CHAPTER V

Classical Civilization

The term *classical* is used here to typify the climax in the development of ancient civilizations. It is not assumed that civilization then reached a state of perfection that has not been equaled, or that since then there has been a general retrogression. The aim is merely to emphasize the culmination of the accomplishments of early peoples. Following the classical period, there was an evident decline in culture, brought about by internal disintegration and by the invasions of foreign peoples. This decline was temporary in most cases. Although the period of assimilation of these various peoples appeared to be disastrous, the new elements actually added an impetus that made further intellectual advance possible.

I. THE LAND AND THE PEOPLE OF EARLY EUROPE

1. GEOGRAPHICAL BASIS OF EUROPEAN CULTURES

Approaches to Central Europe. Southern Europe is dominated by three peninsulas that reach into the Mediterranean Sea. They afforded a means of contact with the main continent, and also provided desirable places upon which man could live. In spite of the numerous approaches, the central and northwestern parts of Europe were difficult to reach. The Alpine mountain system presented a formidable barrier to access from the south. The Black Sea and the Carpathian Mountains made difficult the approach to central Europe from the east. However, the Danube River penetrates these highlands, giving entry into the central part of Europe. By crossing low divides, the traveler could make his way from the source of the Danube to the headwaters of the Elbe, Main, and

Rhine rivers, thus covering the territory from the Black Sea to the North Sea. Other approaches to central Europe were up the Rhone River, which led beyond the main barrier of the Alps, and by way of the Po River and through the Brenner Pass.

Geographical Divisions of Europe. There are three main natural divisions of Europe, formed by climate, mountains, plains, and rivers. They are the Mediterranean lands, including Greece, Italy, Spain, and southern France; the Atlantic region, including the British Isles, France, and Germany; and eastern Europe, north of the Danube River. The main areas in the first group have a subtropical climate and a great variety of soil. Inhabitants of these places, isolated from their neighbors, were dependent on the sea for opportunities of travel and trade. In the second section, which possessed a temperate climate, plains and low mountainous areas were the dominating topographical features. In early times, most of the region was covered with heavy forests, which served as a barrier to the colonizer. Eastern Europe had hot summers and very cold winters. In the northern glaciated areas, there were heavy forests of evergreen trees. South of the forest lands were the "black-earth" areas, with a broad expanse of grasslands extending to the shores of the Black Sea.

Mineral Resources. Early man was attracted by the natural resources that Europe could furnish. Amber, valued for decorations and magical properties, was found near the Baltic Sea. Gold was discovered in Transylvania and in Ireland. Copper was mined in Slovakia and in Spain. Tin was discovered in Britian and in Bohemia. These materials had been procured by civilization centers in the Near East long before Europe was invaded by peoples coming from the east.

2. EARLY PEOPLES OF EUROPE

Early Culture Centers. Most of the peoples and cultures of Europe, within the range of history, were Asiatic in their origin. However, there was a long period of blending, and this produced in cultural characteristics an individuality that can be called correctly European. The spread of metalworking helped to stabilize society and produced the general elements of a peasant village life. Settlers crossed from Asia Minor to Greece and moved up the Danube River, where settlements were made to the south of the

modern city of Belgrade. From here, a similar culture spread northwest through Bohemia, Thuringia, the Rhineland, and northern France. This produced a fully developed Copper Age in Europe about 2500 B.C.

About this time, the Indo-European peoples were entering Iran and Mesopotamia and found their way into Europe. These intruders crossed southern Russia into central Europe as conquerors. They made settlements in Poland, in Silesia, in Bohemia, in Bavaria, and in Scandinavia. One group, the Achaeans, entered northern Greece about 2000 B.C. They were a nomadic people, but they introduced the wagon, the plow, cattle, sheep, the dog, and the horse. They spoke an Indo-European language, and have been called the first Greeks. At the same time, another metal-using people spread northward from Portugal, going as far as Britain and Scandinavia. This group constructed huge monuments, such as Stonehenge in England. Primarily they were farmers, but they carried on some trade with neighboring people.

The Celts. The Celts were apparently the result of a fusion of diverse peoples who, about 1200 B.C., became powerful in southwestern Germany, in the upper Rhine Valley, and in eastern France. They were pioneer iron-workers, specializing in the making of knives, spears, and swords. A warlike people, they were ruled by a chief, whose authority and tenure of office depended on his ability as a warrior. Living in fortified villages, they carried on incessant warfare. About 500 B.C., the Celts invaded and settled Gaul. Here they came into contact with Greek traders, exchanging many commodities with them. The Celts had an elaborate religion, in which they were led by men belonging to an order called the Druids. These leaders, who were philosophers as well as priests, kept records, performed sacrifices—sometimes human sacrifice, made predictions, and carried on many of the functions of government.

The Germans. About 1500 B.C., another pastoral Indo-European people, called the Germans, became established on the Northern German plain. By 800 B.C., they had pushed southward to the Rhine River. A long war with the Celts ensued, in which the latter were driven from central Germany. The Germans were divided into three main groups: the Cimbri in western Germany, the Goths in northern Germany, and the Teutons in the Oder

Valley. These people were all warlike, living in temporary villages and practicing very few crafts.

About the time of the beginning of the Greek cultural tradition, the European peoples were in a great turmoil. Overpopulation existed in many places and warfare dominated the efforts of most of the peoples. A number of villages had grown up, but trade had not developed to the point of creating towns. Finally, inhabitants of the northern areas became strong enough to conquer southwestern Europe.

II. GREEK CIVILIZATION

1. THE LAND AND THE PEOPLE

The Land. Greece, or Hellas, as the early Greeks called it, is a peninsula of about 25,000 square miles, extending from the mainland of Europe into the Mediterranean Sea. The Pindus Mountains form the backbone of the peninsula, extending southward almost to the Gulf of Corinth. The extreme southern section is a plateau, reaching an elevation of 2,000 feet in some places. The Aegean Sea, which separates Greece from Asia Minor, is dotted with numerous islands, so close together that there are few places where land is not visible. The sea penetrates the coast line of Greece in many places, forming excellent ports. This makes Greece an ideal place for the navigation of small ships. In the morning, a north wind is ready to push the sailboats toward Asia Minor and in the evening an accommodating south wind brings them home.

As their soil was unsuitable for agriculture, and as they were blessed with all the natural facilities for navigation, the Greeks were strongly induced, if not actually forced, to become sailors. The numerous indentations of the land by the sea and the many mountain ridges also influenced the political organizations. The people were divided into small units, segregated from their neighbors; the city-state became the typical form of government. There was an excellent supply of good stone that could be used for building purposes and for sculpture. Without that supply, the Greeks would have been denied one of their greatest accomplishments. Mount Pentelicus, to the north of Athens, is a mountain of pure white marble, and near by is a fine clay deposit suitable for making pottery.

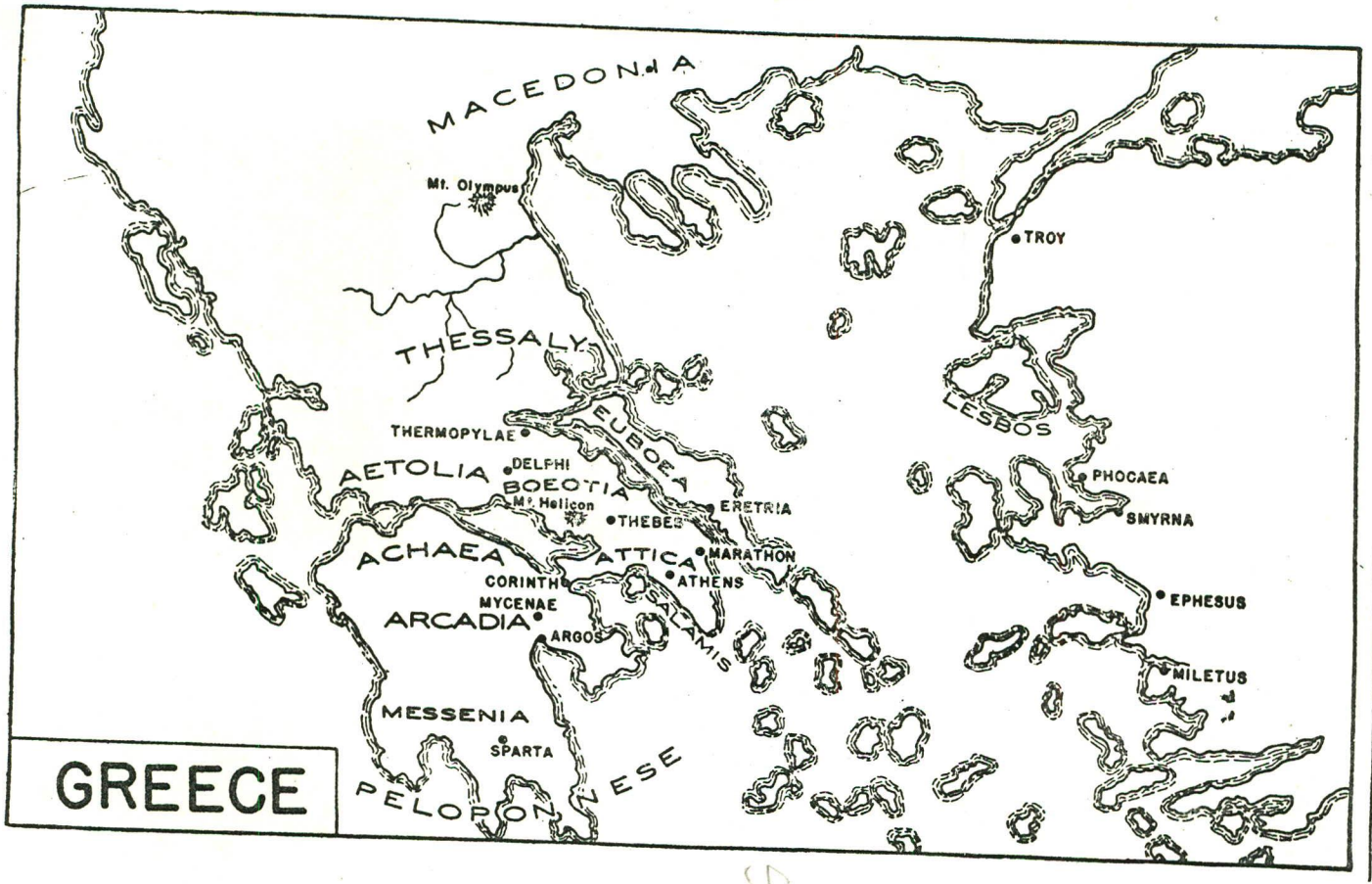
The Climate. The climate of Greece is very desirable. The temperature is mild, but not monotonous. Within a few miles, there is a great variation in temperature that is due to differences in altitude. Euripides sang praise of the climate. "Balmy and clement is our atmosphere. The cold of winter has no extremes for us, and the shafts of the sun do not wound." The Greek could live on a handful of olives and a few sardines a day, and he did not need heavy clothing. Sandals, a tunic, and a mantle were sufficient. He had plenty of time to ponder on the higher things in life.

The People. It now seems likely that the Greeks, as we know them, did not invade the Aegean basin, but rather that they were the outcome of a general fusion of many peoples, including several Indo-European tribes. Their culture was a mixture of influences from Crete, Asia Minor, and other sources. The Dorians, kinfolk of the Achaeans, invaded Greece and mixed with the people there to form the Ionian Greeks, the chief creators of Hellenic culture. There followed a long period of chaos and confusion, sometimes called the "Greek Dark Ages." Minoan culture was destroyed, Troy was conquered, and the Dorians subdued the Achaeans. By the beginning of the 8th century B.C., there were three divisions of the Greeks—the Dorians, the Aeolians, and the Ionians. Sparta, Corinth, Aegos, Athens, Thebes, Ephesus, and Miletus had become flourishing cities and centers of Greek culture.

2. GOVERNMENT

Prehistoric Greeks. The Greeks recorded little of their history during their migrations, but they filled in the many gaps with legends and mythology. These stories, rich in imagination, primarily were accounts of leaders who were depicted as demigods. The Greeks believed they were descendants of a god, thus they had a bond of unity and a common basis of association. The Athenians contended that their first king was half man and half serpent. The Thebans insisted that their ancestors grew from dragon's teeth sown by a wanderer from Phoenicia. Every city and every group had a story explaining its traditional origin, as well as a patron god or goddess.

One of the best known of all these stories is that of the Trojan War, which began when Paris, a Trojan prince, abducted Helen, the wife of the King of Sparta. The kings of Greece formed a


MACEDONIA
Mt. Olympus
TROY
THESSALY
EUBOEA
LESBOS
THERMOPYLAE
DELPHI
AETOLIA
BOEOTIA
Mt. Helicon
THEBES
ERETRIA
PHOCAEA
SMYRNA
ACHAEA
ATTICA
MARATHON
CORINTH
ATHENS
EPHESUS
MYCENAE
ARCADIA
ARGOS
SALAMIS
MILETUS
MESSENIA
SPARTA
PELOPONNESE
GREECE

league and laid siege to the city of Troy. The Greeks, through the trick of using an immense wooden horse, succeeded in entering the walls of the city. They burned Troy and led the women away as slaves Some of these details have been substantiated by the archaeologist Schliemann through excavations at Troy, but much of the legend sprang from the imaginative minds of the Greeks. The *Iliad* and the *Odyssey*, two of the most admired works in Greek literature, tell of the exploits of Achilles before Troy and the adventures of Ulysses after the city had been captured. The author, Homer, does not mention the Greeks by that name, but refers to them under the titles of their tribes. He mentions their agriculture; he refers to the strong cities that they built, to their council of old men, and to the assembly of the people.

From the evidence available, the migrations were well under way by 1400 B.C. It is difficult to give any exact dates, but the older Greek civilization was approximately contemporaneous with that of Judah. Homer, if there actually was such a character, lived about the time of Amos, while the Greek poet Aeschylus lived at about the same time as Zoroaster. The Greeks have no authentic documents of a date earlier than about 700 B.C. The Spartan ephors go back to 757 B.C. and the Athenian archons to 682 B.C. The date of the first Olympiad, 776 B.C., is popularly given as the beginning date of Greek history.

Settlements and Political Organizations. The Achaeans were among the earliest Greek tribes to enter the Peloponnesus. They were followed by the Dorians, who pushed southward and conquered Knossos, on the island of Crete. The Greeks accepted the culture of the Aegeans and acquired iron from the Hittites; they were schooled in trade by the Phoenicians, but they developed their own individual system of political administration. For a time, they retained their council of old men and the assembly, which was made up of men capable of bearing arms. The city-states were essentially sovereign powers, each with its patriotic citizen body, an army, and patron gods. Many of the city-states had kings, whose power gradually gave way before a group of nobles. Rivalry developed among the nobles and there was constant struggle for supremacy.

Age of Tyrants, 600–500 B.C. Under these conditions, usurpers, whom the Greeks called tyrants, came into power. Not all tyrants were cruel and oppressive rulers, as the term might suggest now.

Many of them—Periander of Corinth and Pisistratus of Athens, for example—were good rulers, interested in the welfare of the people. Tyrants generally posed as defenders of the people's rights against the aggressions of officialdom. Draco gave the Athenians their first written law in 621 B.C. It was a severe code, but an improvement over the old, unwritten laws. Solon, elected archon in Athens in 594 B.C., was also a great legal reformer. All citizens were given the right of trial before a jury of citizens, selected by lot. Solon wrote a constitution that gave to all a voice in the political control of the state government. He was not a typical tyrant, for he voluntarily gave up his office and went into exile, in order to allow his constitution a fair chance to prove its worth. Solon's constitution, however, did not prevent the rise of another tyrant to power. Pisistratus (540–528 B.C.) gained the support of the army and seized control of the government. He proved to be an efficient ruler. He built a fleet and seized the Dardanelles; he constructed beautiful buildings in Athens, and encouraged commerce.

Cleisthenes, another famous tyrant in Athens, came to power in 508 B.C. He instituted some fundamental changes in the Athenian constitution. He did away with voting on the basis of kinship and clan solidarity, substituting a geographic division that equalized the population and eliminated the chronic interclan struggles. Cleisthenes instituted a custom called *ostracism*, whereby the voters wrote the name of a man whom they considered dangerous to the state, and the individual against whom a plurality of votes was cast was sent into exile for 10 years. The prolonged struggle for power in the Age of Tyrants, in which almost everyone took an active part, gave expression to a vigorous life, which was reflected not only in statesmanship but also in sculpture, literature, and religion.

The City-state (Polis). The city-state was the outstanding political achievement of the classical Greeks. The *polis* originated as a fortified site, but later was interpreted as a sovereign state including the fort, the city, and the surrounding countryside. Topographical features of the country and the tribal characteristics of the people were important factors in the development of the city-state. The people settled in the fertile valleys and built their homes about strongholds for protection. The jurisdiction of the *polis* was extended to include all the people (with their lands) to

whom protection was offered. Each city-state had its own government, its own deity, its own religious ceremonies, and its own individuality. Many of them had representative governments, a form of council, and a public meeting place. Where the government was oligarchical, the council was made up of the aristocracy, who held office for life; where it was democratic, the council was elective.

The Repulse of Persia. Decentralization was the most characteristic development in the Greek political system before 500 B.C. An attempt at unity and cooperation came as a result of the Persian invasion, that made the Greeks forget their individualism and unite against a common enemy. Miltiades organized an army and by skillful management defeated the Persians at the battle of Marathon (490 B.C.), one of the famous battles in history. Themistocles repulsed a second invasion at Salamis in 480 B.C. Fortunately for Greece, Persia was well on the road to decline and the land was saved from an invasion. The defeat of Persia had an invigorating effect on the Greeks. They had overcome the greatest military power in the world, which made them feel superior to any barbarian. It marked the beginning of a period of great activity among the Greek city-states, especially Athens.

Sparta versus Athens. The struggle with Persia united the Greeks; but as soon as the common enemy was destroyed, friction developed among the city-states. The struggle between the various city-states for supremacy in Greece was more devastating than the Persian war had been. The conflict between Athens and Sparta was not only a contest for the supremacy of Greece, but also a struggle between two ideals of culture: the one supporting the traditional and the rights of a privileged few, championed by Sparta; the other advocating progress and the rights of the people, championed by Athens.

Sparta. Sparta was essentially a militaristic state. The able-bodied citizens were all soldiers and devoted their time to military training. The state furnished the meals; slaves cultivated the land and did all the manual labor. A citizen was one who fought and, if need be, died for his state. Military drill and exercise were all that a self-respecting citizen needed to do. The government was in the hands of a few retired soldiers, and their domination over the people was complete. The Council of Old Men (*Gerousia*) was made up of two kings and 28 elders. Five "overseers" or *ephors* per-

formed most of the administrative duties with almost unlimited power. They were the guardians of the state and the citizen body.

There was little family life in Sparta. The male spent his time fighting or living in a military camp. A boy was permitted to live with his mother until he was seven years of age, after which he served 12 years in military training. At nineteen he became a part of the army. The Spartan mother instructed her son: "Come back with your shield or on it." The mothers whose sons survived after defeat in battle went into mourning, while those whose sons had been killed wore garlands. The ideals of the Spartans were based upon militarism, and they lacked the imagination and initiative of the Athenians.

Sparta had few industries. As a result, she did not have a powerful commercial class such as that which was so influential in Athens. A Spartan citizen was prohibited from participation in trade and even from using gold and silver. Everyone not a soldier was a slave of the state. Sparta was admired for her efficiency and military discipline, but her cultural contributions, compared with those of Athens, were insignificant.

The Athenian State. The pride and public spirit of Athens were augmented by the defeat of Persia. The Athenians visualized a great future for their city-state and felt the urge to dominate the civilized world. Athens became the center of a defensive league composed of the surrounding city-states north of the Gulf of Corinth. This Delian League became for a brief time (478–477 B.C.) master of the Aegean region. Athens did not develop a strong central government, and internal struggles persisted. The Council of Elders was deprived of political power but was allowed to continue to try murder cases and settle questions of state religion. A more popular Council of Five Hundred took charge of the political administration of the state. The right to hold office was extended to all citizens except laborers without property. The officers, with the exception of military commanders, were chosen by lot. The military commander was elected. With the support of the army he became the most important official in the state.

Pericles, one of the greatest of the Greek leaders and foremost among patrons of art, came into power in this way (460 B.C.). Under Pericles, Athens reached the peak of her success. The government was efficient and reflected many of the most outstanding of Greek

political ideals. The citizen body was the government; the administrative, the legislative, and the judicial functions were in its hands. The popular assembly, the citizens as a group, chose and removed the administrative officials and controlled the judiciary. Judges and lawyers, as we know them, did not exist. Cases were decided by the citizen jury, frequently composed of as many as 500 citizens, who voted by secret ballot. Not all the inhabitants of Athens were citizens. Consequently, Athens was not a democracy in the modern sense of the term.

