-wheel ship

STONE AGE

The **history of science and technology** in Europe traces its roots to the earliest human inhabitants of the region. The two most important inventions in prehistoric Europe were fire and the use of stone tools. Without them, the ancestors of modern Europeans, the Cro-Magnon peoples, would never have survived the Ice Age.

Paleolithic Period

The first technological advance occurred during the Lower **Paleolithic** Period in Europe when people began to chip flakes from a flint core to make a chopper, which served as a knife or scraper. The next advance occurred when toolmakers discovered that chipping both sides of the flint made a two-faced (bifacial) blade that was more useful for cutting; this developed into a hand axe.

During the Middle Paleolithic Period in Europe (ca. 100,000–40,000 B.C.E.), Neanderthal peoples manufactured tools by polishing the fragments struck from larger pieces of stone. They also fashioned a variety of cutting tools and made spearheads, probably used for jabbing but not throwing. Simple bone needles were used to sew skins and furs together as coverings, and fire was used to smoke and store meat.

The Cro-Magnon peoples of Europe in the Upper Paleolithic Period (ca. 40,000–10,000

ANCIENT WEAPONS

Chain Mail

As Celts living in central Europe learning ironworking techniques ca. 750 B.C.E., they found the new metal useful not only for making kitchen tools and farm implements but also weapons and armor. Plate armor, in the form of breastplates to shield the chest and in some cases a set of greaves or covering for the legs, had been in use by warriors of the **Bronze Age**. Skilled Celtic smiths developed a new type of armor that the Romans later called chain mail, made of a series of tiny interlocking iron rings. The first chain mail, made ca. 300 B.C.E., consisted of a series of heavy iron rings sewn onto a thick covering, most likely of leather. In time, the armor makers discovered that the rings could be interlocked to form a type of iron fabric, dense enough to prevent the blade of a sword or the tip of an arrow from sinking into the flesh beneath.

Making mail was an expensive and time-consuming task that required specialized skills and tools. Smiths heated iron in a searing furnace and then pounded it into flat sheets. Using a set a tongs, or in more sophisticated shops a windlass turned with a crank, the smith drew the heated iron through a small hole in a draw-plate. He did this repeatedly until he had made a fine, strong wire. The smith then wrapped the wire around an iron rod and cut the wire into small rings. If at any point the iron became too hard to work, the smith heated the metal again and worked with it as it cooled.

The armor maker linked the many small rings together and then fastened them in place using rivets. Each ring was linked to four neighbors, though later armorers might link six or even eight rings to make a more protective fabric. Since the iron ore used in this process was still rather soft, armor makers toughened the mail coat by rolling the finished shirt in crushed charcoal and then placing it in the forge. As the carbon in the charcoal heated, it hardened the iron on the surface of the coat into steel.

Roman legions invading Gaul or modern-day France in the second century B.C.E. encountered Gaulish warriors wearing the new armor, and the Romans quickly adopted the technology. Roman workshops used punched rings to speed the process of making mail shirts to distribute to the soldiers in the legions.

Among the Germanic groups, only chieftains and the most skilled warriors wore mail shirts, perhaps won in war or given as gifts for service. Frankish law valued a coat of mail as worth two horses or six oxen. Soldiers considered the armor a family heirloom and passed chain mail shirts from father to son. Armies of the Frankish king Charlemagne adopted chain mail during the eighth century C.E., and throughout the Middle Ages mail coverings remained an essential part of the medieval knight's possessions.

B.C.E.) expanded their toolkit to include flint and obsidian blades and developed the throwing spear and the fish hook. They sewed clothing to protect against the cold and constructed pit houses (dwellings dug into the ground) or shelters made of animal hides and bones. They had fine tools for engraving rock faces and carving the small female-shaped statues called Venuses. Cro-Magnon people also made lamps using animal fat to provide light for artists who created the detailed cave paintings found in southwestern Europe.