Economic and Social Conditions in Athens. The Greeks, following in the footsteps of the Phoenicians, became colonizers and traders. Colonies were established along the Black Sea, in southern Asia Minor, and in southern Italy and Sicily. Corinth first developed an extensive trade, but she was soon superseded by Athens. Athenian ships carried cattle and slaves from the Danube in exchange for pottery and wine. From Egypt and Mesopotamia, tradesmen brought carpets, rugs, precious stones, silk, frankincense, and spices. The western Mediterranean furnished grain, dairy products, wood, silver, and gold, in exchange for wine, pottery, silver ornaments, and various manufactured goods.

The average Greek was a rather primitive farmer, able to exist only by means of intensive effort. The subtropical climate made cropping throughout the year possible. Wheat and barley were the principal grains and peas and lentils were the main vegetables grown. Olives, grapes, and figs held a prominent place on the menu. Farming on a more extensive scale was used for cattle raising and for olive orchards, fig growing, and vineyards.

The surplus population from Greece went to the colonies, but the Greeks later absorbed more people through the development of manufacturing at home. Military and political, rather than commercial, motives led to Greek colonization. The manufactured products were traded for foodstuffs and raw materials. Tradesmen originated a system of coinage based on that used by the Babylonians. In Athens, the merchant class became very powerful in the political and social orders. While the Athenians did not abhor manual labor, most of the work was done by the slaves. The population of Attica in its most prosperous period was around 500,000. Of this number, about 150,000 were slaves and there were only about 90,000 citizens. The lot of the slaves was not bad—no worse,

perhaps, than that of some laborers in modern society. Often they were skilled craftsmen, working alongside freemen and enjoying many of the same privileges.

Social Developments. The Greeks did not have the degree of social equality that is sometimes attributed to them. The social ideals of the Greek philosophers give the impression that their theories were actualities, but any organization in which less than 40 per cent of the inhabitants are free cannot be called typical of social equality. In Athens, the most democratic of the city-states, there was constant struggle between the oppressors and the oppressed. Draco's code (621 B.C.) sought the security and the protection of privileges through written law. Solon (*ca.* 600 B.C.) endeavored to apply the new popular ideals of humanity. Debtor laws were repealed and freemen were liberated from the menace of peonage. Solon abolished birth privileges but regulated political rights according to wealth. He provided that the members of the Council be chosen by lot, and there was established a final court of appeal made up of 600 people; but these principles were not carried out, because Solon was forced by his political enemies to leave the country.

Cleisthenes (509 B.C.) tried to break the power of the nobility in the assembly, but even here a demagogue assumed almost dictatorial power. Under Pericles, Athens made great progress, but social equality suffered a considerable loss. When the lower class did gain ascendency over the upper, corruption and inefficiency were even worse than before. What semblance of social equality existed in Athens was never extended to her allies. Men dominated Athenian society. Wives did not join husbands in entertainment. They even lived in separate quarters. Pericles described the ideal woman as one about whom the least, either good or bad, could be said.

War between Athens and Sparta. An impending struggle between Athens and Sparta has been mentioned. Trade and prosperity followed the Persian war, and jealousy between the two city-states grew in proportion to their success. In Athens, Pericles won the favor of many of the citizens by flaunting hostility toward Sparta. Both sides prepared for the contest with feverish haste. The first Peloponnesian war (459–446 B.C.) ended with the complete exhaustion of both sides, but the peace that followed was only a breathing spell. The second Peloponnesian war (431

B.C.) started with Athens fighting alone against Sparta; she had lost her allies. Further harassed by a plague, she was forced to sue for peace. The government was bankrupt, prices had risen, selfish men without any real qualifications were in charge of the government, and the army had deteriorated. A reckless Athenian by the name of Alcibiades succeeded in stirring up the war spirit again; but in the third Peloponnesian war, he deserted and went over to Sparta. The Persians joined Sparta and defeated the Athenian fleet at the battle of Aegospotami (405 B.C.). Athens surrendered the following year.

Decline of the Greek City-state. The supremacy of Sparta was short-lived, as she was in no way fitted to rule Greece. Military commanders were put in charge of the various cities, and a most tyrannical administration followed. The Spartans, encouraged by their military success in Greece and by Xenophon's[1] remarkable feat in Persia, set out to conquer Asia Minor. While the Spartan army was away, Thebes, Athens, Corinth, and Argos united against her. A disastrous war followed. Persia interfered, but the strife resolved itself primarily into a war between Sparta and Thebes for the mastery of Greece. Thebes finally won in the battle of Leuctra (371 B.C.), and became master over the other city-states. The glory of Thebes was due largely to the skill of Epaminondas, and when he died (362 B.C.), the city rapidly lost its prestige. When the Greek city-states had thus vanquished one another, their helpless situation set the stage for an invasion.

Invasion by the Macedonians under Philip. The Macedonians, the new invaders of Greece, belonged to the same racial classification as the Greeks. Some time before the conquest, they settled in Macedonia. They were not so far advanced culturally as the Greeks, and the influence of the latter can be detected, even before the invasion. Philip (359–336 B.C.), an able and energetic ruler, was diplomat as well as soldier. He made agreements with various Greek city-states and conquered those that refused to yield to his diplomacy. Athens held out against him. Demosthenes plied all his oratorical eloquence to win allies, but eloquence was no match for Philip's military tactics. The "Eternal Hellenic Confederacy," with

[1] Xenophon was an Athenian who accompanied an army into Persia (400 B.C.) as far as the Tigris River. In the *Anabasis*, he described the expedition and showed how easy it would be to conquer Persia.

Philip as protector, was formed in 337 B.C. He promised peace at home and a campaign against Persia. Unluckily, he had just begun his planned career when his life was ended by an assassin.

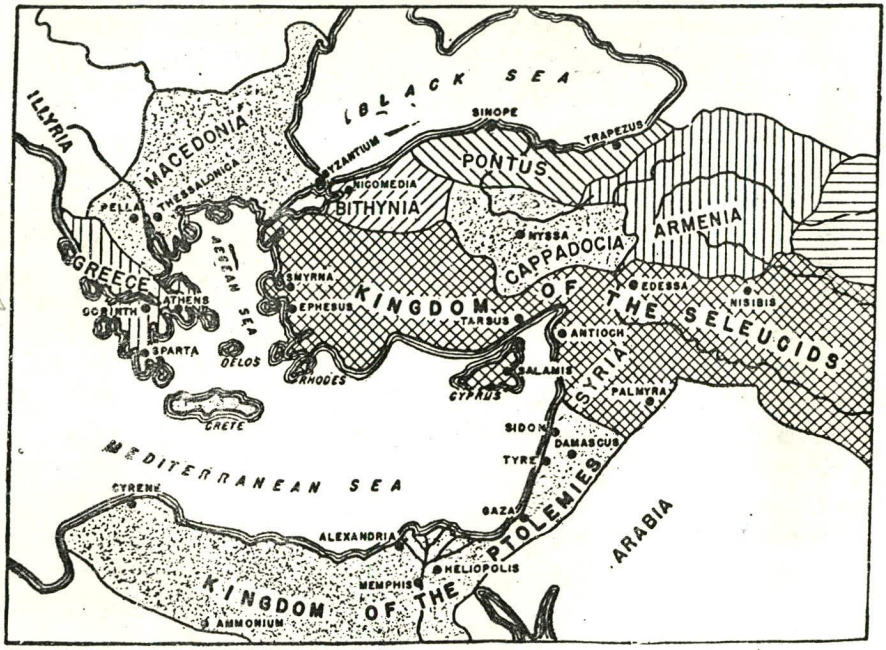
Alexander the Great. Philip was succeeded by his son, Alexander the Great, one of the most remarkable men of antiquity, a Napoleon of the 3d century B.C. Aristotle taught him to love Greek culture, a lesson that the young general never forgot or failed to apply wherever possible. When he was a mere boy, he assumed command of the army and faced the many complications that followed his father's death. He was very self-centered and ambitious and believed that he could conquer the world. As is the case with such persons, he gave less attention to organization than to conquest and matters affecting his personal prestige. He subjugated the rival factions in Greece; but without spending much time in completing an organization, he turned to the glamorous Orient for the satisfaction of his desires. With skill and industry which, centuries later, won the admiration and envy of Napoleon, he marched his army into the heart of the Persian Empire.

Alexander hoped to form a great empire in the Orient. The Iranians, he believed, would make good fighters and they seemed willing to follow his leadership. He sought to combine the military qualities of the Iranians with the cultural attainments of the Greeks. After having led his victorious army to the Indus River, and after having conquered the whole of the civilized world known to him, he died in 323 B.C.

Estimate of Alexander. Alexander's career was short, decisive, and brilliant. If he had done nothing more than lead a victorious army, his name would be merely mentioned. But such is not the case. Though he was egotistical and destructive and his real contributions to civilization were incidental in his own mind, nevertheless he aided in the admirable task of spreading Hellenic civilization and adding to it. Largely as a result of his conquests, there arose a new era of culture—that of the Hellenistic Age—not purely Greek, but combining all the cultures in the Near East. A clear distinction can be made between the art, the literature, the science, and the philosophy of Hellenic time and those of the Hellenistic period. Alexander did not live long enough to complete the organization of his empire and it is doubtful if he ever could have succeeded. He posed as a god and gloried in an Oriental splendor

that would not have been accepted in the West; but he was one of the greatest generals that the world has produced.

The Successors of Alexander. When Alexander died, he left no legal successor; his son was not yet born. His generals divided the empire into three main divisions: Thrace went to Lysimachus; Babylonia, to Seleucus; and Egypt, to Ptolemy. Struggles continued between Macedonia and Egypt for the control of the League



Eastern Mediterranean Lands *ca.* 280 B.C. (*Courtesy, R. E. Turner, The Great Cultural Traditions.*)

of the Aegean Islands. Internal dissensions were frequent and, to add to the difficulties, Asia Minor was overrun by an invasion of Celts. However, cultural progress continued for, in some respects, Hellenistic civilization exceeded the Hellenic. Pergamum, in Asia Minor, became a great art center; and Egypt under the Ptolemies attained a new glory, reminiscent of that of the ancient Pharaohs.

Social and Economic Aspects of Hellenistic Civilization. The conquests of Alexander, including most of the then civilized western world, stimulated far-reaching economic and social changes. A world market was formed, which reached from western Africa to

central Asia and India. Alexandria in Egypt, Antioch in Syria, and Rhodes became great entrepôts of world trade. Goods arrived in Antioch from India, central Asia, and Iran, while Rhodes served as a distribution point for Mediterranean ports. Roads were built and harbors were improved. Vast quantities of precious metal obtained from conquered lands increased the circulation of money, which had been very limited before the time of Alexander the Great. Alexandria was the center of much industrial activity. Glass, textiles, perfumes, and metals were produced and sent to foreign markets in quantities far in excess of any previous efforts along this line. In keeping with commercial activities, agriculture improved. Large olive and grape plantations appeared in Egypt. Horses were used extensively both for pleasure and for farming. There was a great display of luxury by people in the upper social level, where elaborate homes, gaudy uniforms, and costly festivals were conspicuous. At the other end of the social scale, there was suffering and privation. Over the head of every worker hung the menace of debt and enslavement, as creditors had the right to claim possession of debtors. Forced labor was everywhere on the increase. In many places, especially in Greece, revolutions constantly threatened, until ultimately they undermined the old order and brought an end to this golden age.

Greek Politics in Practice. A survey of the Greek political system does not convince the student that it was successful. For short periods, and within a limited scope, some success was manifested, but these breathing spells were followed invariably by chaos. There was a persistency in the conflict between people of the city and people of the country. Citizens became indifferent to the welfare of the state, because they were interested more in their private affairs. Dēmosthenes, in the hour of crisis in Athenian government, lamented such indifference of the people to political affairs. Politics, in practice, never reached the lofty idealism advanced by Plato and Aristotle. Selfish politicians exploited all classes for the promotion of their own interests. The state was regarded as providing the citizen a means of supplying his economic needs, and the maintenance of economic independence on the part of the citizen was considered to be evidence of democracy. Liberty meant membership in a group of free men, not the enforcement of a bill of rights.

Mention should be made of the partial success of the Greek attempt at federal organization in the various leagues. Some of these were organized for defense against foreign invaders; others were religious in their motive; and one of the most notable was the council for the control of the Olympian games. The organization of the Delphic Amphictyonic League was similar to the League of Nations in our own time. In addition to carrying out religious duties, the Delphic Amphictyony aimed at the adjustment of disputes between the city-states, the promotion of international comity, and the regulation of principles of interstate relations.

Greek Political Theory: Plato. It should not be forgotten, however, that the Greeks contributed the first inspiration for civil relations. The word *politics* comes from the Greek word *polis*. Plato and Aristotle, who were the chief exponents of Greek political theory, considered the problem of government from the point of view of the city-state. Their imaginations did not conceive a large political state; and it may be that they would not have recommended democracy for a large organization.

As Plato used the term *politics*, it was more inclusive than it is in the modern usage; it included a search for the fundamental principles of human conduct, not a treatise on political philosophy, but one on moral philosophy. This is characteristic of the Greek way of thinking. To the Greeks the state and political system was all-inclusive—"not an organization but an organism," the life of the state being the life of the men who comprised it. Plato contended that the art of justice necessitated the perfection of the common life. It depended upon the knowledge of the best and the worst in human nature.

He did not subscribe to the idea that all men are created equal. According to him, only those who are inferior desire equality: "horses and asses have a way of marching along with all the rights and dignities of freemen." He recognized the fact that not all men could be governed alike: "governments must vary as the dispositions of men vary and there must be as many of the one as there are of the other." Plato recognized the shortcomings of democracy and some of his criticisms can be taken as warnings of present-day conditions. Democracy, he pointed out, comes as a reaction against oligarchy, under which insolence is termed as breeding, anarchy as liberty, waste as magnificence, and impudence as courage. "All

things are just ready to burst with liberty. They chafe impatiently at the least touch of authority, and at length . . . they cease to care even for laws, written or unwritten; they will have no one over them . . . Such, my friend, . . . is the fair and glorious beginning out of which springs tyranny."

He saw the impermanence of political institutions, and showed how revolutions are the natural finality to any form of government. Each tends to perish by excess of its cherished fundamental principles. Aristocracy is destroyed by excessive limitations of the circle that has the power; oligarchy ruins itself by forgetting everything else in the wild scramble for wealth; and democracy meets with formidable obstacles, in that people are not educated to select the best rulers. The crowd is too subject to flattery and falls victim to unscrupulous rulers. Tyranny or autocracy is a natural outcome. The philosopher Socrates, Plato's teacher, was put to death in democratic Athens.

Greek Political Theory: Aristotle. Aristotle's political views differed quite materially from those of Plato, his teacher. He was more conservative and aristocratic. In the teacher of Alexander the Great, the greatest of conquerors, this would be expected. He looked down on a manual laborer as a man with a mind fit for a slave. Labor, in his estimation, dulled and deteriorated the mind and left no time for political intelligence. Only persons of leisure should have a voice in the government. "The best form of a state will not admit mechanics to citizenship." Citizenship was a definite function, the intelligence for actual participation in community interests. Not everyone had the intelligence for this. "From the hour of birth some are marked out for subjection, others for rule." Aristotle's idea of a state had very little conception of geographical limitations or identity of inhabitants. He described the life of a state as a community intended to give the greatest good to the group, a tendency "no less natural than reproduction, no less spontaneous than self-preservation."

Aristotle, like Plato, had in mind no type of government that he believed suited to all types of people. He classified governments into six groups: monarchy, aristocracy, polity (rule of the middle class), tyranny, oligarchy, and democracy. He believed monarchy to be the best if the right kind of ruler could be found; aristocracy was good if the most capable and disinterested could be given

power; middle-class rule was one of the better types; but he had little use for tyranny, oligarchy, or democracy. The goal of a government should be to promote virtue and happiness, and these could be best attained by observing the mean between the extremes.

3. ART

Greek art was built upon the firm foundation of the accomplishments of the Egyptians and the Aegeans. The Greeks had a particular knack of taking something in the rough, shaping it, putting on finishing touches, and turning out a masterpiece. Art to them was a representation of nature in which they strove for the expression of beauty. The development of the various forms of Greek art may be traced through three rather distinct periods: the Archaic, the Hellenic, and the Hellenistic. The Archaic was the formative period in Greek art, the gradual emergence from barbarism and the infusion of ideas from other people. The Hellenic period was the culmination of the Greek ideal. The Hellenistic age, ushered in by Alexander's conquests, represented a more inclusive type, a mixture of Greek culture with that of the other peoples in the Near East.

a. Music

The artistic temperament of the Greeks and the pride that they took in their various forms of expression made music a natural and logical development. Primitive peoples produced music mainly for utilitarian purposes, to be used in connection with magical ceremonies. The Greeks developed it for its beauty, for its aesthetic qualities.

Early Greek Music. Homer composed and recited verses in hexameters. Hesiod (*ca.* 700 B.C.) used the epic hexameter with a fixed measure of long and short syllables. Terpander (*ca.* 676 B.C.) sang Homeric epic verses to the accompaniment of the cithara and originated the idea of professional minstrels. Greek music was essentially vocal down to the 4th century B.C. Theory and instrumental coordination followed incidentally. The invention of new meters by the lyric poets permitted the development of rhythm and measure. New style of marching songs and chants for marriages and funerals were introduced. The flute was utilized

to build up emotion instead of being used to mark time. The cithara was enlarged from four or six strings to seven strings. This instrument and the aulos (flute), used by Greek composers, were utilized for descriptive music. Apollo's new-year celebration was presented solely with instrumental music.

Pythagoras (570–500 B.C.) succeeded in developing musical sound scientifically. Aeschylus's tragedies made possible the blending of music and dialogue. In 483 B.C., the first great *solo aria* was presented on the stage; and something that came close to being an opera in the modern sense of the word—*The Trojan Women*—was presented in 415 B.C. Plato attempted to establish a doctrine of ethics, the moral and immoral character of modes. The Dorian mode he characterized as serious, solemn, and sublime; the Phrygian, as inspiring and purifying; and the Lydian, as weakening and destructive.

Later Greek Music. Music in the Hellenistic period was accepted as an essential part of culture. Musical production became more professional and lost a great deal of the inspiration that was characteristic of the earlier periods. In technique, it advanced little beyond that of the time of Euripides.

b. Architecture

General Character. The civic pride of the Greeks is reflected in their architecture. Temples for the gods of the city-states were magnificent edifices, while the dwellings of the people lacked beauty and even comfort. Smoke from the kitchen fire filled the rooms and there were no panes for the windows and no plumbing. The temples were magnificent structures, having every known improvement and constructed with utter disregard for either effort or expense. In fact, the Greeks spent very little time in their homes. They much preferred to stay on the Acropolis or in the theater. The Greek temple, unlike the Egyptian and the Babylonian, was not considered as a home for the gods. The Greeks believed that their gods existed in human form and needed a place in which to live, but that was provided in another world. The temple was a means by which the people could show their respect and admiration for something wonderful and divine.

Evolution of the Greek Temple. The Greek temples were built in earliest times of wood; later, of sun-dried brick; and finally, of

stone. Skill in building developed rapidly and, with the increase in wealth, the magnificent buildings that typify Greece were made possible. The Greek conception of the temple was not entirely original. The Egyptians had a pillared edifice similar to that of the Doric style, and the Babylonians had a pattern much like the Ionic. The earliest known temples (*ca.* 581 B.C.), of the Doric order, were built in Corinth. The temple at Delphi was the earliest that had a well-developed façade.

The Parthenon, in the Doric Style. The Parthenon, built 447–438 B.C., marked the zenith of Greek Doric architecture.