Mesolithic Period

In the **Mesolithic Period** (ca. 10,000–6000 B.C.E.), early Europeans learned to supplement their diet by gathering roots, nuts, fruits, and wild grain. They domesticated the dog and then sheep, goats,

This stately aqueduct in Segovia, Spain, stands as testament to the Roman genius for engineering and endurance. Many aqueducts built by the ancient Romans to pipe water into their cities still function today. (Albert J. Copley/Photodisc Green/Getty Images)

and horses. They produced small blades called microliths for use in arrows and spears and improved the hand axe by developing the hafted axe, which had a wooden handle. They also developed the bow and arrow. People living along coasts and harbors made the first boats and improved tools for fishing and gathering shellfish like mollusks. Such technological advances allowed these first European settlers to survive extreme climate changes and populate the continent in the wake of the receding glaciers.

Neolithic Period

Beginning with the Neolithic Period, agriculture revolutionized food production and turned many groups from hunter-gatherers into settled communities. This occurred at different times throughout the various regions of Europe, starting around 6000 B.C.E. Neolithic farmers developed the plow and sickle to plant and reap grain and created improved grindstones for making flour. The introduction of the potter's wheel, invented in Mesopotamia, allowed early Europeans to make clay pots they could then use to store, carry, and cook food. Pottery represented a significant improvement over the stone and leather containers used earlier.

Once someone realized that adding wheels to sleds made it easier to transport heavy loads, the wagon came into use. Europeans of the Neolithic Period also learned how to take fibers such as flax or animal products such as hair or wool and weave them together to create **textiles**. With farming practices to furnish a stable food supply and better techniques for storing and preserving food, Neolithic peoples of Europe managed to form villages and support growing populations.

TURNING POINT

The Roman Aqueduct

The Roman **aqueducts** were artificial channels that used gravity to direct water from higher-elevation supplies such as springs and lakes into Roman cities. Although much of the aqueduct was made up of tunnels or watercourses at ground level, many aqueducts were large, bridgelike structures, composed of a series of stone arches that carried the water across valleys and plains. The gentle declining slope of the aqueduct allowed the water to flow from its source to its destination with no need for pumps or any human intervention. Sedimentation tanks located along the watercourse used filters to capture impurities before the water reached the city.

In some cases, Roman engineers used a siphon to channel water through valleys. Internal pressure forced water from a source up a pipe to the tunnel or watercourse beyond. This system was not as common as the stone arches. Once in the city, another series of walls and arches carried the water into the pipes that distributed it to the pools, baths, public fountains, and other receptacles for private use. Eleven aqueducts furnished the daily water supply for the one million people who lived in Rome.

Remains of Roman aqueducts still stand. The Pont du Gard, built between 20 and 16 B.C.E. by Marcus Agrippa, carried water from the Gardon River in southern France to the city of Nemausus (modern-day Nîmes). The structure featured a series of three stone arches 226 feet (69 m) high and still impresses visitors with its engineering as well as its symmetrical beauty. The aqueducts epitomize the blending of functional purpose and elegance of design in Roman architecture.

Favorable geographic conditions such as a warm climate led groups in southern Europe, particularly those living around the Aegean Sea, to develop Europe's earliest urban civilizations. These societies were also located near trade routes that afforded easy access to the latest technological advancements of the East. By contrast, ideas from the Near East and Asia spread to the rest of Europe much more gradually. While the Minoans were building monumental palaces on Crete, the peoples of western Europe were building the massive cairn graves and stone circles that characterize the **megalith** culture.

BRONZE AND IRON AGES

Europe moved out of the **Stone Age** when trading contacts with Africa and the Near East gave southern Europeans the technology to smelt one part tin with nine parts copper to make bronze. Trade in copper, tin, and the bronze tools and weapons they produced spurred economic activity throughout Europe. The civilizations of the Balkan peninsula entered the **Bronze Age** around 3000 B.C.E.; beginning in 2500 B.C.E., bronze trade spread to central and western Europe, while the eastern and northern parts of Europe entered the Bronze Age around 1500 B.C.E.

Beginning around 1000 B.C.E., techniques of smelting iron spread from Asia Minor first to Greece and the Balkans, then later to Italy and central Europe. The development of iron plows improved agriculture, and the creation of iron weapons and armor supported war as well as defense. Unlike the rarer and more costly bronze implements, iron weapons were comparatively cheap to make. Mines across northern Europe provided iron ore, and forests furnished wood for charcoal. Around 300 B.C.E. Celtic smiths developed a type of armor called chain mail, consisting of an interlocked series of tiny iron rings.