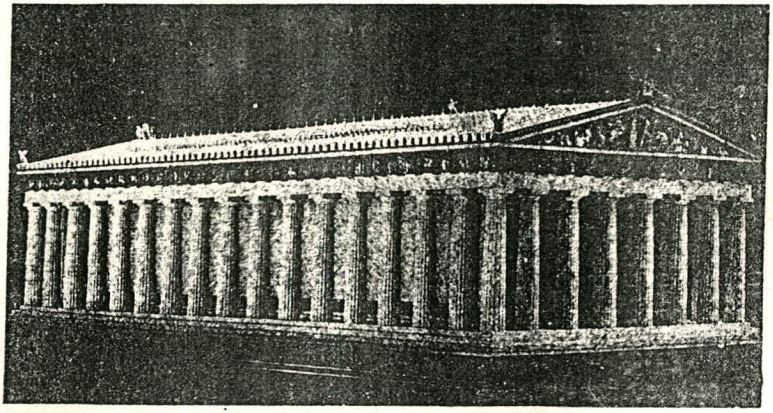


FIG. 14.—The Parthenon at Athens, from a model. (*Courtesy, Lucas, A Short History of Civilization.*)

It occupies a prominent position on the Acropolis, its rectangular shape harmonizing with the contour of the hill. The limited interior space contained only enough room for the cult statue, a place for the treasure, and space for the priests and their attendants. The stylobate measured 229 feet by 100 feet and was approached by three steps, each 20 inches high. Forty-six Doric columns, each 34 feet high, diminishing from six feet three inches at the foot to 4 feet 10 inches at the top, supported the roof and dominated the appearance of the building. The shaft of each column was channeled into grooves or flutings, which produced soft shadows and accentuated the rhythmic effect. The capital was plain and made a well-balanced transition between the shaft and the lintel. The frieze of the temple was covered with figures designed by the great Greek sculptor, Phidias. Some of the metopes

(spaces between the triglyphs) contained figures representing the siege of Troy. One pediment showed the birth of Athena from the brow of Zeus, while the other portrayed the strife between Athena and Poseidon for the control of Attica.

The outer wall of the cella, over 500 feet long and 3 feet high, showed the procession at a Panathenaic festival. Originally, a statue of Athena, 42 feet high, occupied the interior. The beauty of the building depended upon many factors, but most of all upon



FIG. 15.—Restored interior of the Parthenon. (*Courtesy, Metropolitan Museum of Art, New York.*)

the delicate proportions maintained throughout. A balance between vertical and horizontal lines, the rich but subordinate sculpture, and the skillful variation from regularity are among the factors that contribute toward the rare beauty of the Parthenon. Today it wears only a reminder of its ancient glory, but even in ruins, it stands majestic, harmonious, and beautiful.[1]

The Ionic Style. Not all Greek buildings were constructed in the Doric style. The Ionic order, which was frequently used, was

[1] In the 5th century, the Parthenon was used as a Christian church and dedicated to the Virgin. In 1640, it was occupied as a mosque. In 1687, the Turks used it as a storehouse for powder and it was practically destroyed by an explosion in the same year. In 1801, Lord Elgin, with the permission of the Turkish government, removed most of the remaining sculpture to England.

characterized by the style of its columns. In contrast with the Doric, the Ionic column, given an ornate base, a more slender and less tapering shaft, presents a more elegant effect. Each Ionic column stands on an individual base and has a capital decorated with a double scroll. An Ionic frieze consists of a con-

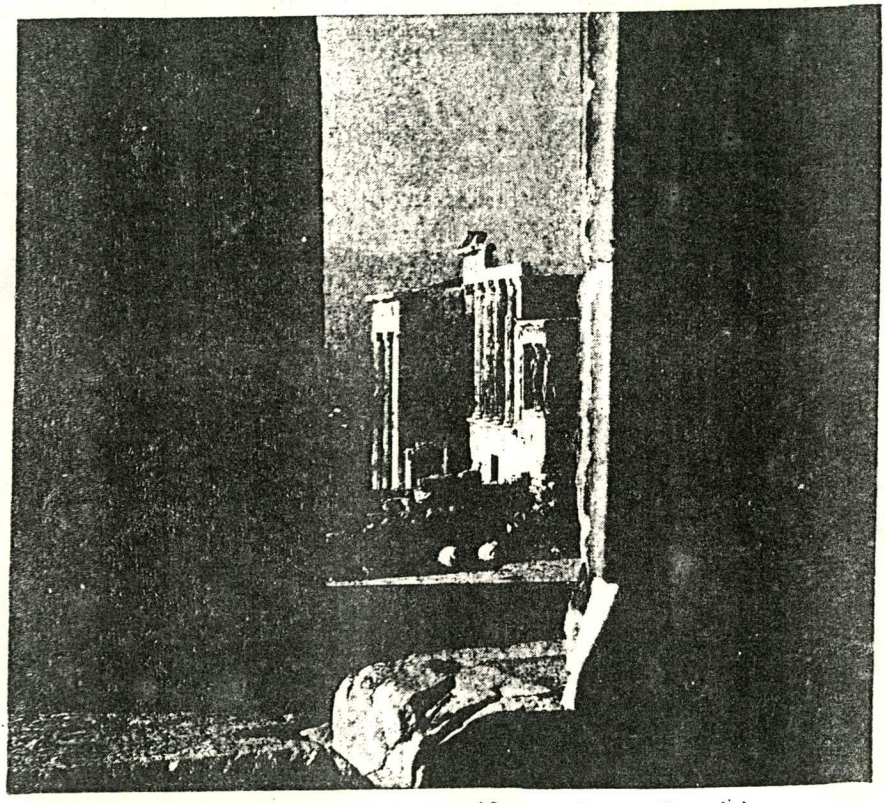


FIG. 16.—View of the Erechtheum. (*Courtesy, Clarence Kennedy.*)

tinuous band of sculpture in relief, while the stringcourses and cornices, doorway, and wall bands are carved with a braid pattern.

One of the best known examples of a building of the Ionic style is the Erechtheum, which stands near the Parthenon on the Acropolis. This ranks next to the Parthenon as a masterpiece of Greek architecture. It is built on two levels: on the upper level, facing the shrine of Athena, is an Ionic porch; on the lower level, facing the north, are six Ionic columns that support a magnificent roof. The beautiful Porch of the Maidens is on the southern upper

level. The sculptured maidens, serving as columns, bear on their heads a chest for objects to be used in the festivals of Erechtheus.

The Corinthian Style. An admirable example of Corinthian architecture, the third of the Greek orders of architecture, is the choragic monument of Lysicrates at Athens, erected in 330 B.C. The Corinthian capital, which was used sparingly in the Hellenic periods because it was so ornate, became the favorite of the Romans.

Hellenistic Architecture. The architects of the Hellenistic period concerned themselves mostly with secular buildings. Although temples were still built, innovations were made, in the form of royal palaces, pavilions, country residences, libraries, museums, gymnasiums, lighthouses, and theaters. Cities were laid out with the greatest care; Pergamum, Priene, and Alexandria still bear witness to the glory of the city in the Hellenistic age. In keeping with the more elaborate type of building, the Corinthian column was used extensively. The most characteristic feature in this style is the capital of the column, which carries elaborate decoration. The pavement of the court was covered with beautiful mosaics, and the walls were adorned with pictures, either painted on the plaster or in stucco.

c. Painting and Sculpture

Painting. Early Greek painting was done mostly on vases. Some of the work is exquisite in design and execution. The painter Duris portrayed an incident in a Homeric story, the strife between Ajax and Odysseus over the armor of Achilles. Odysseus is shown as the conqueror and Ajax bends his head sorrowfully in defeat. The arrangement of the figures and the skillful moderation in the decorations make the work characteristic of Greek art in general. The Greeks did not consider the vase painter to be a great artist, but this work must be listed as a notable part of their artistic production. Painting reached its height in Greece in the 5th century B.C. Polygnotus of Thrace, a contemporary of Phidias, portrayed distinctive character in his works. He painted many group pictures, particular pains being taken with each individual figure. His representation of "transparent wind-blown drapery" was admired by his contemporaries and was imitated by many painters. Apollodorus (4th century B.C.) introduced shading and painted on wood

blocks instead of vases and walls. His best known work is the "Priest in the Act of Devotion."

In the Hellenistic period, painting became more worldly and more highly embellished. Apelles of Colophon, court painter for Alexander the Great, and a great painter himself, founded a school



FIG. 17.—Red-figured amphora, signed by Menon (5th century B.C.). (*Courtesy, University of Pennsylvania Museum.*)

of painting. He and his students made progress in line and in accuracy of expression. Greek painters were most interested in developing significant aspects of form and natural appearance. This they did mainly through the use of line, keeping color, shading, and perspective in subordination.

Motives of the Sculptors. The sculpture of the Greeks repre-

sents one of their greatest accomplishments. It provided a means of expressing their ideals and an outlet for the manifestation of their talents. The sculptor was one of the most revered and honored men in the city-state. This can be explained, at least in part, on the ground that art was primarily a civic enterprise. The building and decorating of temples was utilized, not only for the beautification of the city, but also as a means of glorifying the gods, who were regarded as divine citizens of the state. The chief task of the sculptor, from the beginning of art and throughout the Hellenic period, was to represent the human figure as an ideal and as a part of nature. Impetus was given to this by the belief that gods had human forms—more beautiful, of course, than those of men, but physically the same. The more perfect the representation of the human form, the more nearly it would represent the gods. Instead of attempting the portrayal of individual figures, the artists sought the perfection of a type.

Archaic Sculpture. The evolution of Greek sculpture follows the same impressive cycles of development that are characteristic of all Greek artistic work; and to aid appreciation of the m r- pieces, some mention should be made of the steps that led up to their perfection. The earliest Greek sculpture was crude and archaic. The human form was clumsily shaped, the limbs of the figures were stiff, and the face had an artificial, fixed grin—since called the archaic smile. A favorite subject was that of a draped female holding in an extended hand an offering to a goddess. The earliest work was carved in soft, porous stone; but as the sculptors improved in their technique, use was made of the excellent marble that existed in abundance in Greece. For a time, the Greeks painted their statues, but this practice was abandoned as their skill in finishing the hard marble developed. Some work was done in bronze. The "Charioteer" at Delphi is one of the few originals remaining from that period. This male figure belonged to a group: driver, chariot, and horses. He stands erect, dressed in the garment of a driver, and holds the reins in his outstretched hands. The simple dignity and reserve that became so outstanding a feature of later sculpture are conspicuous in this work.

Hellenic Sculpture. The age of Socrates, Sophocles, and Protagoras produced equally famous sculptors. Phidias of Athens (500–435 B.C.), friend and adviser of Pericles and the artist re-

sponsible for the sculpture on the Parthenon, was one of the most famous. The design of the sculpture on the Parthenon, in spite of its magnitude, was homogeneous and rich in diversity, and possessed serene grandeur. "Theseus," half-seated, half-reclining, nude male figure, is one of the finest of the remaining fragments. There were many figures of man and beast, which are individually famous, but as a composite unit they form a unique combination.

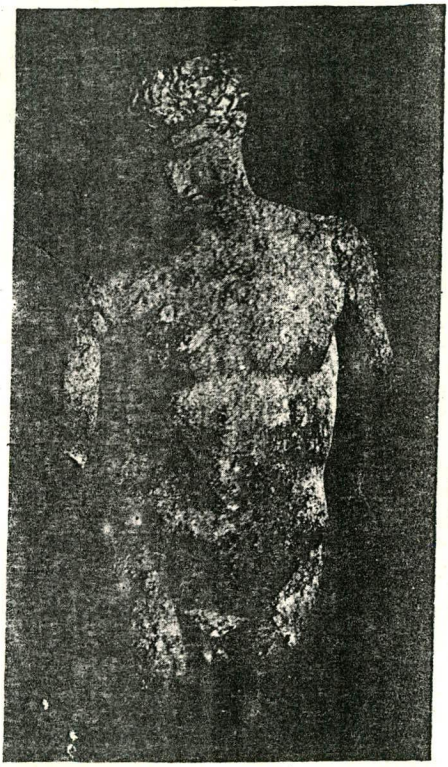


FIG. 18.—"Hermes." (*Courtesy, Museum of Fine Arts, Boston.*)

Myron of Eleutherae, a contemporary of Phidias, achieved fame for his nature studies. "Athena and Marsyas" shows a goddess annoyed because she could not play the flute as well as the satyr. It is animated, but lacks the idealism of the works of Phidias. Polycletus (480–420 B.C.) was the third great sculptor of this period. He was famous for his bronze statues of athletes. His chief ambition was to produce a perfect reproduction of the human body, and he chose to portray figures in motion. He took a number of measurements of beautiful bodies and worked out a scientific canon of beauty, which received the praise of Socrates and was long considered authoritative as to the proportions of the human figure.

In the 4th century B.C., sculptors in Greece tended to express greater individualism and more variety of emotion in the faces and figures of their statues, in place of the impersonal dignity and serenity of earlier works. Scopas (395–350 B.C.) portrayed vigorous action and movement, even passionate feeling. An excellent example remains in a head from his pediment sculptures at Tegea. The upturned face and deep-set eyes are indicative of human

tragedy. Praxiteles, whose best period fell about the middle of the century, produced youthful figures of charming grace and ease combined with intelligence and physical vigor. Best known of them is the unquestioned original work that has come down to us—his "Hermes," which shows the young god carrying on his arm the infant Dionysus.



FIG. 19.—"Discobolus," by Myron. (*Courtesy, H. S. Lucas, A Short History of Civilization.*)

Hellenistic Sculpture. There was a noticeable transformation in sculpture during the Hellenistic period. The later sculptors introduced the naturalism of everyday life and extreme emotion or struggle: children, a drunken man, a dying soldier, and a suffering god are subjects of well-known masterpieces. The "Dying Gaul" presents an example of anguish and suffering, which a poet describes in these words:

> 'He leans upon his hand—his manly brow
> Consents to death, but conquers agony,
> And his drooped head sinks gradually low—
> And through his side the last drops, ebbing slow

From the red gash, fall heavy, one by one,
Like the first of a thundershower. . . . . "

The "Laocoön," which Michelangelo declared a marvel of art, represents a priest of Apollo and his two sons, attacked by serpents.



FIG. 20.—"Death of Laocoön." Note the portrayal of feeling and motion. (*Courtesy, Metropolitan Museum of Art, New York.*)

evident that the artist was aiming to portray an agonizing struggle by means of the grouping of the figures and of the

impression of writhing movements in the intertwined forms of human beings and serpents. Critics generally agree that Hellenistic sculptors, on the whole, laid too much stress upon the expression of extreme emotion or effort and were too self-consciously striving for effect.

4. RELIGION AND PHILOSOPHY

Greek Gods. The Greek conception of religion bears a striking contrast to the religions of earlier peoples. Gods to them were glorified men, worldly, lustful, and brawling. They were represented often as immoral, living and acting much the same as men, except that they were endowed with immortality. There was no real religious tie between the people and the gods. The Greeks believed that men need not concern themselves unduly about gods who were too busy having a good time to bother about men. There is little, if any, trace of a feeling of terror—perhaps a measure of awe, but nothing more. The gods were so numerous that space does not permit even a complete enumeration of them. There was Zeus, lord and master of all the gods, and wielder of the thunderbolt. Demeter was the earth goddess; Hades, the lord of the underworld; Poseidon, god of ocean and shaker of the earth; Athena, the patroness of wisdom and all the arts; Apollo, lord of the bow; Hermes, messenger of the gods and guide of the souls in Hades; and Dionysus, god of wine. Zeus with his colleagues, wife, and children—12 in number—was supposed to live upon snow-clad Mount Olympus. There were countless local and household deities besides the universal divinities. Gods played a very important part in the cultural life of the Greeks and about them developed a vast amount of mythology.

Divine Origin of the Greeks. Stories found in Greek mythology reflect a clear view of the religious point of view. A variety of explanations of the origin of man were given. In some places, the Greek, described as a descendant of gods, was offered the hope that there was a possibility of his becoming a god after death. Prometheus was supposed to have made man out of clay and to have stolen fire and given it to man. In revenge, Zeus sent Pandora with a jar containing cares and wasting diseases, which she set free a imposed upon men. The human beings went from bad to wo until Zeus in disgust swept them away with a mighty flood, sp

only two—the son of Prometheus with his wife. This couple, legend records, were the ancestors of the Greeks.

Forms of Worship. Worship of gods consumed a comparatively small amount of the time and activity of the Greeks. They were too philosophical-minded to subscribe to a formulated and routine worship. They did offer food and wine to the gods before each meal and there were public sacrifices on festival days, on the opening of assemblies, on the opening of law courts, and on such important occasions as marriage, birth, and death. The purpose of the sacrifice was to discover the will of the gods, to keep on good terms with those that were friendly, and to placate those that were hostile.

There were priests to perform these ceremonies, but Greece was never priest-ridden. Priesthood in Greece was not an exclusive profession. The father in each family was a priest, both in theory and in practice. Worship often took the form of community gatherings, to which faraway cities sent representatives. The great Amphictyony of 12 tribes met in the spring of the year at the shrine of Demeter near Thermopylae, and in the autumn at Apollo's sanctuary in Delphi. The Delphic oracle was consulted by many individuals. The oracle itself was located below the temple of Apollo in a grotto. A current of cool air, which issued from a rift in the ground, had an intoxicating effect on the person who breathed it. Under the influence of this, the keeper would ask questions and the priests would interpret the answers. The Olympian games were a form of religious activity. They were held in honor of Zeus and while they were in progress a sacred truce bound all Hellenes. The victor in the contests was considered a special favorite of the gods, the nearest approach to the perfect man. Both the Delphic oracle and the Olympian games provided means of preserving unity of religious practices among the Greek city-states.

The Mysteries. Mysteries played an important part in the religion of the Greeks. Many of them centered around the story of a god who died and was resurrected, an idea that appealed to many because it promised immortality. One of the most famous was the Eleusinian mystery, which was devoted to the worship of Demeter and Persephone. The ideas of the mystery were kept in secrecy and only those who were initiated into the cult could reach the immortal bliss that it was supposed to confer. This cult became very powerful and, along with several others of a similar

nature, received the support of many of the Greeks, especially those of the lower social order. The *Panathenaea*, celebrated annually in honor of Athena, was one of the greatest religious festivals in Greece. The winner of the contests held on this occasion was given a jar decorated with a figure of Athena and filled with oil from the olives of the sacred olive trees. Many of these mysteries were adaptations from similiar practices in the Near East. Some were later accepted by Christians.

Hellenistic Religion. In Hellenistic times, morality and a future life were stressed more than in the earlier period. This was due in part to the influence of the religions of the Orient and in part to the teachings of the philosophers. There was a tendency to break away from the localized city-state religion and political organizations. Alexander the Great asked the Greek city-state to list him among the gods. He demanded that his followers pay honor to him as they would to a god, by such acts as prostration on entering his presence. In addition to the state religion, which was maintained primarily for political purposes, there were a number of independent developments. Rationalism and materialism, agnosticism and atheism were prevalent and gained considerable headway.

Pre-Socratic Philosophy. A sharp line of differentiation cannot be drawn between Greek religion and Greek philosophy. The more advanced individuals were philosophers who were inclined to interpret their religion philosophically, individually rather than collectively. Greek pre-Socratic philosophy was, taken as a whole, an attempt to interpret the problems of the world; what exists? and how does change occur? Even the early poets, Homer and Hesiod, for example, wrote about cosmology. Homer concluded that gods exist and make changes in the universe at will. The philosophers went beyond a supernatural and mythological explanation of the universe to seek a natural and rational solution of how the material world came into being. While these attempts were essentially intended as philosophical approaches, they formed the basis for scientific research. Thales (624–548 B.C.), the first nature philosopher, predicted the sun's eclipse of 585 B.C. and held that the primal substance of all things was water. Endowed with an animating power, it assumed the form of the natural world.

Anaximander (*ca.* 611–547 B.C.), living at the same time,

contended that air was the basic element and startled people with the idea that fish were the form of life from which land animals developed. Pythagoras said that numbers were the basis of all principles and that life was regulated by music and mathematics. Empedocles (4th century B.C.) developed the theory that there were four basic elements: earth, air, fire, and water. Each, he declared, was without beginning or end, and were unchangeable and homogeneous. All things originally came from mixtures of these elements. When they ceased to exist they returned to the original elements. He believed that two forces controlled all phenomena: love, which unites, and hate, which separates the elements. Democritus (460–370 B.C.) established an atomic theory, which stated that particles varying in shape and in size arranged themselves into various combinations.

The Sophists. There were evident conflicting opinions among the ideas advanced and several people were inclined to be skeptical, to conclude that none was correct and that nothing was absolutely and universally true. One such group called themselves Sophists, teachers of argumentation and dialectics. They believed that the most important thing was to be able to persuade others, to better an adversary in argument, rather than to try to prove anything conclusively. Gorgias (480–395 B.C.) summed up the philosophy, "Nothing exists, or if anything does exist, it cannot be known; or if it can be known, we cannot express our knowledge and communicate it to others." Another Sophist, Protagoras (4th century B.C.), of Abdera, wrote, "Man is the measure of all things, of things that are that they are, and of things that are not that they are not." This sounds pedantic and impractical, but in reality the Sophists made a real contribution to learning. They taught the youth of Greece to excel in politics, to take part in public affairs, and to become intelligent citizens. They emphasized the value of a scientific study of speech, which bore fruit in the great literary works of a later period. Their inquisitive and orderly approach to a subject encouraged scientific procedure. They revealed ignorance that masqueraded as knowledge, and they concerned themselves with the practical problems of virtue, rather than with the subjective validity of truth.