INVENTIONS OF THE ANCIENT WORLD

Inventions of the Minoan civilization were designed to enable trade and build comfortable palaces that

GREAT LIVES

Euclid

Euclid was a Greek mathematician who is believed to have lived from around 330 to 270 B.C.E. He taught at the museum in Alexandria, Egypt, which had become an important center of intellectual and cultural life after the time of Alexander III, the Great. Euclid compiled the works of previous and contemporary Greek mathematicians into a thirteen-volume work called *Elements*, which became the most famous and influential of Greek texts. In *Elements*, Euclid approached the subjects of plane and solid geometry and numbers theory using a process of deductive reasoning. He required that each supposition or proposition be supported by proof, and the proof of later theorems depended on the logic of propositions that had been proven earlier.

For centuries to follow, schools across Europe taught mathematics in this fashion, earning Euclid the title of "father of geometry." Euclid also wrote treatises on astronomy and optics, as well as several other works now lost.

functioned as the center of the Minoan world. Using bronze saws, workers cut blocks of stone to furnish building materials for homes and for the roads that connected the Minoan cities. Drainage systems made with stone shafts and clay pipes equipped the houses of the wealthier citizens with sewage facilities. Rainwater from cisterns on the roof was used to flush lavatories, channeling used water to a nearby river.

The Etruscan civilization, which flourished in Italy between 800 and 200 B.C.E., also had paved streets, **aqueducts** to bring water to the cities, and sewer systems to carry it away. A system of dikes and trenches kept farmland fertile through irrigation. The achievements of Etruscan architecture, such as the arch used in the huge vaulted domes of certain tombs, inspired the later Romans to their impressive feats of engineering.

While the Greeks' technological achievements receive less attention than their advances in the arts, Greek engineers were pioneers in several areas. They invented the first portable time-telling devices, the suction pump, and cranes for use in loading and unloading cargo on ships. The Greeks also invented early versions of weapons such as the flame thrower and the crossbow. A Greek device dating to the first century B.C.E., discovered in C.E. 1900 in a shipwreck near Crete, is the earliest machine to use gears. This object, called the *Antikythera*, was apparently designed to calculate positions of the sun and moon as well as the signs of the zodiac. In the first century C.E., Heron of Alexandria invented the first steam engine. He also created several other devices—some functional and some purely for entertainment—that performed tasks such as trimming the wick of an oil lamp or running an automated puppet show.

Roman ingenuity likewise expressed itself in diverse ways. To aid in military conquest, the Romans developed war machines like the *onager*, an enormous catapult, and the *ballista*, which fired a bolt tipped with an iron point. When building the famous Roman roads, surveyors used an instrument called a *groma* to establish the straight line the road would follow. Roman roads, bridges, and tunnels cut through the landscape made transportation faster and supported commerce throughout the empire. The Romans also invented such tools as the heavy plow and the ball bearing. They invented concrete to aid in their massive building projects and perfected the art of glassblowing, enabling the mass production of bottles, flasks, and beakers. Around C.E. 370, Roman engineers built a ship powered not by human effort but by a paddle wheel.

Some historians point out that Rome's adoption of slavery discouraged innovation, because it reduced the need to develop labor-saving devices. Nevertheless, the technological achievements of the Romans remained unequalled until the time of the Renaissance.

See also: Archeological Discoveries; Culture and Traditions; Slavery; Society; Tools and Weapons.

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Tools and Weapons

Advances in toolmaking and weapons technology shaped the course of civilization in ancient Europe. In about 1100 B.C.E., for example, the Dorians of northern Greece used superior iron weaponry to conquer the Mycenaeans, the dominant power in Greece at the time. The Mycenaean civilization had risen to prominence on the strength of its bronze weapons but now found them no match for Dorian technology.

TOOLS

Humans survived in Europe because they could make tools to adapt to their environment and provide food and shelter. The first Europeans made flat pebble choppers by chipping a piece of flint. Over time, they developed more complex tools. The best stone for weapons came from flint or chert, whereas harder stones, such as basalt or sandstone, were used as grindstones. Wood and shell also served as tools or toolmaking materials.

Around 35,000 B.C.E., the Cro-Magnon peoples living in Europe developed tools for boring, scraping, and cutting and also improved the stone weapons used for hunting. Bone and antler furnished materials for finer tools and implements, such as the points of throwing spears or needles. Archeological discoveries have revealed that Cro-Magnon peoples used flint weapons and had toolkits with more than 100 items used for everything from fishing and making clothing to artwork.

With the arrival of agriculture in the **Neolithic Period** came stone axes, which farmers could use to cut down forests and create fields for planting. Stone tools of the Neolithic Period were polished instead of merely chipped, resulting in smoother and more efficient cutting surfaces. Neolithic farmers developed sickle blades to cut their grain, grindstones to turn grain into flour, and pottery to store flour and to aid in other food-gathering tasks.

Southern Europe entered the **Bronze Age** around 3000 B.C.E. when Europeans living in the Cyclades, a group of islands in the Aegean Sea, began to smelt copper and tin to make bronze. The Minoan civilization of ancient Crete also used bronze implements and weapons. Around 1000 B.C.E., groups living in eastern Europe learned the technique of ironworking from their neighbors in Asia Minor (modern-day Turkey). By 750 B.C.E., the Celts living in central Europe had entered the **Iron Age.** They used iron in knives, shears, axe heads,

ANCIENT WEAPONS

The Roman Chariot

During the **Bronze** and **Iron Ages**, the chariot, a two-wheeled vehicle drawn by horses, served as a weapon in battle for many Asian and European armies. The heroes of the Trojan War rode chariots into battle and staged chariot races as part of the funeral games to celebrate the death of a warrior. The Persian king Darius III (r. 336–330 B.C.E.) used chariots, though unsuccessfully, against Alexander III, the Great (356–323 B.C.E.). Remains of chariots have been found in several Celtic graves and in an Etruscan burial site, perhaps as a ceremonial transport to the next world.

The Romans never adopted the chariot for warfare, but prized it for ceremony and entertainment. In the triumphal procession held to honor a successful military general, four horses pulled the gilded chariot in which the triumphal man rode. The victorious warrior, his face painted red, carried an ivory scepter and a laurel wreath that symbolized victory, and wore the purple toga that represented imperial power. In the days of the empire, only the emperor or members of the imperial family could hold a triumph.

Chariot races, however, became one of the most popular forms of entertainment, appealing to all strata of the Roman populace. In the Circus Maximus in Rome, more than 260,000 spectators crowded to see the competitors race seven times around the oval track, competing to spill or overturn their opponents. After each lap, slaves posted at one of the bends poured water on the overheated wheels. Victors won the laurel wreath, a large sum of money, and, in the case of gladiators or slaves made charioteers, their freedom. The frequency of charioteers and chariot motifs depicted on pottery, coins, and household objects attests to the enduring popularity of these games, and skilled charioteers earned as much admiration as the sports heroes of today.

plows, and cooking pots, as well as in the chains used for hanging cooking cauldrons over a fire. Copper and tin remained in demand for bronze objects, such as cauldrons, bowls, drinking vessels, mirrors, and decorative ornaments, but basic tools, such as the scissors, saw, billhook, boathook, and sickle, were made of iron.

WEAPONS

Bronze daggers, swords, and spearheads circulated through Crete and early Greece in the second and third millennia B.C.E. The first bronze daggers had a simple ridged blade and a handle of bone or wood. Some of the earliest bronze swords had a "rat-tailed" construction, named for the bent tip used to attach the blade to the hilt. The narrow, leaf-shaped blades of the spearhead were strengthened with a rib down the center and joined to a wooden shaft. Metalworkers also developed bronze armor, beneath which soldiers wore leather or linen padding for comfort.