Socrates. Socrates (470–399 B.C.) is one of the best known and in many respects one of the most famous of the Greek philosophers.

Few facts are known concerning his life, but he was born of lowly parentage. He served in the Greek army and was at one time a member of the Council of Five Hundred in Athens. He was not a formal teacher in the modern sense of the word; his students were the men in the street and his classroom was the market place or the house of a friend. He followed the Sophist method of question and answer, but he deplored mere pretense and rhetoric. He posed as a seeker of truth. He appealed to others for their ideas and strove to convince them of their ignorance and to lead them into right concepts. Moral standards, justice, honor, and beauty were the subjects discussed, not politics or the material universe. He summarized his philosophy of life thus:

> Every man knows by his nature in every case how to act rightly, that is, in such a way as to bring true happiness. It is only necessary to make it clear to him and teach him how to make it clear to himself. . . . The way to do is to let a man say how in each case he proposes to act and then investigate with him whether such action will make him happy in the true sense. If not, he must choose another course and investigate its consequences; and so on, until it proves that the course found will bring happiness.

Socrates's teachings were considered immoral and corrupt by the officials of Athens. He was arrested on the charge of leading the youth of the native city astray. Every school child knows of his death, which he preferred to meet with fortitude and nobility. He became, as a result, the supreme example of intellectual integrity for he would not retract what he believed to be the truth.

Plato. Plato (427–347 B.C.), for seven years the pupil of Socrates, is his most notable disciple. He founded an academy on the outskirts of Athens to promulgate his ideas to others. He was well suited to be an inspiring teacher, having a poetical style in the presentation of his ideas and an actor's ability to portray them. He did not reject all the earlier speculations about the physical world but, like Socrates, emphasized general concepts. His work was deductive and based on faith rather than on reason. The primary principles in Platonic philosophy were matter, ideas, and God. Plato believed that matter was coeternal with God and that from it He created all animate and inanimate things. Ideas were the most permanent; visible things would soon pass away, leaving the universal concept as the only reality.

Plato advocated an idea of immortality that conceived the

preservation of works and ideas rather than the individual. He emphasized the value of work and its everlasting qualities. It is difficult to summarize the philosophy of Plato or to express his point of view, because of his imaginativeness. His writings were frequently in dialogue form and often Socrates was one of the characters. A few quotations may convey his method and some of the content of his philosophy. "A freeman ought to be a freeman in the acquisition of knowledge." "Knowledge which is acquired under compulsion has no hold on the mind." "That lie is the worst of which the liar is unaware, for it is inside his soul." He summed up thus his procedure in intellectual pursuits: "If we may not approach the good with the aid of one idea, then let us overtake it with three —beauty, proportion, and truth." In addition to moral and ethical problems, Plato also speculated on politics. His contribution to high intellectual tradition is beyond calculation. He has been called the "Creator of the age of faith," and a "Christian before Christianity." He formulated the first idealistic principles of a democratic state.

Aristotle. Aristotle (384–322 B.C.), a student under Plato, was the teacher of Alexander the Great. He followed the path blazed by his illustrious predecessor, but he was unwilling to confine himself to the intellectual horizon of his teacher. Plato, as has been noted before, was impractical and idealistic, while Aristotle was a patient and persistent investigator who found it necessary "to consider the particular in order that the universal might be established." Aristotle's *History of Animals* was the result of hard work and close observation. Several of his conclusions anticipated modern discoveries in the field of science. He was not primarily interested in immortality and divine origin so much as in actual phenomena. Consequently, his style was less poetical, more unimaginative than that of Plato. He was a great classifier and organizer of knowledge, segregating physics, metaphysics, logic, and ethics into separate studies. His scientific conclusions dominated the intellectual world for nearly 2,000 years. To question them was heresy among scientists. When Thomas Aquinas, in the 13th century, sought to revive a purely scientific point of view, he turned back to Aristotle as a master of the method.

A New Era in Philosophy. The period in philosophical development from Socrates to the death of Aristotle was an

era of great thinkers whose researches appealed to and satisfied very few people. In the Hellenistic age, the people were conscious of their wealth and were inclined to attribute their material well-being to the king and the state rather than to some unseen theoretical principle. They did not desire the scholastic philosophy of Socrates and Plato, but contentment, which they believed to be the secret of happiness. Happiness was not a matter of doing things, but a matter of receiving things. The two philosophers who gave a bourgeois view of life, to fit their needs, were Epicurus and Zeno.

Epicureanism. Epicurus (342–270 B.C.) held that friendship was the most important thing in life, and that the state was made for man rather than man for the state. He was materialistic in his outlook and rejected the religions of his day because "they interfered with the real life and disturbed mankind." He borrowed Democritus's explanation of the universe. He went so far as to contend that the soul, and even god, is made up of atoms; that in the physical make-up the only difference between man and god is that the latter is made of finer atoms. Epicurus denied that gods had anything to do with human affairs, as they dwelt apart from and were unconcerned about man. As a consequence, man should enjoy himself and turn all his intellect in that direction. Epicurus, contrary to the popular interpretation, preached moderation. "Beware of excesses for they will lead to unhappiness." "Beware of folly and sin for they will lead to wretchedness." Pleasure he defined as freedom from pain and all that is unpleasant and disturbing. It is easy to see how the vulgar misinterpreted his philosophy and used it as an excuse for excess with all the destructive consequences.

Stoicism. Zeno (350–260 B.C.) was an advocate of Stoicism, which sought the same end as Epicureanism but in a very different way. The Stoics were materialistic, pessimistic, and endured suffering without emotion. They preached the common brotherhood of man, but considered the state merely as a social convenience the regulations of which should not bind the wise man. Man was expected to live reasonably and in accordance with natural laws. The universe, according to the Stoics, was fundamentally good, and man, as a little universe, could live in harmony with the great universe. Astrology and divination had a great attraction for the Stoics. Philo, for example, thought that stars

were free-born citizens of the universe and were divine, rational natures. If a man failed to conform to the laws of nature, he was wicked and inwardly a slave, regardless of his position. A good man should ignore evil or should conquer and utilize it to his own advantage. Stoicism played an important part in early Christianity and is noticeable in the teachings of St. Paul, St. Ambrose, and St. Augustine.

The Cynics. Another philosophical approach to happiness was Cynicism. The Cynics ridiculed rulers and ignored social customs. They advocated a return to nature: "The earth for a bed and the sky for a covering." They spurned the rich as "sepulchers of fat" and deplored the unequal distribution of wealth. According to the Cynics, life is virtue; virtue is knowledge, and knowledge concerns self alone. To the Cynic whatever is, is right; therefore, one should take what comes. Cynicism was a form of social defeatism; it added little to the growing body of scientific knowledge, and it accepted a "shiftless resignation" to fate. Diogenes (412–323 B.C.), one of the famous Cynics, when visited by Alexander the Great, was asked if there was anything Alexander could do for him. He replied, "Yes, get out of my light."

Importance of Greek Philosophy. One of the principal goals of the Greek philosophers was to explain the origin and destiny of man and of the universe. They established the unity of godhood, which they believed was present everywhere in nature. They sought to explain the character of the soul, which they believed had a past, a present, and a future life. Truth and beauty were interesting and important to them. Some attempted to ascertain absolute truth, while others recognized the fact that the world was full of delusions and ridiculed the possibilities of truth. All these ideas are important, in that they showed the development of man's intellectual horizon and taught him self-reliance in meeting the numerous problems that confront him. The mature philosophy of the Greeks represents one of the great products of human thought. It aided in the advancement of science and in the study of ethics.

5. LITERATURE

The Background. The Greeks borrowed their alphabet from the Phoenicians, but they adapted it to their needs by adding

some new letters and by dropping some superfluous consonantal signs. The Ionians perfected and spread the revised alphabet, and in this form it was accepted by the Hellenic world by the 4th century B.C. In language, as well as in art, the Greeks attained beauty, simplicity, and clear and logical structure. Their sentences were constructed with that same artistic finish that characterized the Parthenon. Unfortunately, today their language is considered dead and very few really appreciate its beauty. "No one who is a stranger to Greek literature has seen how perfect an instrument it is possible for human speech to be." The Greeks had an excellent background for their literature: a keen appreciation for quality and beauty, a heritage rich in tradition and folklore, and a group of capable men to develop and encourage forms of expression.

The Epic. The epic was one of the earliest forms of Greek literature. Homer stands as a symbol of epic poetry. Whether there ever was a man by that name or whether the *Iliad* and the *Odyssey* were the work of several men is uncertain; however that may be, these poems are outstanding examples of epic literature. The Homeric poems are thought to have been produced originally to be sung or recited, which may account for their superior beauty of expression; but their careful construction makes them well suited to the printed word as well. The *Iliad* contains some of the final episodes in the siege of Troy and a great part of Greek mythology. The thread of the story is centered about Achilles, who became enraged with Agamemnon over a captive girl. He quit the battle and sulked in his tent. Patroclus, the friend of Achilles, was killed in the battle and that so infuriated Achilles that he reentered the struggle and in his wrath killed Hector, the Trojan Prince.

The *Odyssey* is closely related to the *Iliad.* It concludes the story of the siege of Troy and continues with an account of the wanderings of Ulysses. There is no more appealing story in any language than the account of Ulysses' wife, Penelope. Surrounded by suitors and tempted in every conceivable way, she remained loyal to her husband and was finally rewarded by his return. Ulysses' wanderings over all the Mediterranean world have become a familiar story in many languages. Vergil, Dante, Tennyson, and others have presented him as a character in their literary works.

Among the famous epic poets is Hesiod (*ca.* 750 B.C.), the reputed author of *Works and Days* and *Descent of the Gods. Works*

and Days is a book of advice to farmers. The author glorified the life of a farmer, who was safe if he worked hard and watched the calendar. Hesiod gave advice on methods of farming, suggested lucky days for the performance of various tasks, and commented on the finer art of matrimony. He deplored the conduct of princes and the application of the general policy in which "might shall be right, and one shall sack the other's city." He warned unjust princes of the punishment of farseeing Zeus and of what would, in the long run, be in store for them. The *Descent of the Gods* is instruction to men about their divine relations. Hesiod's works are more valuable as historical records than are those of Homer, but they are less romantic and very tame in subject matter compared with the *Iliad* and *Odyssey*. In general, Hesiod's writings, which mark a departure from the older form of the epic, relate chiefly matters of mythology and the supernatural. Hesiod condescended to lower concerns and condemned current social and economic conditions.

Lyric Poetry. Lyric poetry, in the strictest sense of the word, was written to be recited to the accompaniment of the lyre or, in some cases, the flute. It was more personal and emotional than the epic. In place of relating exploits of mythology, the lyric poet wrote love songs, lamentations, and epigrams. Unfortunately, most of the Greek lyric poems are either entirely lost or exist only in fragmentary form. Archilochus (7th century B.C.) invented the iambic satirical verse so admired by the Latin poet Horace. He was one of the first Greek writers to use the poetic medium to express individual opinions. Sappho (6th century B.C.) was a great poetess, one of the very first of whom there is any definite record. She was admired almost as much as Homer and was given the exalted title of "the tenth muse." Anacreon (*ca.* 560–475 B.C.) expressed emotions with great success. Without envy of pomp or power or wealth, he sought tranquility and happiness and detested war because it destroyed the youthful and the brave, leaving cowards in their place. Pleasures of youth and the agreeable effects of drinking wine were experiences much more to his taste.

Pindar and Bacchylides (a century after Sappho) wrote choral poetry. So great was the fame of Pindar that he was considered by his contemporaries to be the "god of song" and a special favorite of Apollo. Of most of his works only fragments exist, and they are chiefly in praise of the victors in the national games. The lyrics of

the Hellenistic period do not measure up to the standard set in the Hellenic period. They have not the same beauty of style and expression, possibly because they were written to be read and not recited or sung. Theocritus of Sicily (3d century B.C.), whose writings are about shepherds, their surroundings, and their superstitions, is a decided exception to the general rule. His works were widely read in later periods and served as models for poets in the centuries to follow.

Most of the poets of the Hellenistic period tried to follow the older forms of literature. Scientists, in presenting their material, used the epic verse but without any great success.

Drama. The drama is the most familiar of the Greek forms of literature. It originated from festivals such as the one to Dionysus, the wine god, where a speaker was added to explain episodes in the pageant. To these primitive types the Greeks, in their characteristic fashion, added the finishing touches and produced plays that are still considered standards of perfection. The plays were closely associated with religion and public life; consequently, almost everyone was interested. Costumes and dancing held an important place in the early presentations. The chorus sometimes represented such things as clouds, birds, and frogs and carried on conversations with the leading actor. A second main actor was not added until the time of Aeschylus, and a third was introduced by Sophocles. Masks were used always in the make-up of the actors, and women's parts were taken by men. The Greek theater, in the open air, was built in an amphitheater style, and had a semicircular stage.

Aeschylus (525–456 B.C.) was the greatest of the tragic poets. His subjects are mostly religious and mythological, and the plays carry somber and stern morals. His two most famous plays are *Prometheus Bound* and *Agamemnon*. The central theme in the works of Aeschylus is confidence in the justice of the gods and in the soundness of an intelligent moral order. Sophocles (496–406 B.C.), living a generation later, represents the peak of Greek drama. He wrote more than 100 plays, of which seven have survived. His *Antigone* and *Electra* are well known to modern students of the theater. Euripides (480–406 B.C.), the third of the great tragic poets, made more of life and love in his plays than had either Aeschylus or Sophocles. Believing that in life people were more

important than gods, he concerned himself with the passions and emotions of human beings, instead of giving descriptions of deities. Most of his plays were written during the Peloponnesian war and clearly reflect the stress of war as felt by the people. He was a spokesman for the poor and the oppressed. His best known work, *The Trojan Women*, pictures the suffering of women during a war.

Aristophanes (448–385 B.C.) was the greatest comic poet. Political satire reached a high level in his writings, in which such figures as the stupid general and the inefficient politician were ridiculed. Drama became such an instrument for social criticism that, in 414 B.C., comedians were forbidden to comment on public affairs. In the Hellenistic period, drama developed along the romantic lines started by Euripides. Menander (342–291 B.C.), one of the most popular writers of this period, wrote for and about the common folk. In his plays, love affairs, family difficulties, and everyday life were discussed in exquisite language. He was very popular with the Romans and it is through their writings that we get most of our information concerning him. The Latin poet Manilius wrote concerning Menander:

> "He composes amusing plays for the comic stage:
> Impassioned youths, girls head over heels in love,
> Fathers who're fooled, and slaves who're up to all tricks:
> He who made the life of his time live through the ages,
> Beneath the polish of his speech intimate with his city,
> Menander! who has mirrored life and put it on paper."

History. The penetrating minds of the Greeks enabled them to produce history that was literature. Herodotus (b. *ca.* 484 B.C.) has been given the title of "the father of history." Traveling extensively, he kept records of what he saw and heard. He glorified the history of Greece, especially the victory over Persia, to such an extent that much of his material is untrustworthy. His aim was to preserve great deeds of the Greeks, but today we have more interest in his digressions, in which institutions and people are described. He wrote for effect and frankly said that he himself did not quite believe all that he wrote, but thought that he must tell it. Thucydides (460–400 B.C.) wrote about his own times, the Peloponnesian war, and his own travels. He indulged less in

anecdotes, and his work was more subjective than that of Herodotus. He deplored the fact that historians wished "to please the ear rather than tell the truth." Xenophon (434–355 B.C.) continued the work of Thucydides, writing the *Anabasis*, a history of a Greek expedition into Persia. This work is supposed to have encouraged Alexander the Great to undertake the conquest of Persia. Polybius (205–120 B.C.) wrote an account of the rise of the Roman state, in which he praised the Roman political system. His works, although they are comparatively accurate, lack the literary merit that distinguishes the writings of Herodotus and Thucydides.

Oratory. Oratory was considered by the Greeks to be indispensable. The citizen often resorted to oratory for the attainment of honor and prestige. Law courts and public assemblies of different kinds gave the orator a chance to gain public attention. Isocrates (436–338 B.C.) was an influential teacher of rhetoric whose methods were followed by orators and writers of later generations. Demosthenes (384–322 B.C.), the greatest of the Greek orators, used his talent in defense of Greek democracy, which, in his time, was rapidly losing ground. He took his stand as the fearless champion of a lost cause and made oratory a part of literature.

6. LEARNING

Education. The philosophers were responsible for Greek advancement in learning. Zeno's school, the painted porch, and Epicurus's school were two centers of cultural activity where the philosophies of those two masters were passed on to the citizens of Athens. The Sophists, with their emphasis on public speaking, grammar, and dialectics, and their frequent reference to the physical sciences, history, and literature, had a broader influence than any of the other philosophers. They offered the youth of their country food for thought and cultural activity, instead of mere pleasure and inactivity. In the age of Pericles, most of the upper class could read and write, and a few were engaged in research.

In the Hellenistic period, public libraries were built, the most famous of which was the one at Alexandria. This great storehouse of learning contained 500,000 works. Pergamum, Athens, Antioch, and Tarsus also had great libraries. Books were edited and copies of the classics of earlier periods were made accessible to the

people. In some cases, the state supported elementary schools and, after completing the course in them, the sons of wealthy families were sent to attend lectures on rhetoric, philosophy, and mathematics in private schools. To train the youth for professions, special courses in engineering, medicine, astronomy, and geography were given. The Museum at Alexandria, representing a pioneer attempt in the presentation of advanced studies, might be classified as a university.

Science. Greek philosophers furnished the impetus for the beginning of the study of science. Speculating on various aspects of nature, they sought concrete information to prove their deductions. They were not interested primarily in developing science for a commercial or a materialistic purpose, as such study is pursued today, but mainly with the aim of supporting some philosophical concept. However, it should be noted that from these speculations developed the specialized sciences that have dominated the intellectual enterprises of our civilization. Not all of these ideas were original, as the Greeks drew heavily upon Egyptian and Babylonian learning.

Aristotle laid the foundations for the study of natural science. His works on ichthyology are still used and need surprisingly little correction. Theophrastus, a pupil of Aristotle, established botany as a recognized science. Dioscorides, in the 1st century after Christ, named a great many plants and classified them according to their value as drugs. Another scientist noted the presence of petrified sea plants on land and called attention to the fact that the sea must have covered some areas that are now dry land. Aristarchus (310–230 B.C.) advanced the heliocentric theory of the solar system, centuries before Copernicus, and made a computation of the size of the earth. Eratosthenes (276–196 B.C.) computed the circumference of the earth; wrote a geography; drew a map of the world, using parallels of latitude and longitude; and suggested that it would be possible to reach India by sailing westward.

Mathematics. Geometry was the first science that the Greeks pursued independent of philosophy. Thales borrowed what the Egyptians knew about the subject and added such concepts as "point" and "line." He developed the bisection of the circle by its diameter, the equality of angles at the intersection of two straight lines, and the equality of two triangles having one side and two

angles equal. Pythagoras (570–500 B.C.) made a practical use of numbers, besides taking them as the foundation for his philosophical speculations. He discovered the numerical relations of musical tones, proved mathematically that the earth was round, and demonstrated that the square of the hypotenuse of a right-angled triangle is equal to the sum of the squares of the other two sides. On the basis of numerical speculation, Pythagoras believed that god existed in nature as the principle of universal order and that the soul in man provided the principle of harmony. Numbers, he believed, possessed soul-purifying qualities. One of his chief aims was to reconstitute religion and to reinterpret primitive beliefs. Euclid (*ca.* 300 B.C.) wrote a geometry that is still accepted as authoritative. Archimedes (287–212 B.C.) discovered that a body immersed in a fluid loses weight equal to the amount of fluid displaced, established rules for the measurement of curvilinear areas and volumes, and invented the tubular screw. Hipparchus (160–125 B.C.) worked out some principles in plane and spherical trigonometry and perfected latitude and longitude for use in map making.

Zoology and Physiology. Anaximander was one of the first Greeks to speculate in biological science. He believed that the earliest organisms lived in water and later passed to dry land. Empedocles added to this theory of evolution by pointing out that favorable variations determine the character of the evolution. The first anatomical treatise in the west was written by Diogenes of Apollonia (500–430 B.C.), who stated that organisms developed in the soil, through warming from rays of the sun. Democritus classified animals according to blood quality, a classification that was further developed by Aristotle.

Medicine. One of the most distinctive scientific contributions made by the Greeks was in the field of medicine. There were three more or less independent schools of medicine. The School of Cnidus investigated particular diseases and sought a specific cure for each. The School of Croton, of which Pythagoras was a participant, studied the phases of the cause of a disease correlated with numbers and arrived at the idea of "crisis" in its development. The School of Cos, which claimed association with Hippocrates, emphasized the study of diseased conditions, concluding that they were produced by natural causes and that some could be cured.

Hipprocates (ca. 460–377 B.C.), "the father of Greek medicine," repudiated the belief that disease was the work of evil spirits, and this paved the way for further study. He declared: "The fact is that invoking the gods to explain diseases and other natural events is all nonsense. It doesn't really matter whether you can call things divine or not. In nature, all things are alike in this, that they can be traced to preceding causes." This school recognized the value of sanitation in preventing disease, practiced bloodletting, sweating, and dieting for the treatment of the afflicted. The Hippocratic oath placed the practice of medicine on an ethical basis with social responsibilities: "The regimen I adopt shall be for the benefit of the patients to the best of my power and judgment, not for their injury or for any wrongful purpose. I will not give a deadly drug to anyone, though it be asked of me, nor will I lead the way in such counsel. . . . Whatsoever house I enter, I will enter for the benefit of the sick, refraining from all voluntary wrongdoing and corruption, especially seduction of male or female, bound or free. Whatsoever things I see or hear concerning the life of men, in my attendance on the sick or even apart from my attendance, which ought not to be gossiped abroad, I will keep silence on them, counting such things to be as religious secrets."

Herophilus (3d century B.C.) is known as the "father of anatomy." He dissected the human body, observing the functions of nerves and muscles. He studied arteries, veins, the liver, the digestive tract, the salivary glands, and the genital organs. He noted the pulse and devised an instrument for measuring its rate. A contemporary, Erasistratus, was called the "father of physiology." He believed that blood flowing through the veins nourished the body. He gave to the valves of the heart the names that are still used. These men placed the practice of medicine on the dignified level of a profession, but succeeding centuries have not obliterated entirely the superstition that they condemned.

7. ESTIMATE OF GREEK CIVILIZATION

It is doubtful if at any other time or in any other place there was ever a group of such brilliant minds as those in Athens during the Age of Pericles. Their language and literature are still held as a model of perfection in the art of expression. Their art presents a revelation of surpassing beauty and creative power. Today

broken specimens, statues without heads or arms, mere fragments of the originals, are priceless possessions. In philosophy, the Greeks reigned supreme. Socrates, the dean of philosophers, and Plato and Aristotle, the other two members of the triumvirate, remain the most outstanding philosopers of all time. They formulated the theory of democracy in the art of government and, although unsuccessful in applying it, they set the goal toward which we are still striving. A list of the scientists and their accomplishments is sufficient proof of progress in their sphere. However, the scientific facts that they established are not so noteworthy as are the scientific spirit and methods that they introduced.

The material gains and the economic accomplishments of the Greeks were in many ways inferior to those of the people who lived earlier than they did. They adopted Phoenician ideas of commerce, trade, and colonization, and improved on them; but they contributed few significant principles in the technique of manufacturing and no important improvements in agriculture. The Greek interest was clearly cultural rather than materialistic. Their craftsmen preferred not to work for wages. Wage labor, in their estimation, limited freedom. Politics, literature, and art were highly regarded and considered honorable fields of endeavor. Last, but not least, the Greeks discovered the importance of the individual. Earlier civilizations, and some since, considered man as a mere creation of circumstance, a plaything for gods and rulers. The Greek's philosophy of a good life was developed on the basis of the individual. To them "man is the measure of all things" and "of all the wonders on earth, none is more wonderful than man." The Greeks succeeded in originating both the feeling for life and the understanding of it.

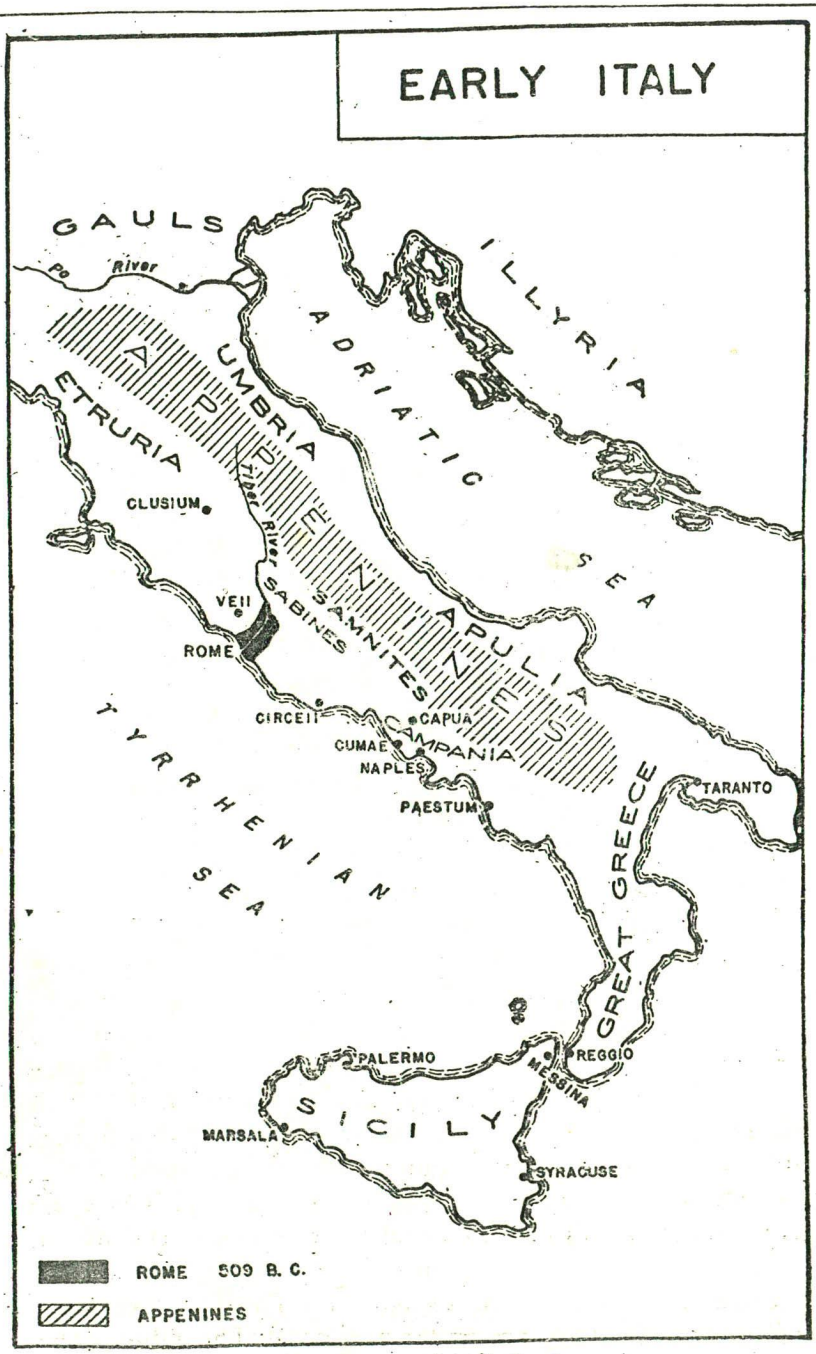
Decline. The decline of the civilization of the Greeks was due to certain inherent weaknesses that they were unable to overcome. They neglected the material and practical side of life for speculations and abstractions. Manual labor and business enterprises gave way to philosophical speculation. They failed to a great degree to put into practice their political theories and to establish an adequate central government. Finally, they fell before the superior military organizations of Macedonia and Rome. The independence of the Greeks and their political organizations were destroyed, but it must be remembered that their cultural contributions lived. In some respects they have never been superseded.

III. ROMAN CIVILIZATION

In many respects, Roman civilization belongs to the Hellenistic classification, a continuation of Greek culture with modifications typical of the Romans. One of the most striking examples of this was the organization of a great empire built on a precedent established by the Macedonians. The Romans lacked the imagination of the Greeks, but were blessed with practical common sense, enlightened by experience. Dogged perseverance, not brilliant inspiration, was responsible for the success of the Romans. Anything impractical was to them a sign of degeneracy. They appreciated the importance of religion, art, and philosophy; but instead of taking time to develop these themselves, they borrowed from other peoples. Frequently, they took theoretical conceptions from others and turned them into practical applications for their own use. The Roman father who had sufficient means to do so obtained a Greek to instruct his children. Roman genius and industry were directed essentially toward agriculture, law, government, and war. The culture of the Romans represents the final stage of classical civilization in western Europe.

1. THE LAND AND THE PEOPLE

The Land. At its greatest extent, the Roman Empire included the whole of the Mediterranean basin, the southern part of Europe, the northern fringe of Africa, and a considerable part of the Near East. Italy, the heart of the Roman Empire, is a peninsula about 650 miles long and 100 miles wide, shaped like a huge boot extending into the Mediterranean Sea. The Apennines, a mountain range reaching from north to the south, form a backbone for the whole peninsula. Italy is isolated from the rest of Europe by the Alps, but there are passes that enable invaders to enter the territory; foreign intruders have made their way into Italy since the Bronze Age. The valley of the Po, in the northern part, is one of the most fertile regions in the world, and one of the few sections of Italy where agriculture can be carried on extensively. There are numerous small valleys in the central and southern part, but taken as a whole, the land is not well suited to agriculture. A great part of the extreme southern region is waste land. The important ports and trading centers in Italy are on the west coast. The Tiber is the most


EARLY ITALY
GAULS
Po River
ILLYRIA
ADRIATIC SEA
APPENINES
UMBRIA
ETRURIA
CLUSIUM
Tiber River
SABINES
SAMNITES
APULIA
VEII
ROME
CIRCEII
CAPUA
CUMAE
CAMPANIA
NAPLES
PAESTUM
TARANTO
TYRRHENIAN SEA
GREAT GREECE
PALERMO
REGGIO
MESSINA
SICILY
MARSALA
SYRACUSE
ROME 509 B. C.
APPENINES

important stream south of the Po. The climate of the country is ideal. Mild temperature, abundance of rainfall in most places, and plentiful sunshine make it a desirable place to live. Being located in the center of the Mediterranean basin, the Italian peninsula became a reservoir for cultural materials from many lands.

Ethnic Background. There were traces of Paleolithic, Neolithic, Bronze, and Iron-age cultures in Italy before the arrival of the Italians. The Etruscans, whose origin is obscure, settled in Etruria, just north of the Tiber River, about 1000 B.C. Skilled architects and engineers, they taught the Romans how to drain swamps, to build sewage systems, and to construct roads. Etruscan cities were joined in a loose confederacy that was kept united by a strong military force. The Etruscans used copper and iron extensively, built ships, and promoted a thriving Mediterranean trade. They borrowed many of their ideas in religion, art, and learning from Eastern sources. The Italians, who racially were closely related to the Greeks, invaded Italy about 1500 B.C. They were divided into four major groups: the Samnites, the Latins, the Umbrians, and the Sabines. The Latins ultimately conquered the whole peninsula and dominated the civilized western world. The Greeks began to colonize in the southern part of Italy and Sicily about 800 B.C. The cultural influence of the Greeks on the Romans is inestimable. The Gauls, who settled in the Po Valley about 400 B.C., helped in the conquest of the Etruscans. The Carthaginians also had colonies in Italy and Sicily. When they threatened to dominate the western part of the Mediterranean, they were checked only by the rising power of Rome. Carthage was a Phoenician colony on the northern coast of Africa, established about 853 B.C. by wealthy citizens of Tyre who fled before the conquering Assyrians. The city was ruled by a plutocracy. The main activities of the citizens were commercial and their influence on the peoples conquered was chiefly economic. In the 6th century B.C., western Sicily, Sardinia, the Balearic Islands, the northern coast of West Africa, and southern Spain were under the control of Carthage. Roman civilization and the Roman people, as well, were a mixture of all these cultural and racial elements.

2. GOVERNMENT

Beginning of Rome. The origin of Rome, destined to become the heart of the mightiest empire of antiquity, is shrouded in

mystery and tradition. The mythical wolf, even Romulus and Remus, may be mere tradition, but they were important in uniting the early Latins into a compact political and social unit. The early Latins had a hard struggle against poverty and unfriendly neighbors. They were primitive people, slow in developing an efficient government. Rome became a city kingdom under an Etruscan king about 750 B.C. The Romans profited considerably from their contacts with the Etruscans. The old Roman forum was drained by the construction of a sewer, that is still in existence; the city was beautiful with temples; bridges were built across streams; and the Romans received much needed instruction in political administration and military training. About 500 B.C., the Romans succeeded in driving out the Etruscans, the first of a long list of military achievements.

The Age of Kings. Before the establishment of the republic, Rome was under the rule of a king, who was the leader in war, the judge in all matters affecting the community, and an intermediary between man and the gods. His power was unlimited, but he was elected by the people and not chosen by hereditary right. Although his power was absolute, he consulted the heads of the clans, who formed a Council of Elders, when an important issue was to be decided. There was a popular assembly known as the *Comitia curiata*. Members voted by groups (each *curia* having one vote) on questions submitted to them, but they could not initiate legislation. The kings lost their power to the nobles about the time that the Etruscans were driven out of Rome.

The Early Republic. Rome was under a republican form of government almost half of the thousand years of its political existence. The government was the result of a slow development, marked chiefly by a struggle between plebeians and patricians for supremacy. These two classes were developed while Rome was still under Etruscan influence. The most important office was that of *consul*. Two consuls were elected annually by the weapon-bearing men, but they represented the interests of the patricians. Each consul had the power to veto the acts of the other, and in case of a deadlock, the question was referred to the Senate, which was patrician dominated. The Senate soon became a powerful advisory body. The first important victory for the plebeians was the establishment of the *tribunes* (471 B.C.). They had the right to veto the

action of any officer, even the consul, and they could stop the enforcement of any law if they saw fit to do so. As Rome grew and the task of administration became greater, the consuls found it impossible to attend to all the problems. They were frequently away from Rome, leading the army, and important matters of state had to await their return. Consequently, other officers were chosen. *Quaestors* were put in charge of the treasury; *praetors* were appointed to administer justice, and *censors*, to take charge of collecting taxes and to supervise the building of public works. It was very evident that the government was unwieldy and lacked centralization. In a crisis, a *dictator* was appointed, a practice which led to the establishment of a military man in power and, ultimately, to a monarchy.

Struggle between Patrician and Plebeian. The power of the patrician class remained unbroken, in spite of the tribunes. The plebeians were excluded from the more important offices and discriminated against in economic affairs. They won an important victory in 450 B.C., with the codification of the laws, which limited the power of the patrician judge. The code, or the *Laws of the Twelve Tables*, was engraved on copper tables and set up in the forum, so that thenceforth the people knew for certain what was law and what was the punishment for various offenses. They then demanded a right to participate in the making of the laws. The *Comitia centuriata* was made a political body and transformed into an assembly of "centuries," which was at first essentially military. It took money to buy arms and, as a result, the organization was dominated by the patricians, but certain basic rights were granted to plebeians, including payment for military service.

There followed a long period of bitter rivalry between the two classes for political supremacy. The Licinian laws of 367 B.C. limited the amount of land and livestock that one man might hold. Each landlord had to employ a proportion of free laborers, in addition to slaves, and measures were taken to relieve those heavily in debt. In 313 B.C., the right of a creditor to seize a debtor was abolished and prisoners held for debts were released. Gradually, the plebians gained the right to hold important offices, such as *quaestor*, *consul*, *censor*, and *praetor*. The admission of plebeians to the Senate, one of the most important steps in their political advancement, came in 304 B.C. However, the plebeians admitted to

the Senate were mostly wealthy landholders; therefore, this did not make adjustment between the rich and the poor, but produced a new combination among the rich. Thus, a new issue took shape, which was to bear fruit in a later period. Under the wise and diligent leadership of the Senate, Rome made great progress. The rights of the people were respected and the territorial limits of the state were expanded.

Expansion of the Roman Republic. There is in history no more impressive story of imperialistic expansion than that of Rome from a small city-state in Latium to the mightiest of all empires. The tramp of the legions resounded from England to the distant land of the Tigris-Euphrates Valley. The whole civilized western world was tucked snugly into the folds of one vast empire. Reference has been made to the struggle between the Etruscans and the Romans and the triumph of the latter. The Gauls, a Germanic people from the north, captured Rome (382 B.C.) and threatened her with complete destruction, but the Romans finally won. Not content to stay in the limited area of Latium, they invaded and conquered the territory of the Samnites. Gradually, the Romans subdued the peoples from the Arnus River in the north to the Greek city-states in southern Italy (295 B.C.). The Greeks united to oppose Rome. Tarentum, the leading city-state, appealed to Pyrrhus of Epirus, who responded with a well-trained army equipped with fighting elephants. The Carthaginians came to the aid of the Romans. The latter won (275 B.C.), but then a new and even more formidable struggle for the supremacy of the West loomed between Rome and Carthage.

The Punic Wars, 264–146 B.C. A war between Rome and Carthage was inevitable. They represented two rival civilizations, each ambitious to accomplish the same thing—the domination of the western Mediterranean. The Carthaginians were a prosperous commercial people with trading centers all along the western Mediterranean coast. They had a large merchant marine and a well-trained army, which seemed superior to that of the Romans. Petty quarrels and trade rivalry had existed for some time between the Romans and the Carthaginians in southern Italy, and both sides awaited a favorable opportunity to begin the struggle. The Romans built a fleet and, after many unfortunate experiences with storms, finally defeated the enemy (241 B.C.). The peace was only

a truce, for in 218 B.C. Hannibal led a force of his countrymen through Spain and France and crossed the Alps into Italy. The Carthaginians won many victories, the most famous of which was that at Cannae, but Hannibal never captured Rome. Exhausted, short of supplies, and opposed by the brilliant Roman general Scipio, Hannibal was forced to retire. In the Third Punic War (146 B.C.) Carthage was destroyed and Rome became supreme in the West.

Conquest of the Eastern Mediterranean World. After the overthrow of Carthage, Rome continued her march eastward. The mainland of Greece was invaded; Macedon fell, and Corinth, the most powerful of the remaining city-states, was subjected. The Romans crossed the Aegean and destroyed the Seleucid dynasty. In 168 B.C., Egypt acknowledged herself to be a vassal of Rome. Julius Caesar continued the extension of the Roman territory. Following his success in Gaul and Britain, he advanced into the Near East (48–45 B.C.) and overthrew his opponents in Asia Minor. This was the occasion for his famous message to the Roman Senate, "I came, I saw, I conquered." Some territory was added during the period of the empire. The Roman Empire attained its greatest extent about A.D. 113, but soon after that it began to decline.

Decadence of the Republic. The great expansion of the territorial limits of Rome proved disastrous for its republican form of government. It was impossible for people in distant provinces to attend the popular assemblies held in Rome, and no successful form of representative government was devised. Dissension and corruption arose in the Senate and in the administration of the provinces. The Roman Senate became an oligarchy of selfish aristocrats without ability or inclination to meet the problems that confronted the government. The Senate was never popular with the people. They felt that power had been usurped from the assemblies. Members of the Senate had gained control of most of the land. Tiberius and Gaius Gracchus lost their lives in attempting to reform this evil. Tiberius was slain by a group of senators (133 B.C.) because of the land reform act that he introduced; and Gaius, when his plans seemed doomed to failure, committed suicide in 121 B.C. The Senate charged them with seeking absolute rule. However, a precedent had been set for further attacks against the established order.

Outbreaks against the Senate, thus begun, rapidly gained momentum. The decisive attack, however, was to come from a military man, not from popular leaders such as the Gracchi. The war with Jugurtha, ruler of the kingdom of Numidia in north Africa, brought to the front Marius, a capable leader in sympathy with the people (107 B.C.). Elected consul, he made a number of much-needed reforms. He substituted professional soldiers for the citizen army and tried to do away with corruption and graft in the government. However, he was not successful as a statesman and, unable to cope with the well-organized political system of the senators, he was forced to resign and retired in disgrace. This, however, did not end the disorders. Civil war at home and an outbreak against Roman rule in the Near East led to the appointment of Sulla, a lieutenant of Marius, to establish order at home and to put down rebellion abroad. Sulla was made dictator in 82 B.C. He returned authority to the Senate and, thinking his task completed, retired three years later.

One-man Power; End of the Republic. Sulla's reforms proved inadequate. The people were not to be crushed so easily. They found a military leader to support their cause just as effectively as Sulla had supported the cause of the Senate. Pompey, trained as a soldier under Sulla, was elected consul in 70 B.C. He cleared the Mediterranean of pirates and defeated Mithridates in the East. While Pompey was in the East, another general—one of the most famous of all the Roman commanders—Julius Caesar, rose to power in Rome. When Pompey returned, he joined with Caesar and a wealthy nobleman named Crassus to form the First Triumvirate. When Caesar left Rome, to complete his conquest of Gaul, Pompey sided with the Senate against him, but Caesar returned, defeated the combination organized to oppose him, and proceeded to reorganize the government. He reformed the Senate by introducing many new members who were in sympathy with the people; he reformed municipal administration and made elaborate plans to further intellectual pursuits in Rome. It will never be known whether or not Caesar intended to put a definite end to the republic and establish an empire, for he was assassinated before his plans were completed (44 B.C.). Julius Caesar made a profound impression. His name became synonymous with emperor, and as such was adopted by his successors and by modern czars

and kaisers. Later caesars carried to completion the plans that he had instigated.