In Mycenaean Greece in the late Bronze Age, between 1500 and 1100 B.C.E., warriors owned shields shaped like figure eights, bronze breastplates, helmets, thrusting spears, and long swords. Some warriors wore bronze greaves to protect their legs, and archers had bronze wrist guards. These are the weapons carried by heroes in **classical** Greek legends about the Trojan War. Complex fortifications, chariots, and warships also served as tools for defense and attack.

Where once the development of more efficient tools marked the advancement of human culture, now the possession of better weapons and armor changed the fortunes of the peoples of Europe. The Mycenaeans still had weapons made of bronze when the Dorians, tribes from northern Greece armed with iron weapons, invaded ca. 1100 B.C.E.

The cemetery near Hallstatt, Austria, discovered in C.E. 1846, yielded several artifacts that illuminated the lives of Iron Age Celts. The artifacts included an assortment of jewelry, pottery, and iron weapons. This bronze axe head, which is decorated with a seated warrior, was probably used for ceremonial purposes. (Erich Lessing/Art Resource, NY)

The iron weapons may not have been more efficient, but they were cheaper to make, more readily available, and, therefore, more members of the society could be armed.

During the Iron Age, smiths crafted sword blades made with cores of softer metal for flexibility and hard exteriors to hold the edges. Other iron weapons included lances, spears, arrow points, and one-edged swords.

In the eighth century B.C.E., the Greeks developed an infantry known as *hoplites*. These heavily armored warriors carried long lances, round shields on their left arms, and thrusting spears. The helmet was made of bronze and the corselet and greaves were made of linen, leather, or perhaps metal. These weapons allowed close-formation fighting, a tactic more deadly than the earlier style of individual combat, which resulted in higher casualties in conflicts like the Persian Wars (490–479 B.C.E.) or the Peloponnesian War (431–404 B.C.E.). Alexander III, the Great (356–323 B.C.E.), the Macedonian king who conquered parts of Europe, Africa, and Asia, had the same weaponry and armor available to him during his conquests; his success depended on his strategy and his effective use of the *phalanx*, a squadron of infantry eight to 36 men deep.

The early Romans also used the phalanx formation and fought with spears, swords, and armor, but they gradually replaced the round hoplite shield with a long oval shield, developed a longer double-edged sword, and used a throwing spear or *pilum*. In the fourth century B.C.E., Roman generals organized their fighting men into legions. Although the Romans developed a professional navy and also had a class of cavalry, or warriors who fought on horseback, the bulk of Roman military might rested in the legion of infantry. The Roman system of professional soldiering produced a vast force of highly trained and dedicated soldiers who helped push the boundaries of the Roman Empire as far as Britain and Arabia. In time, however, the area of the empire exceeded the number of soldiers available to protect it, and Rome fell to the Germanic groups it had once attempted to subdue.

See also: Agriculture; Archeological Discoveries; Technology and Inventions.

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Trojan War

Conflict fought in the thirteenth century B.C.E. between the Mycenaean Greeks and the inhabitants of Troy, a city on the west coast of Asia Minor (modern-day Turkey). Tales of the origin, battles, and aftermath of the war were recorded in the epic poems the *Iliad* and the *Odyssey* (ca. 750 B.C.E.), attributed to the Greek poet Homer. These works inspired the art and literature of western Europe for centuries to follow.

Readers and scholars throughout the ages have debated whether Homer's epic poems depicted an actual event or merely a legendary tale. Based on archeological evidence, however, historians now generally agree that the war actually occurred, even though Homer's account of it is highly romanticized. Ironically, although the Trojan War is now accepted as fact, scholars still are not certain whether Homer himself was an actual historical figure.

According to Homer, the Trojans instigated the war when Paris, a prince of Troy, carried off Helen, wife of the Spartan king Menelaus and considered the most beautiful woman in the world. Menelaus then joined forces with his brother Agamemnon, king of Mycenaean Greece, to recover Helen and punish the Trojans. Although the epic retellings added embellishments, turning the story into a quarrel over a woman and an exercise in heroic valor, the Trojan War probably had its roots in disputes over trade rights and access to the waterways controlled by ancient Troy.