Contest for Control. General confusion followed the assassination of Julius Caesar. For a time, it seemed uncertain whether a man could be found to end the disorders. Antony, a friend of Caesar, and Lepidus agreed to support Caesar's nephew, Octavian, and with him they formed the Second Triumvirate. Octavian proved more capable and aggressive than Antony had surmised. When only twenty-eight years of age, he had gained complete control of Italy and the western part of the Roman state. Disagreement between Antony and Octavian led to the defeat of the former. Antony fled to Egypt and, when he heard of Octavian's advance, committed suicide, dying in Cleopatra's arms. The beautiful queen of Egypt took poison when she found that her charms had no effect on Octavian. After completing the conquest of the East, Octavian returned to Rome, where he was given the title of *Augustus* and the office of *Princeps*. He was called *Imperator*. *Augustus* signified dignity, *Princeps* meant first ruler, and *Imperator* indicated "victorious general."

Character of the Empire. The government established by Octavian was not entirely revolutionary. He did not openly disturb the power of the Senate but voluntarily gave it authority. The Senate, mindful of past experiences in their inability to maintain order, delegated to Octavian the command of the army, the control of the frontier provinces, and the power of a tribune. The new government was a dual concentration of power in the hands of the Senate and the Princeps, who was in practice the emperor. Carefully and consistently, Octavian established the power of the new office. Not only did he take steps to establish his power constitutionally, but also on the firmer foundation of myth and sacrificial customs that were accepted by society. Tradition established the divine ancestry of the Princeps, glorified by Vergil as an object of veneration and bringer of salvation.

Octavian was clever in not openly antagonizing the supporters of the republic by its immediate destruction. He always showed the Senate the greatest respect, but in practice his powers were readily upheld by the Senate until he became an absolute emperor. Octavian concentrated his attention on the army, brought into service the inhabitants of the provinces, and increased the number

of soldiers to 225,000. He took care in appointing governors of provinces and held them responsible for the safety and prosperity of the territory. The finances of the state were reformed, and competent men were put in charge of the treasury. Taxes were not reduced, but the fairness with which they were levied and collected removed many of the complaints that had been made under the republic. In addition to a careful reorganization of the political and economic orders of the state, art and culture were encouraged. The Augustan age is commonly referred to as the golden age of Roman culture.

The Empire. For almost two centuries Rome lived in comparative peace under the monarchy. Not all the successors of Octavian were good rulers, but the system established was strong enough to endure the inefficiency of a few poor rulers. Although space does not permit the discussion of each emperor, there are significant steps in the political evolution of the Roman Empire that should be mentioned.[1] The last vestige of the people's control of the government gradually disappeared, while the emperor assumed more and more the role of an Oriental despot. He became the fountain of all authority. He appointed all the officers, dictated the laws, and directed the collection of taxes.

The peoples of western Europe were really not temperamentally suited for such a government. Evidences of dissension appeared and unrest soon became evident. There was a steady decline in farming because of the Oriental system of confining land ownership to the state, dominated by only a few people. The confiscation of the small farms by the state was one of the leading economic causes for the fall of Rome. There was a conspicuous decline in the efficiency of the army at a time when it was needed badly to maintain order at home and to keep the barbarians from crossing the frontier.

Diocletian (284–305) made a valiant and momentarily successful effort to restore the Roman Empire to its former glory. He established an absolutism based upon religious practices and upon

[1] Some of the outstanding Roman emperors were Augustus (d. 14), a great organizer; Claudius (41–54), known as a wise and judicious ruler; Vespasian (69–79), a great organizer; Trajan (98–117) and Hadrian (117–138), great soldiers; and Marcus Aurelius (161–180), the philosopher. There were some notoriously poor rulers: Caligula (37–41), who made his horse consul; Nero (54–68), who supposedly burned Rome, and Commodus (182–192), known as "the Listless."

the power of the army—a religious and military discipline reaching from the emperor down to the lowest officer in the state. Diocletian, posing as an Oriental sun-god, was named officially the "Invincible Sun." Law became the decree of a sacred sovereign. The East was a more appropriate setting for this kind of despotism. Consequently, Diocletian spent most of his time at Nicomedia. A co-ruler was appointed to rule in the West, with Rome as the center, but his orders came direct from Nicomedia.

Constantine (323–337) completed the work of Diocletian and developed a full-fledged Oriental monarchy. Different parts of the empire were governed by prefects, responsible to the emperor. Constantine accepted Christianity and bore the title "equal to the Apostles." He presided over church councils and tried to compel obedience to their decisions. Revolutionary changes were made in many of the traditional Roman customs. The army was reorganized on the model of Persia, which resulted in the abolishment of the Praetorian Guard (312) and in the disappearance of the old legions. The new capital of the empire was transferred to Constantinople (330), built on the ancient site of Byzantium. Greek and Oriental customs predominated and everything Roman was pushed into the background. In the course of these developments, the Roman Empire as a unit disintegrated until in 476, the last emperor of the West was deposed. Odoacer, a German, became the titular head of the government in Italy. A basic change had taken place not only in the government but also in the character of the people. The Visigoths, Ostrogoths, Suevi, and Burgundians were living on the lands that extend from Macedonia to Spain. Franks and Saxons overran the territory farther north.

Justinian (527–565), emperor of the Byzantine Empire, succeeded in reuniting the east and the west under one rule. He built fortifications to defend the frontiers and divided the territory into provinces over which a military man ruled. Justinian reformed the administration of the empire and did away with much of the corruption and inefficiency that had become prevalent. He rebuilt cities and constructed aqueducts, baths, theaters, churches, and museums. The return of glory to the Roman Empire was short-lived. When Justinian died, the treasury was empty and internal disorder arose. Barbarian invasions then were renewed and control

over the western part of the empire slipped away completely from Constantinople.

Roman Law. The most outstanding intellectual contribution of the Romans was the formation of a body of law that became an instrument of justice, based not entirely upon custom, but upon reason as well. Roman law can be traced to the ancient kings and to customs of the family and the gens. Much of the early law was interpreted by priests, and it was not until the 5th century B.C. that pressure was exerted to make changes. The Twelve Tables (*ca.* 450 B.C.), a compilation from a variety of sources, was produced, in order to keep abreast of changing economic conditions. Commercial transactions were legalized, and the traditional right of an injured party was displaced by a right to collect damages. Significant was the provision that established among the citizens equality before the law. Changes in law were accomplished more by interpretation than by legislation. The oral legal tradition persisted and made possible the development of law under changing conditions. Trained jurists interpreted the laws. They took no pay for their services, but expected to gain reputation that would help to advance them in public life. Roman jurists, such as Paetus, Paulus, Ulpian, and Papinian, contributed much to the development of Roman law. They modernized old laws, emphasized the importance of high ethical standards in legal procedure, and applied the Stoic conception of natural law. The person before whom a case was tried was called a *praetor*. Each *praetor*, at the beginning of his term of office, issued an edict explaining the principles that he expected to follow in cases to be brought before him. Under this procedure, Roman law was permitted to develop and to improve. There were two *praetors*, one to take charge of suits between Roman citizens—the *praetor urbanus*—and one to take charge of suits between aliens—the *praetor peregrinus*. Justice was rendered in accordance with the customs of the people who were parties to the suit.

Roman civil law, dealing with persons, things, and actions, became a fundamental element in Occidental cultural tradition. The legal concept of a corporation originated in the Roman law of personality. The law of things classified the various types of property; that is, sacred property, common property, and private property. Furthermore, the law of things classified and validated

the means of legally acquiring ownership. Under the *jus civilis*, this could be done in three ways: (1) by formal sale in the presence of witnesses; (2) by a magistrate's order of transfer; and (3) by use, one year for movables and two for immovables.

The law of contract was one of the most distinctive elements of Roman law. The contract was defined as a legal form that made enforceable the promises of individuals. Three acts were involved in a contractual relationship: (1) the offer, (2) the acceptance, and (3) the performance. The lasting importance of this phase of Roman law was to standardize transactions including property and labor by making commitments of individuals legally binding.

By 176 B.C., a new praetorian law, called the *jus gentium*, or law for noncitizens, was evolved. In time, this was fused into a new synthesis with the *jus civile*, embodying the practices of many foreigners. Equity and humanity were important characteristics. Deliberate efforts were made by the praetors to fit the law to the case, rather than the case to the law.

Attempts at codification of Roman law were well under way by the 4th century A.D. Many legal principles were borrowed from the *jus naturale* (natural law), thus humanizing the law into "what a man of common sense and good faith would deem to be right." The Theodosian Code (438) was an attempt to incorporate into Roman law the ideas of Christianity and some of the German concepts.

The development of Roman law culminated in the *Corpus Juris Civilis* of Justinian (534). Justinian saw the need for reform in Roman law. Many of the old laws had become obsolete and were filled with obscurities and contradictions. He appointed a commission composed of 10 men under the direction of Tribonian, a learned lawyer and statesman, to complete the task. This compilation was divided into four parts. The Code contained the imperial ordinances or statute law then in force. The Digest, or the Pandects, contained the opinions of the jurisconsuls—the quintessence of Roman legal opinion. The Institutes included a critical analysis of law and was intended as a textbook for law students. The Novels provided for modifications of and additions to the Code. The Corpus Juris Civilis furnished a fine source for the study of Roman law and served as a model for later civil and canon law.

It would be difficult to overestimate the importance of Roman

law in the development of legal procedure. It provided the basic principle for the law in all Romance countries during the Middle Ages. Canon law, the law of the Roman Catholic Church, can be traced to Roman law. Its influence is apparent in the legal framework of modern European countries. One of the most distinctive achievements was the most complete elaboration of the rights of private property found in any legal system before modern times. In Roman law, there is even a conception of popular sovereignty, that served as a powerful impulse to a subsequent development of representative government.

3. ECONOMIC DEVELOPMENTS

Agriculture. Throughout their history, the basic occupation of the Romans was agriculture. After the Roman conquests, an important change took place in the ownership and distribution of land. Much of the conquered territory became state property (*ager publicus*). The small middle-class landholders could not compete with the large landholders. They were forced to give up their property to large landholders who stood in good favor with the government. There was a constant decrease in the number of small farmers and a continual growth in the size of the landless class. Roman provinces furnished grain to Rome cheaper than it could be produced at home. As a result, agriculture in the Italian peninsula suffered. Victims of these circumstances, the destitute farmers sought refuge in the cities. Land ownership passed into the hands of the wealthy, and the work that was done on the land was performed by slaves imported from the East. Many of the nobles of the old senatorial class, having been deprived of their political positions, took up their residences on great estates or in villas. Farming was not an occupation with these people. They lived on the wealth that they had accumulated from other sources. The agricultural system of the West had become orientalized.

Agricultural Methods. The Romans made few contributions to agricultural methods, but what was known they spread throughout their provinces. They used crude plows, harvested with sickles, and trampled out grain on threshing floors. They practiced crop rotation, grew leguminous plants, and used artificial fertilizers. They grew barley, beans, millet, and wheat. They kept orchards and grew grapes, figs, and olives. They raised cattle primarily for

draft purposes but they also used horses, asses, and goats. They raised sheep, hogs, and fowl for meat. Taken as a whole, the Romans advanced about as far in agricultural methods as any other people did before the time of the Industrial Revolution.

Industry and Commerce. Trade developed much more slowly in the western part of the Roman Empire than it did in the eastern. However, the people of Italy did export glazed pottery, wine, olive oil, lumber, and metals. They imported manufactured goods, grain dyes, precious stones, tapestries, glassware, linen, cotton, pearls, incense, cosmetics, and spices, from the Black Sea region, Anatolia, Syria, India, Arabia, and Egypt. After the conquest of Gaul and Britain, linen cloth, iron, hides, wool, slate, meat, cheese, and tin were imported. In order to take care of this flow of merchandise, the port of Ostia, at the mouth of the Tiber River, was improved. Puteoli, on the bay of Naples, also became a manufacturing city and port. Many of the merchant ships were privately owned, but under the empire the government subsidized shipping.

Most of the industrial work was done by slaves, only farming being considered a respectable occupation. There was little freedom in industrial enterprises, as the government frowned upon anyone, other than the aristocracy, who acquired too much wealth. There was a general exclusion of business people from politics and of politicians from business enterprises. Adequate commercial banking facilities were lacking. Nearly everyone's wealth was measured in terms of land. Coined money was scarce. It has been estimated that one of the large banks in New York City has a larger volume of business than that of the Roman Empire, even at the time of its greatest prosperity. Coinage by the Romans dates from 366 B.C. They had a bimetallic system of bronze and silver coined at a ratio of about 120 to 1. Later, gold was coined with silver at a ratio of 16⅔ to 1. There was a great deal of trouble in keeping the metals in the proper ratio. Some of the emperors debased coinage freely. As trade increased, speculation and gambling became prevalent, reaching considerable proportions late in the republic. The Temple of Janus was a veritable Wall Street in ancient Rome.

Crafts. In Roman times, there were many different crafts besides agriculture. Butchers, bakers, smiths, tanners, dyers, masons, musicians, and barbers were common. Craft associations existed, but they were essentially for social and religious, rather than

industrial, purposes. The *collegia*, organized about 200 B.C., were made up of men working at the same trade. They were strictly regulated under the empire. Members were expected to give the government certain services gratis. They were expected to collect government taxes from guild members, to carry grain from the provinces free of charge, and to furnish many articles to government officials at cost. The government ultimately insisted upon appointing the officers of the *collegia* and controlling the finances. This weakened the artisan class and furnished an important cause for the "decline and fall" of Rome.

Rome provided a medium for the bringing together of agricultural and industrial progress of the civilized people of that time. Eastern agricultural products and methods were transferred to the Mediterranean basin and western Europe. In much the same way, eastern industrial technique was brought into southern Europe. On the basis of knowledge brought from the Near East, Gaul produced beautiful pottery and fine fabrics. Glassmaking was introduced into Italy and from there to the Rhine Valley. Rome was responsible for introducing ironworking techniques that produced a new age. Foundations for feudal economy during the Middle Ages can be traced to Roman methods of economic organization; and the Roman law of property and persons was interwoven, at a much later date, into modern capitalism.

Social Conditions. Under the republic, social supremacy was held by an agrarian nobility, or landed aristocracy. They looked down upon businessmen and their profession. The equestrian order, a ranking social group, was made up of plebeians who had property worth $16,000 or more. The overthrow of the republic and the establishment of the empire led to many changes in the social order. Membership in social groups was determined by the amount of wealth that one possessed. The wealthy disassociated themselves from public responsibilities and lived in luxury. Games, gladiatorial combats, and chariot races were staged for their amusement. Living in luxurious surroundings, they ate and drank to excess in many cases. In contrast, the condition of the masses was deplorable.

Wages, on the average, seem to have been sufficient, but not very many people had employment. Most of the people lived in very undesirable homes. They did not have adequate food and

were without police protection. The poor people living in the country districts were no more fortunate. Slavery pushed the freemen into privation. The condition of a poor gardener is described by Apuleius.[1]

> My master was so very poor that he provided no straw nor even the least covering either for me or himself but lived contentedly under the shelter of a booth of leafy boughs. . . . My master and myself had exactly the same fare for supper and very scanty it was. It consisted of those ancient and unsavory lettuces which, when old age comes upom them and they have run to seed, grow so unreasonably tall that they look like brooms, while their fibers rot and are filled with a bitter muddy juice.

The government undertook to care for the unfortunates through charity, but this became so indiscriminate that it destroyed the initiative of the people. Under Augustus, there were about 200,000 such people receiving free bread; under Marcus Aurelius, there were over 300,000. The middle class was crushed in an effort to support the unemployed. This was one of the basic causes for the decay of the Roman state.

4. THE ARTS

General Characteristics of Roman Art. Early Roman art shows distinctly Greek influence. The Romans were not ashamed of this; in fact, they boasted about it. Some of the finest of the Roman buildings were designed by Greeks, and Roman sculpture was very similar to the Greek. However, with all their adoptions and imitations, there was something distinctive about Roman art. Since the Roman was practical and utilitarian in his artistic work, the idea of service was as prevalent as that of beauty. Ornamental features were not an integral part of the building structures but were applied by way of a finishing touch. Imitation columns and arches were used to produce ornate effects. Roads, aqueducts, bridges, public bathhouses, and palaces figured much more prominently than shrines and temples. In sculpture, the Romans aimed at the immortalization of individuals rather than the perfection of a type produced purely for the sake of art or beauty. Historical subjects were used by the painters for the commemora-

[1] His book, *The Golden Ass*, was written in the 2d century of the Christian Era. Parts of it are the sayings of a man in the outward guise of a donkey, describing conditions under which the people lived.

tion of deeds or for political propaganda. It was in architecture that the Romans made their most original contribution. The use of arches and vaults made possible larger and more spacious buildings. Roman basilicas were used as models for the early Christian churches, and the vaulted building was a forerunner of the Gothic cathedral.

Architecture. Not a great deal is known about early Roman architecture. Ancient Rome has not been excavated completely;

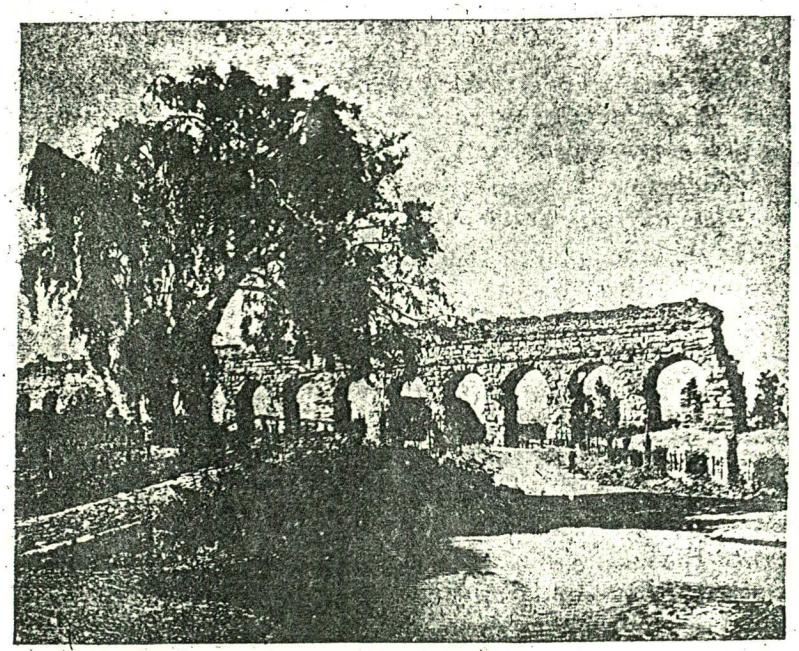


FIG. 21.—Roman aqueduct. (*Courtesy, Metropolitan Museum of Art, New York.*)

Pompeii, as well as other cities, is still being unearthed. Near the end of the republic and continuing into the empire, a great building boom developed in Rome. Temples, theaters, fine public buildings, baths, and homes were built in large numbers. Pompey's theater (55 B.C.) was a magnificent structure. The first floor was decorated in Etruscan style, with half columns; the second floor was of the Ionian order, and the third was adorned with Corinthian columns. Julius built the first imperial forum, a complete marble structure in Greek style, with the Temple of Venus in the center. Augustus erected the first imperial palace on the Palatine, one of

the seven hills of Rome. Vespasian built the Colosseum, which in many respects typifies Roman architecture. It is a combination of the arch and lintel systems, the arch being the vital part of the construction, with columns and entablatures serving only for deco-

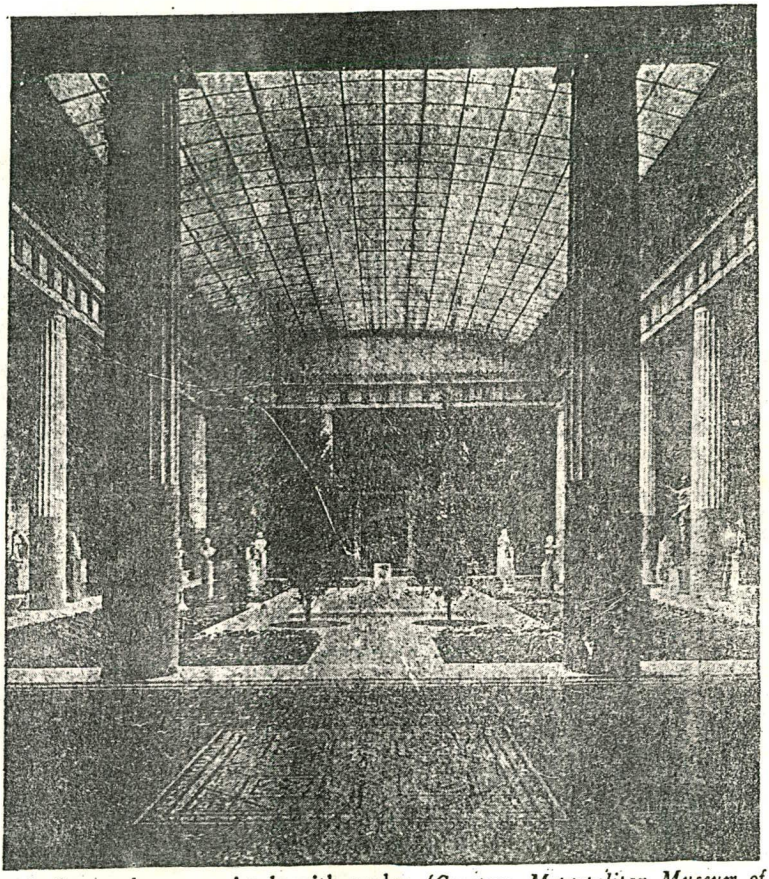


FIG. 22.—Roman house, peristyle with garden. (*Courtesy, Metropolitan Museum of Art, New York.*)

ration. This combination gives structural solidarity, impressive dignity, and elegant magnificence.

The triumphal arch of Titus, one of the most beautiful of many similar memorials, was the most lavish of Roman constructions meant to serve as decorative monuments. Plain, massive, and impressive, it fulfills the dignified function for which it was intended—to commemorate a victory. The bas-reliefs upon it are

among the best examples of Roman historic relief sculpture. The Forum of Trajan was designed by the architect Apollodorus. He built the first hot-spring bath in Rome and a bridge over the Danube, which was considered a miracle of architectual skill. One of the best preserved and most famous of Roman buildings is the Pantheon (completed in 124). It is a huge, almost drum-shaped structure, with walls 20 feet thick, upon which rests a dome 142 feet in diameter, reaching a height of 142 feet. A gabled and colonnaded portico of Greek design extends across the front of the building.

Christianity gave a new impetus to Roman architecture. The basilica was altered sufficiently to accommodate an altar and a Holy of Holies. St. Peter's Church in Rome, St. Sophia in Constantinople, and a similar structure in Jerusalem were examples of a new architecture, which was to dominate the later period.

Sculpture. The Romans showed some originality in sculpture and in bas-reliefs. The "Unknown Roman," belonging to the period of the republic, is one of the best known examples. The subject is presented in a lifelike manner, with keen eyes, sparse hair, and sagging skin beneath the chin. The head of a Roman youth (*ca.* 100) is a good example of Roman sculpture at its best. Much of the original quality in sculpture was lost during the empire. Portrait heads were placed upon bodies that were intended to represent Greek gods, and the result was not very satisfying. Claudius, for example, was depicted as Jupiter. One striking exception should be noted in the equestrian statue of Marcus Aurelius, which is a fine and dignified memorial. The bas-relief is more representative of Roman skill than is the statue. The frieze on the Pantheon and the triumphal procession on the arch of Titus are lifelike, natural, and mobile. Another fine example of bas-relief is that which spirals around the column of Trajan, where two whole campaigns of the Emperor are depicted.

Painting. Most of the Roman paintings have disappeared. The best of the surviving murals are found in Pompeii. Those dealing with mythological subjects show a Greek influence, but the nature studies appear to be original. In the landscape paintings, the artist shows skill in producing perspective, the linear perspective being almost correct; in some cases, aerial perspective is attained. In this respect, Roman painting was further advanced

than anything that the Greeks produced. Painting seems to have died out as an art by 200. Pliny spoke of it as a dying art, but it was revived through Christian influence in church frescoes, in the



FIG. 23.—Head of Roman youth (A.D. 100). (*Courtesy, University of Pennsylvania Museum.*)

illumination of Bibles, and in biographies of the saints. This phase, however, belongs to a later period.

5. RELIGION AND PHILOSOPHY

a. RELIGION

Household Spirits. The religion of the primitive Italian tribes was comparatively free from outside influence. Family deities were the most conspicuous. The perpetuation of the family was

all-important, and the spirits that guarded the home were the most revered. Every home had its guardian spirit, called Janus; the hearth was guarded by Vesta. Reproduction was considered a divine dispensation. Genius was believed to be the spirit personifying man's virility, while Juno controlled woman's power to conceive. Saturmes, Pomona, Ceres, and Pales were agricultural deities, presiding over crops and husbandry. A special ritual was employed for the worship of each. All these spirits were worshiped with simple ceremonies presided over by the father of the family.

Early State Religions. The development of city-states led to the worship of gods to protect them. Mars, the god of war, and Jupiter, the Roman version of Zeus, appeared early and continued to be important for a long time. A high priest appeared to guide the form of worship, but he did not supersede the father of the family as an important figure. The worship of the state gods was looked upon as a formal civic affair, not as anything directly affecting the individual. When the Etruscans invaded Rome, they brought a type of state religion with them. Minerva, Diana, and other gods were introduced, and a college of priests was established with a Pontifex Maximus at the head. Temples were built and images were placed in them. This system was brought to a rather abrupt close when the Roman soldiers returned from the East with other ideas about religion.

Mysteries. Mysticism played an important part in Roman religion. Some of the early festivals were primitive. During Lupercalia the worshipers smeared themselves with goat's blood and danced through the streets striking women with bits of skin, to make them fertile. The Saturnalia was celebrated from Dec. 17 to Dec. 23, with the giving of gifts, with dancing, and with the lighting of candles. One of the most important of the mysteries introduced from the East was the cult of Cybele, "the great mother of the gods." The festivals held in her honor were incredibly cruel. Altars were erected under sacred trees, about which people danced in frenzy to the accompaniment of drums, flutes, and cymbals, seeking thereby their salvation. They mutilated their bodies, tore off their clothing, and, when exhausted, fell to the ground bleeding—in some cases, mortally wounded. Other mysteries introduced from the East were those of Tammuz, Attis, Dionysus, Orpheus, and Osiris. There was a certain amount of bloodshed and self-

mutilation in the performance of most of these mysteries. The aim in the performances was the dramatic presentation of the career of the god, stressing his submission to death, his triumph over it, and his ascent to everlasting life. The worshipers thought that they could be delivered from evil and be assured of everlasting life by taking part in these ceremonies.

Mithraism, an offshoot from Zoroastrianism, gradually superseded the cults mentioned above. Mithra—a divine hero, a champion of the sun-god in the struggle against darkness—was believed to have given life to the soil by slaying a sacred bull and allowing the blood to cover the earth. The worshiper of this cult was expected to eat flesh and drink the blood of a sacrificed animal, that would give to the partaker the immortality of Mithra. The cult of Mithraism had some ethical content, and curtailed most of the orgiastic practices of the earlier mysteries. It was one of the chief rivals of Christianity in the eastern part of the empire until the 2d century. The naming of the days of the week after planets and the celebration of Dec. 25 as the birthday of the Savior God were derived from practices adopted from Mithraism.

Gnosticism. In the great confusion of religious beliefs in Rome there appeared a practice called Gnosticism. It was a combination of religious, astrological, and philosophical concepts that reached a peak in the 2d century of the Christian Era. There were over 30 separate Gnostic systems created by men of learning who claimed divine inspiration. Each had its own priests and secret initiations into the order. The two most basic beliefs of most Gnostics were (1) salvation can be won only through a special knowledge, and (2) matter, as opposed to spirit, is fundamentally evil. The attainment of knowledge for salvation could be acquired only through performing rituals and practicing magic. Knowledge could not be won by unaided reason, but was a "gift of the spirit." The adherents were drawn chiefly from the poor classes of the cities in the eastern part of the Roman Empire. They bitterly attacked Christianity. One group denounced Christ as a devil.

The Imperial Cult. Augustus Caesar borrowed from the East the idea of a ruler posing as a god. The Greek philosophers had recognized in man a spark of divinity and it was easy to show that, since rulers were far superior to ordinary men, they possessed divinity. The imperial cult was a form of patriotism and religious

festivals were held in honor of the emperor, an imperial god, to whom all were to pay homage. Augustus Caesar let the people believe that he had been born in heaven and had been sent to save the earth from destruction. The successors of Augustus followed his plan. Diocletian (284–305) posed as a sun-god. There were two important sources of opposition to this practice: the Cynic philosophers, who taught that common sense was the only road to salvation and who ridiculed the emperors for posing as immortals, and the Christians, who openly refused to worship the emperor. As their number and influences grew, the imperial cult weakened.

Christianity in the Roman Empire. There were many developments within the Roman Empire that ultimately produced weaknesses. Within the cities, the great cosmopolitan centers of the empire, were many people belonging to all ranks of life who did not follow the traditional Roman point of view. They readily accepted new philosophies, because of economic and social insecurity. By the 2d century A.D., the attitude of a pessimistic outlook on life permeated all classes. The brilliance of the imperialistic age had faded and the government tried to cover an apparent weakness by means of repressive measures. The result was a growing practice on the part of the suppressed to seek satisfaction in promises of another world—a heavenly city. Signs of this can be traced to Stoicism, Epicureanism, and Cynicism. The spread of many mystic cults in the Roman Empire indicated a prevailing belief that the goal of life was salvation in a land beyond the power of the human mind to conceive. Only the dispensation of an all-powerful God could assure men of the attainment of this goal. Even in the realm of philosophy, religious feeling began to supplant reason. By the 3d century A.D., learning showed signs of stagnation, and religion, which appealed to all the faculties of mind and heart, gained general predominance. The fertile seeds of Christianity were sown in this soil.

The Hebrew background of Christianity has been discussed, but the inspiring part of the story is found in the life and teachings of Jesus. The historian must confine his observations to the human aspects of Christianity, as faith has a divine foundation that cannot be studied by means of man-made documents. The new belief possessed the dynamics of a religion of salvation.

The Earthly Career of Jesus. As a boy, Jesus experienced the

unsettled conditions and the hardships of his people. He sensed the suffering of his fellow men, and was profoundly impressed. He was greatly influenced by John the Baptist, who taught the need for repentance, spiritual cleanliness, and the promise of a great leader to inspire the world. The execution of John the Baptist, at the command of King Herod, inspired Jesus to continue his work. He met with grave difficulties. Herod suspected him and the Pharisees denounced him as a "false prophet." He spent some time wandering in the hill country, where he preached to those who would listen—to the fishermen on the Sea of Galilee, to the rich, and to the publicans and sinners. Few who heard him could resist his eloquence and logic. His disciples, especially Peter, soon recognized Jesus as the Messiah. He accepted this commission and returned to Jerusalem at the Passover. The priests at the Temple refused to recognize him as the Messiah, and the Sanhedrin ordered his arrest. He was turned over to Pilate, the Roman procurator, for judgment. He was put to death, but he died only to come to life again.

The Teachings of Jesus. The known sayings of Jesus, although they are fragmentary, indicate that he brought a message of brotherly love to the inhabitants of a cruel world. The idea is best expressed in his Sermon on the Mount, somewhat as follows: Blessed are you who are poor, for the Kingdom of God is yours! Blessed are you who are hungry now, for you will be satisfied! Blessed are you who weep, for you will laugh! . . . Alas for you who have plenty to eat now, for you will be hungry! . . . Alas for you when everyone speaks well of you, for that is the way their forefathers treated false prophets! . . . His program was simple; he did not subscribe to elaborate ritual. He taught that men should serve one another and that, by so doing, they would serve God. The interpretation of the Kingdom of Heaven was a complete inversion of the accepted social order that imposed hardships on the lowly and the weak.

Peter became the leader of a small group of followers of Jesus who remained in Jerusalem. They prepared themselves for the "Second Coming" and performed a ceremonial initiation to their group, which was called *baptism.* In addition, the select members made their evening meal a ceremonial repast, which provided communion with their "Savior." Only a small number of Jews

joined, and the group remained small for some time. Many of the Jews who lived in various other places in the Roman Empire were more attracted to Christianity than were the inhabitants of Jerusalem. Paul of Tarsus (d. *ca.* A.D. 67) was largely responsible for the admission of Gentiles into Christian ranks. Paul established churches in the most important cities of the empire, wrote letters explaining the doctrine of this religion, and preached the universality of Christianity. Paul's interpretation of Christianity gave



Centers of Christianity *ca.* 100. (*Courtesy, E. R. Turner, Great Cultural Traditions.*)

it dynamic force. He believed that flesh warred against the spirit and prevented it from achieving perfection. For a solution, he proposed a dualistic conception of human nature: the spirit and the flesh. The deliverance of the spirit from the evils of the flesh he found in the acceptance of Christ. Paul regarded Christianity as a religion of redemption and Jesus as the Saviour and the Redeemer. The teachings of Christianity had a tremendous appeal. To the disillusioned, the weak, and the suppressed, of whom there were many in the Roman Empire, the simple summons, "Come unto Me all ye that labor and are heavy laden," were strongly appealing.

Christians as Missionaries. The early Christians not only were converts to a new cause, but also were convinced of a mission to carry the gospel to all men. Paul, the greatest of the early missionaries, established churches at Antioch, Ephesus, Corinth, Athens, and Philippi. Slaves and poor free laborers comprised a large percentage of the converts. The most despised classes of the Roman Empire were among the most enthusiastic members of the new cult. Communication, which the Roman Empire provided, made the spread of the message easy and provided an element of unity for classes supporting Christianity.

The Persecutions. Officially, the early Roman Empire accepted Christianity as only another religion, of which there were many, and gave very little attention to it; but the inauguration of emperor worship changed the attitude of the government toward the Christians for political reasons. They refused to bow before the emperor as a god, and thus became revolutionaries. There were, of course, other reasons for persecuting them. The Jews were unpopular because they were nonconformists and early Christians and Jews were regarded by many Roman officials as the same. In the eyes of the Romans, the Christians often behaved strangely. They refused to hold public offices, they hated idols, they considered marriage to be regrettable, they condemned luxuries, and held secret meetings. In response to popular antagonism, the Roman government punished Christians. Trajan made the refusal to pay homage to the emperor a criminal offense, punishable with death; and Marcus Aurelius ordered the Christians persecuted because he felt that it was a civic duty. In 248, the Christians refused to take part in the anniversary of the founding of Rome. As a result, the emperor ordered every person to appear before a magistrate and offer sacrifice to Roman gods. This the Christians refused to do and, as a result, thousands were executed.

In spite of these stern measures, the Christians became more outspoken in the glorification of their religion and in the criticism of the social order. Diocletian, as a part of his reform measures, purged the army of Christians; he ordered the burning of their churches, their removal from public office, and the prohibition of the freeing of Christian slaves. This cruel fate was accepted without complaint. In fact, it was glorified. "Let no one think of death, but of immortality; of temporary punishment, but of eternal joy" was their

cry of exultation. The blood of the martyrs became the seed of the church.

Christianity Legalized. The Christians could not be exterminated through persecutions. They gained in numbers and many Romans in the upper social order were converted. The Roman Empire was on the decline, and this reduced emperor worship; besides, the old pagan gods were often regarded as obsolete. The Emperor Galerius (305–311), beset with political misfortune and a fatal disease, issued the edict of toleration (311). Constantine (306–337), grateful for a victory won under the banner of Christ, by the terms of the Edict of Milan (313) granted to the Christians liberty of worship, removal of legal disabilities, and the restitution of property. Under Theodosius I (379–395), Christianity became the only religion recognized by the state.

b. PHILOSOPHY

Early Roman Philosophy: Cato. The Romans made few contributions in philosophy; but they were students and interpreters of Greek philosophy, which in its original form was too theoretical for the practical-minded Roman. Cato (234–149 B.C.), sometimes called the Socrates of the West, opposed what he called Roman subjection to Greek culture and advocated the retention of the simplicity, the manner, and the vigor of Latin forefathers. He even objected to the teaching of Greek in the public schools and insisted that Roman culture, not Greek, should dominate the civilized world. Like Socrates, he was a devotee of reason, enlightenment, and moral discipline. "Right conduct is advantageous conduct conducive to happiness, and only piety and virtue are conducive to happiness." Cato's opinion was exceptional; his efforts were futile, for Greek culture practically conquered Rome.

Stoicism and Epicureanism. Of all the Greek philosophies, Stoicism was the best fitted for the Roman temperament. Panaetius of Rhodes (180–110 B.C.) brought it to Rome and taught it to the people. He condemned myths and advocated monotheism. Man, he contended, should improve himself rationally and morally, become a servant of the state and thus acquire happiness. Salvation could be acquired through the fulfillment of patriotic duties; happiness would come from serving the state. Epicureanism, sponsored by Lucretius (95–55 B.C.), was also generally accepted in Rome.

Lucretius ridiculed superstitions, the worship of gods, and the fear of death. To him nature was a marvelous mechanism dominated by natural law and worthy of being worshiped. Science and rationalism were his gods; he believed they were capable of conquering fear, which he considered more dangerous than death itself. In contrast to the Stoics, the Epicureans had no faith in civic virtue or in the struggle for liberty, which they considered to be a catchword, utilized for selfish purposes in the struggle for power. Stoicism was more acceptable to the ruling class than was Epicureanism, but as the authority of the government weakened, Epicureanism gained in popularity.

Other Philosophies. There were many forms of philosophy in Rome, most of them Greek in origin. Cicero (106–43 B.C.) started his career as a politician, but with the failure of his political plans he took solace in philosophy. He compiled a philosophical encyclopedia, which contained little that was not already known but which served as the standard philosophical work in the Latin language and transmitted to later generations much of the earlier philosophies that otherwise would have been lost. Seneca (4 B.C.–65) was one of the greatest of the Roman philosophers. A man of the world—versatile, clever, and passionate—he was essentially a Stoic, a believer in Rome's destiny. All men, in his estimation, were naturally equal; rich and poor must fight the fight that is called life; and to succeed, one must follow his better nature. He prescribed a close watch on passions, submission to universal law, and service to mankind.

Marcus Aurelius Antoninus (121–180) must have been the emperor of Seneca's dreams, a ruler of wisdom, mercy, benevolence, and strength. He believed God had chosen him to rule mankind and, as an individual, he was carrying out the will of divine providence for the good of the whole community. His little book, *Meditations*, has preserved for us the keynote of his interpretation of Stoic philosophy and its place in Roman civilization.

6. LITERATURE AND LEARNING

Importance of Latin. The Latin language stands high in the long list of Roman contributions to civilization. Here is found a combination of the practical Roman and the idealistic Greek conceptions, which produced a usable language and formed the basis

of many modern forms of speech. The native sons of Latium saw the superiority of the Greek language and proceeded to use its style in formulating their own. They had their own native legends, but these were superseded or altered by Greek influence. Although Latin playwrights copied the form of the comedies of Menander and the epics of Homer, the language they used was not purely Greek but a new language, Latin.

Before the fall of Rome, Latin became the accepted language of much of the civilized world. It was the medium of expression of the Roman Catholic Church and was used in the writings of churchmen, such as Augustine, Bede, Abelard, and Erasmus. For centuries after the fall of Rome, Latin was the official language of most of the western states (state documents as late as Queen Elizabeth's time were written in Latin); and it was also the accepted medium of expression used by scholars, such as Bacon, Harvey, and Newton.

Latin in its classical form was difficult to use. From necessity or laxity, the vocabulary was changed to make it usable. Consonants were pronounced differently; vowel quantities gradually disappeared, and verb structure became analytic rather than synthetic. This later form, with the addition of some expressions and uses brought in by the Germanic invaders, developed into the Romance languages. The Latin influence is discernible in the English and Germanic languages, and while it is not so significant there as in the Romance group, more than half of the common words in English are of Latin origin.

a. Literature

History. The first history, in the modern sense of the word, was written by the Romans. Julius Caesar (d. 44 B.C.) has the distinction not only of making history, but also of writing it. His *Gallic Wars*, because of its simplicity and its style, is still widely read. Much of our knowledge of the North Roman provinces has been obtained from this book. His *Civil War* gives a vivid picture of the internal affairs of Rome during the life of the author. Much more impersonal and objective than the writings of Caesar are those of Sallust (86–34 B.C.), a scholar who resorted to documentary sources for his information. The history of the conspiracy of Catiline and the war with Jugurtha are standard works. Livy (59

B.C.–17) was the greatest of the Roman historians. His *History of Rome*, not quite completed when he died, is acclaimed as one of the great chronicles. He deplored the lack of dependable information concerning the early history of Rome and studiously sought to remedy the defect. He chose his evidence and wrote down his conclusions in a clear, vivid style. Livy viewed his time with misgivings. "Our vices have attained such height of enormity that we can neither endure the burden of them nor the sharpness necessary to correct them." No list of Roman historians would be complete without mention of Tacitus (*ca.* 55–120). His *Germania* is almost the only dependable contemporary written account of the early German people that has been preserved.