Homer relates that the Greeks launched 1,000 ships carrying troops to attack Troy and win Helen back. After a 10-year siege, the city fell to its attackers due to a famous ruse. The Greeks made a great show of abandoning the siege, leaving behind an enormous wooden horse as an offering to the gods. The Trojans, convinced that they had driven off the Greeks, brought the horse into the city. However, Greek warriors, who had secretly hidden inside the horse, emerged after nightfall, killing the inhabitants and sacking and burning the city.

The Greeks accepted the Trojan War as a true part of their history, and the story of Troy held an enduring claim on the Western imagination. The Roman poet Virgil (70–19 B.C.E.) wrote the *Aeneid* (19 B.C.E.), which described how the Trojan prince Aeneas, after escaping the burning city, went on to found Rome. Building on the Roman myth in an effort to enhance their status, later peoples in Europe claimed that their descendants, including the Franks and the Norsemen, were also from Troy.

In C.E. 1871, Heinrich Schliemann, a German antiquarian who had long been fascinated with tales of the Trojan War, began a systemic search to find the ruins of ancient Troy. Using details from Homer's poems, he identified a site at Hissilark, in Turkey, as the Homeric city of Troy. Schliemann's

This fifteenth-century C.E. wood panel of a scene from Homer's *Iliad* demonstrates the enduring fascination that Europeans had for the Trojan War, supposedly waged between the ancient Greeks and the residents of Troy around 1180 B.C.E. (Réunion des Musées Nationaux/Art Resource, NY)

diggings uncovered the ruins of a city that had stood since the **Bronze Age** and had been destroyed and rebuilt many times. Based on evidence of a massive destruction around 1250 B.C.E., scholars now generally accept Schliemann's claim that Hissilark was the site of the legendary Troy.

See also: Greece; Myths, Epics, and Sagas; Rome.

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Troy

See Trojan War.

Vikings

See Norsemen.

Glossary

The following words and terms, including those in "The Historian's Tools," also appear in context in boldface type throughout this volume.

The Historian's Tools

These terms and concepts are commonly used or referred to by historians and other researchers and writers to analyze the past.

cause-and-effect relationships A paradigm for understanding historical events where one result or condition is the direct consequence of a preceding event or condition

chronological thinking Developing a clear sense of historical time—past, present, and future

cultural history See history, cultural

economic history See history, economic

era A period of time usually marked by a characteristic circumstance or event

historical inquiry A methodical approach to historical understanding that involves asking a question, gathering information, exploring hypotheses, and establishing conclusions

historical interpretations/analysis An approach to studying history that involves applying a set of questions to a set of data in order to understand how things change over time

historical research An investigation into an era or event using primary sources (records made during the period in question) and secondary sources (information gathered after the period in question)

historical understanding Knowledge of a moment, person, event, or pattern in history that links that information to a larger context

history of science and technology Study of the evolution of scientific discoveries and technological advancements

history, cultural An analysis of history in terms of a people's culture, or way of life, including investigating patterns of human work and thought

history, economic An analysis of history in terms of the production, distribution, and consumption of goods

history, political An analysis of history in terms of the methods used to govern a group of people

history, social An analysis of history in terms of the personal relationships between people and groups

patterns of continuity and change A paradigm for understanding historical events in terms of institutions, culture, or other social behavior that either remain consistent or show marked differences over time

periodization Dividing history into distinct eras

political history See history, political

radio-carbon dating A test for determining the approximate age of an object or artifact by measuring the number of carbon 14 atoms in that object

social history See history, social

Key Terms Found in A to Z Entries

antiquity The ancient past, particularly referring to the history of the western world before the fall of the Roman Empire in C.E. 476

aqueduct A channel built to carry water over distances; also refers to the pipes or the bridgelike structures that support the channel across a river or valley

archeologist A scientist who studies prehistoric people and their culture

aristocratic In a society, belonging to the nobility or the ruling class, whose wealth is generally based on land and whose power is passed from one generation to another

artifact In archeology, any material object made by humans, especially a tool, weapon, or ornament

artisan A skilled craftsperson or worker who practices a trade or handicraft

Bronze Age Historical period in European history marked by the introduction of bronze for tools and weapons, beginning in southern Europe ca. 3000 B.C.E and in central Europe ca. 2500 B.C.E

classical Term applied to the culture that flourished between 480 and 323 B.C.E. in Greece

colonization The establishment of settlements in areas outside a group's home territory

doctrine A set of principles presented for acceptance or belief, such as by a religious, political, or philosophical group

genetics The study of the biology of heredity, the qualities passed from one organism to another through reproduction

glyphs Symbolic figures that hold a specific meaning, often incised or engraved into a surface

Hellenistic Describing Greek culture from the time of Alexander III, the Great (356–323 B.C.E.), to approximately the first century B.C.E., when the Greek language and ideas were carried to the non-Greek world

hierarchical Describing an organization, especially of persons, that ranks people by authority or importance

hieroglyphic Picture or symbol representing a word, syllable, or sound used by the ancient Egyptians and others

Ice Age An extended period of extremely low temperatures; there have been many ice ages in the history of the earth

inscription Writing carved or engraved on a surface such as a coin, tablet, or stone monument

Iron Age The period in European history, following the Bronze Age, marked by the introduction of ironworking technology; ironworking techniques reached eastern Europe ca. C.E. 1000 but came into regular use in central Europe from about 750 to 100 B.C.E.

linguist A person who studies human speech, especially a particular language or means of communication

logograms Pictograms standing for whole words, part of the syllabary system of writing

material culture Term used by archeologists to refer to the items used by a particular group of people, including tools, weaponry, jewelry, houses, and burial practices

megalith A large structure made of stone; used particularly to describe enormous circles, tombs, and other stone constructions of Bronze Age Europe

Mesolithic Period Era also known as the Middle Stone Age, characterized by the adoption of the bow and flint tools and ending with the introduction of agriculture; lasted aroughly from 10,000 to 6,000 B.C.E. for most of Europe

monarchy Form of government in which a state is headed by a single hereditary ruler

Neolithic Period Also known as the New Stone Age, an interval in human culture starting with the invention of agriculture and ending with the introduction of the first metal implements and weapons; began around 6,000 B.C.E in southern Europe and around 4,500 B.C.E. in central Europe

Neolithic Revolution Period between 8,000 to 6000 B.C.E. during which the transition from hunting and gathering to agriculture occurred in the Near and Southwest Asia; by 4000 B.C.E., the Neeolithic Revolution had spread through most of Europe

oracle A shrine, or religious figure serving at that shrine, consulted for religious purposes, particularly giving advice or foretelling the future

Paleolithic Period Also called the "Old Stone" Age, from the Greek, the period in human development from about 450,000 to 10,000 B.C.E., beginning with the use of the earliest stone tools and ending with the adoption of the bow and flint tools; historians further classify the era as the Lower Paleolithic Period (about 450,000 to 100,000 B.C.E.), Middle Paleolithic Period (100,000 to 40,000 B.C.E.), and Upper Paleolithic Period (40,000 to 10,000 B.C.E.)

pantheon All the gods of a people, or a temple dedicated to all the gods of a people

patriarchal A type of society ruled of male leaders, where men typically possess sole religious, political, and domestic authority

petroglyph (see also: **glyphs**) A symbolic figure engraved on a stone surface

pictogram A picture standing for whole words, part of the syllabary system of writing

pictograph A pictorial representation of a word or idea

primitive Pertaining to an earlier, simpler state; may particularly refer to early stages in the development of human culture before the development of writing

relief A type of sculpture where raised figures project from a flat surface, giving the appearance of dimension

republic Political system in which the head of state is not a monarch and in which the supreme power lies in a body of citizens who are entitled to vote for representatives responsible to them

rhetoric The art of oratory and the persuasive use of language

ritual An act or procedure following a set order or form; often contains a ceremonial or religious importance

Stone Age see: **Paleolithic Period**; **Mesolithic Period**; **Neolithic Period**

subjugation Condition in which one person or group is made subservient or obedient to another person or group

syllabary A writing system consisting of symbols representing vowels and consonants, as well as logograms or pictograms that stand for whole words

textiles Items made of cloth or fabric, or the fibers used to weave a fabric

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Note: bold entries indicate glossary term; *t* indicates timeline; *m* indicates map; *p* indicates photo.

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