The Epic; Vergil. Vergil (70–19 B.C.) has been awarded the title of the most splendid "voice of Rome." Dante said of him, "O courteous Mantuan spirit; whose fame still lasts in the world, and will last as long as time." He created epic poetry worthy of any civilization. He perfected the use of the Greek hexameter in the Latin language, which Tennyson called "the stateliest measure ever molded by lips of man." He copied the Greek method in some of his work, but he had distinctly Roman characteristics. His *Bucolics* is a collection of pastoral poems from the north Italian farmlands. Rural life is further described in his *Georgics*, "a song of the husbandry of fields, of cattle, and of trees." His best known work, the one that endeared him to his fellow countrymen, is the *Aeneid*. The myth that Rome was founded by wanderers from Troy forms the skeleton of the story. It begins with the siege of Troy and follows the arduous journey of Aeneas from Troy to Latium. Warfare, adventure, and a stirring romance are skillfully woven together in one of the finest forms of literary epic. It contains a eulogy of the Emperor Augustus, which accounts directly for the fact that the emperor gave specific instructions for its preservation. The destinies of Rome were pictured by Vergil as being guided by an all-wise providence: "God's temple is the earth, the sea, the air, the sky, the pure in heart. Why seek we further? All thou dost see, all thou dost feel is love."

Drama. The Romans leaned more heavily on the Greeks for their drama than for any other of their literary forms. Plautus (254–184 B.C.) and Terence (195–159 B.C.), the most popular of the Roman dramatists, borrowed extensively. Plautus, a great admirer

of Menander, gives the best account of the almost extinct works of that great Greek poet. Terence's works are more finished than those of Plautus, but are even more dependent on the Greek. The legitimate stage made very little progress in Rome over what the Greeks had already accomplished. Roman theatrical productions were often obscene, with dancing girls and noisy bands to enliven the performances. The chief characters were dullards, soothsayers, boobies, and gluttons. Perhaps the Romans were too much interested in gladiatorial combats and chariot races to spend much time on plays.

Philosophic and Lyric Poetry. Several Latin philosophic and lyric poets achieved fame. Lucretius (95–55 B.C.) related Epicurean philosophy in superb poetry:

> "Soon shall thy home greet thee in joy no more,
> Nor faithful wife nor darling children run
> To snatch first kiss, and stir within thy heart
> Sweet thoughts too deep for words. Thou canst no more
> Win wealth by working or defend thine own.
> The pity of it! One fell hour, they say,
> Hath robbed thee of thine every prize in life."

Catullus (87–54 B.C.) was the most human of Latin poets. He was interested in the nature of things, particularly as they affected him. His ladylove Lesbia he adores, abuses, and immortalizes in his writings:

> "Let's live, my Lesbia, and love.
> Let's value not a whit above
> A penny all that dotards gray
> In tones of condemnation say.
> The sun can set, the sun can rise;
> Once let the brief light quit our eyes,
> And we through endless night must keep
> The couch of one unbroken sleep.
>
> . . . . .
>
> I hate yet love: you ask how this may be,
> Who knows? I feel its truth and agony."

Horace (65–8 B.C.) is the best known, the most extensively trans-

lated, and the most frequently quoted of the Latin poets. *To Pyrra* is his most familiar ode. His philosophy of life he expressed as follows:

> "Be wise! Drink free, and in so short a space
> Do not protracted hopes of life embrace:
> Whilst we are talking, envious time doth slide;
> This day's thine own; the next may be denied."

Ovid (43 B.C.–17) has charmed many generations as a storyteller, and has influenced the modern conception of classical mythology in his *Metamorphoses*. He was sincere, vivacious, and imaginative in his writings. His *Art of Love* appealed to the faster set in Rome, but it caused him to spend 10 years in exile.

Prose. Cicero (106–43 B.C.) created a Latin prose that many scholars hold to be a standard of expression. Lovers of high-class prose read and reread his works. His writings have ringing clearness and conviction, on the order of his superbly delivered orations. Petronius, in his works, approached moderm realism; and Apuleius (2d century), in *The Golden Ass*, contributed the charming romance of Cupid and Psyche. Quintilian (35–95) was a teacher and a critic whose influence was far-reaching and in whose writings there is a great amount of information about Latin literature.

b. LEARNING

Education. Formal education developed slowly among the Romans. They did not have a Homer whose works they could commit to memory. The school children, instead, were taught to recite the *Twelve Tables of Law*. The Romans lacked a cultural background, but they possessed an appreciation for culture. Proud Roman fathers sent their children to be instructed by the Greeks whom they had conquered and subjected to slavery. Cato was the first great exponent of Roman pedagogy and the editor of an encyclopedia. He had no use for Greek culture and contended that Romans, not Greeks, should educate the Roman children in agriculture, citizenship, and the art of war. Varro (116–27 B.C.) continued the work of Cato and wrote on the Latin language, Roman life, and religion. He depended largely on Greek knowledge, but wrote and taught in Latin. The preparatory-school subjects were grammar, dialectics, and rhetoric; while geometry, arithmetic,

astronomy, medicine, and architecture were added for more advanced study.

Cicero contributed an ideal of education when he recommended a combination of the theoretical and the practical. In his estimation, the study of civic rights, public speaking, and philosophy would produce a well-trained mind. Enough private schools existed so that the wealthy might send their children to elementary school, to grammar school, and to a school for higher learning. Quintilian was one of the foremost educators of the early empire. He included philosophy and pedagogy as regular subjects, that should be taught in addition to rhetoric, literature, music, mathematics, and gymnastics. Higher education flourished under the patronage of some of the emperors. Hadrian founded the Athenaeum, probably the first liberal-arts college, and Severus provided for the advanced study of rhetoric, grammar, medicine, mathematics, and architecture.

The establishment of Christianity led to the repudiation of heathen culture. Little progress was made in the West until near the close of the Middle Ages, largely because of the combined influence of the barbarian invasions and the domination of cultural activity by the church. The cultural idea of the church was pity and steadfastness in faith, with the hope of serving God and with emphasis on theology rather than on science.

Roman Science. Roman contributions in pure science were very limited. The important advancements made during the period of Roman supremacy came mostly from the parts of the empire where Greek culture, rather than Roman, was dominant. Most of the conclusions reached by Roman scientists were philosophical, and not the result of careful experimentation. Pliny the Elder (29–79) wrote a *Natural History*, which he described as a systematic view of nature; while it was voluminous, it was not very dependable. The Romans borrowed the Etruscan notation system, but it was not developed much above the level of arithmetic and surveying. Simple geometrical principles were used in land surveys and in city planning. Ptolemy (2d century A.D.), a native of Alexandria, developed spherical trigonometry and computed the value of π as 3.1416. He believed that the earth was a fixed sphere with a circumference of about 18,000 miles. Ptolemy made technical use of parallels and meridians in map making. However, it should be

noted that his conclusions differed from the heliocentric theory of the universe held by some earlier scientists. Reform of the calendar on the basis of astronomical learning was a Roman contribution. The solar year of 365 days, with an extra day added every four years, was instituted in 45 B.C.

Medicine. The Roman government accepted responsibility for public health and sanitation. All towns of any importance had public physicians, who received salaries from the state and served the poor without cost. There were medical officers and hospitals for the army. There were several Roman schools of thought in medicine; but the general status of the medical profession was low, being little more than a mixture of Babylonian folk medicine and Egyptian priestly lore. Both diagnosis and therapeutics were formalized by a doctrinaire approach, which resulted in a number of medical sects with independent theories of diseases and schemes of treatment.

Galen (130–200), the greatest physician of Roman times, lived in Pergamum under Greek influence rather than under Roman. He restored the Hippocratic tradition, that had been very generally neglected. The respiratory system, the spinal cord, the heart, and muscles were studied and scientifically explained by Galen. His physiological theory was among the first coherent views of the whole life process, explained in terms of interaction between exterior environment and the human organisms, constituted as a structure of interdependent organs. In the history of medicine this was an outstanding accomplishment.

Engineering and Technology. Buildings, roads, bridges, and aqueducts are surviving monuments of the practical skill of the Romans. However, their scientific knowledge was very limited. Enough concrete knowledge existed for the construction of cranes, mortars, windmills, and heating units for buildings. The ax, the plow, the saw, and the drill were improved. Frontinus (40–103) wrote a pioneer work on engineering.

7. ESTIMATE OF ROMAN CIVILIZATION

"Decline and Fall." The decline of Rome was a gradual and fundamental change, not a sudden and cataclysmic upheaval; even at the height of her glory, in the 2d century, there were evident signs of decay. Rome had outgrown herself; her territorial expanse

was too great to permit unity. The populace had lost its patriotism and pride in the state. This was greatly accentuated by the prevalence of graft and corruption. A state-controlled economy led to gross inefficiency. A comparatively small group was overtaxed in order to feed the masses. Economic activity was stifled; individual initiative was destroyed; and fatalism gripped the minds of the people. Apathy on the part of the rich and discontent on the part of the poor undermined the security of the state. The barbarian invasions, made possible by the internal decay of Rome, marked an end to the tottering structure of the state.

Contributions. Rome "fell" only in the sense that her imperial hegemony ceased to exist. Most of her cultural contributions lived and were fused with other ideas, which formed the basis for new civilizations. The Latin language, Roman political ideals, law, military organization, and engineering were valuable contributions to posterity. The Romans set an example of a world state that still inspires would-be conquerors. In political circles, the absolute primacy of the state was established. In legal doctrine and practice, the individual was assured immunity from illegal invasion of his constitutional rights. In theory, at least, Roman law established the control of the state by popular consent.

One can hardly say that the "fall" of Rome was a calamity. She had made her contributions and had gone as far as could be expected under her system of organization. New blood was needed and a new idealism was necessary to invigorate intellectual activity. The barbarian invasions appeared destructive, but the Germans contributed the necessary impetus for advancement that had been lost by the Romans. While the Romans were not creators of civilization and culture, they did establish order and unity, that made possible an assimilation of ancient cultures into an imperial civilization of Italy. Roman civilization, which had filled a very important place in the development of world culture, passed on to the Middle Ages practical fundamentals in politics, law, religion, and economic life.

IV. EARLY INDIAN CIVILIZATION

Students of Western civilization are inclined to neglect the cultures of the Far East. Although these are remote and isolated from the West, they should not be slighted in the study of world

culture. Some of the reasons why so little knowledge of the East has penetrated to the western world are that the languages are difficult for an Occidental to interpret, many of the regions are inaccessible, and the Oriental point of view is hard for people of the Occident to understand. However, even in the age of ancient empires, there were contacts with the Far East; and it is certain that recent trends in world affairs call urgently for an understanding of the cultural background of the Far Eastern peoples.

1. THE LAND AND THE PEOPLE

The Land. Physiographically, India is separated from the rest of Asia by the plateau of Iran on the west, the Himalaya on the north, and the Arakan Yoma mountains on the east. Two large rivers, the Indus and the Brahmaputra, rise in the lake region of the plateau of Tibet and flow in opposite directions. The Indus passes through Kashmir and Punjab into the Arabian Sea. The Brahmaputra traverses the plain of Assam and forms a joint delta with the Ganges River at the Bay of Bengal. The valleys of these three rivers form, to the south of the Himalaya, a great plain, upon which most of the people live. The soil is very fertile, but in places there is a scarcity of rainfall. With irrigation, however, two crops a year can be grown with comparative ease.

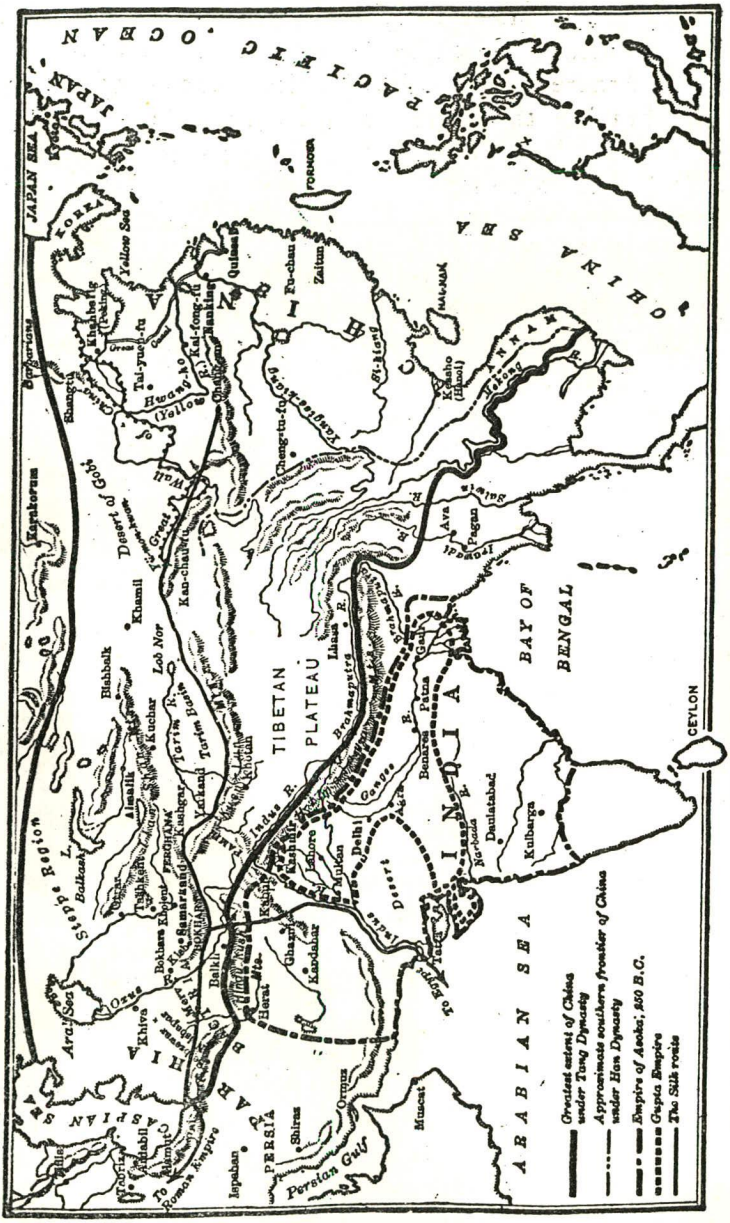
Today about one-fifth of India is jungle and a rather large portion is arid; except in the higher regions, the climate is depressing. There is every reason to believe that considerable change has taken place in the climate of India since civilization first appeared there. The Vedas describe the Saraswati River as a mighty stream, but today it loses itself in the sands of the desert without reaching a natural destination. The climate of the greater part of India is monsoonal. Northwestern India, which is not watered by the monsoon, has a continental climate with heavy precipitation in the winter months. Diversities of climate and soil produce great variations in plant and animal life. Frequent floods, droughts, disease, and wild beasts of the jungles made life difficult. Nevertheless, the pulse of India, the towering Himalayas, the monsoon climate, the desert, and the jungle have spurred the people to activity and progress. The country has three rather distinct geographical divisions: the region of the Himalaya, which rises to a height of 29,000 feet; the fertile valley of the great rivers, which receives the drainage of

the northern as well as of the southern slopes of the Himalaya; and the Deccan, or southern plateau. In spite of the high mountains that separate India from the mainland of Asia, access is possible through the passes, by which numerous invaders have entered the peninsula.

The People. Before the Aryans, the eastern branch of the Indo-Europeans, entered India, a civilization already had started there. The Vedic poets spoke of a race of blackskins who resisted the advance of the Aryans (*ca.* 1200 B.C.). There is also mention of invasions by other Aryan tribes and of struggles among these kindred peoples, who apparently belonged to the same cultural group as the Indo-Europeans that figured prominently in this area at the beginning of the 2d millennium B.C. The racial mixture was complete by the time that Alexander the Great appeared, in 327 B.C., when the first Indian civilization already was decaying. Around 290 B.C., the Scythians invaded northwestern India and a second Indian civilization appeared, which lasted from 400 to 800. About 100 years later, the Mohammedans came, adding another element and overthrowing the existing political and religious organizations. As a consequence of these earlier experiences, India has as varied and polyglot a population as can be found anywhere. This marked variety in race, religion, and culture, taken all together, presents an almost insurmountable obstacle to political unity.

2. POLITICAL AND SOCIAL ORGANIZATIONS

Political Evolution. Political institutions in India are difficult to describe in chronological order. The remains are scanty and for information we are dependent very largely on religious writings, which are not always trustworthy. For convenience sake, the early history of India is divided into two periods: Vedic India (2000–1000 B.C.) and the "Heroic" age (1000–500 B.C.). Tribal chieftains existed in the early period, while priests occupied prominent political positions and led armies on the field of battle. The literature (*Vedas*) tell of petty struggles between peoples for political supremacy and of united efforts of many tribes to repel a common enemy. Mention is made of great kingdoms and beautiful cities, and of their rise and fall. Great philosophers, such as Yajnavalkya (*ca.* 600 B.C.) and Siddhartha (ca. 500 B.C.) had kings for their patrons, and their philosophies helped to unite the people.



Asia in classical times. (*Courtesy, Hayes and Moon, Ancient and Medieval History, The Macmillan Company.*)

Darius, the great Persian conqueror, controlled the upper Indus valley, that in turn, was occupied by Alexander the Great. After his withdrawal, there arose the first definitely known great Indian kingdom, embracing the Ganges and Indus valleys, under the leadership of Chandragupta (*ca.* 315 B.C.). His grandson Asoka (273–232 B.C.) extended the empire into central India and established Buddhism as the state religion (250 B.C.). This was a period of enlightened citizenship, industry, and intellectual progress. The next kingdom of importance was formed under the Gupta dynasty in 290 and lasted until 900. These rulers did not interfere seriously with the civilization already established. In fact, literature, astronomy, and medicine were encouraged and reached a high state of perfection.

This period of peace, prosperity, and cultural activity was interrupted by an invasion of Mongolians. For a century, India suffered bondage and chaos; but the Gupta line was restored by Harsha, a good ruler and a patron of learning. The Mohammedan conquest of India (11th century) was a bloody orgy. City after city was destroyed, until waste and destruction met the traveler's eye wherever he went. The Mohammedans established a despotic military dictatorship, with heavy taxation and widespread serfdom. One observer remarked, "No Hindu could hold up his head, and in their houses no sign of gold or silver . . . or of any superfluity was to be seen. . . . Blows, confinement in the stocks, imprisonment and chains, were all employed to enforce payment." This impoverishment has influenced greatly Indian thought. The people took refuge in supernatural consolations, which regarded both mastery and slavery as superficial delusions and which intimated that life was too short to bother about freedom of the body or of the nation.

The Indian Oriental monarchy was not a state organized under law but a military regime, which used terroristic methods to obtain submission. Civil law could not be distinguished from customs and was the outgrowth of religious feeling rather than of any concept of justice. Legal justice and political liberty were not recognized, and the use of magic in politics was common practice. Criminals were branded as defilers of shrines and associates of evil spirits.

Economics. Indians, from antiquity, have possessed an enormous amount of wealth. Some of the wealthiest men in the world

today are Indian princes. Gold, silver, and precious stones are the subject of fabulous reports; elaborate palaces and temples have been numerous in India for centuries. These luxuries, of course, have been confined to the upper class. Throughout the history of India, the lower class has had a miserable existence. The Aryans were primarily agriculturists, who raised cattle, using them for food and as beasts of burden, and who cultivated grain. The village community had a headman who controlled local economy. The fields were divided among the families but could not be sold to outsiders and could be bequeathed only to direct male descendants. Most heads of families owned their own land. Irrigation, which was of great importance in parts of India, and public improvements were controlled by the central authority. Handicrafts and guilds flourished in the various towns, where there were guilds for metal-workers, woodworkers, stoneworkers, basket makers, leatherworkers, house painters, ivory workers, decorators, potters, butchers, confectioners, and fishermen. Perfumes, spices, cloth, precious stones, jewelry, and ebony were carried to Arabia and Egypt.

Commercial contact between India and Mesopotamia dates back to the 3d millennium B.C. Alexander the Great found that a thriving trade existed between the East and the West. Sea routes from the lower Indus Valley to Mesopotamia, through the Persian Gulf, and to Egypt by way of the Red Sea were used by tradesmen in Roman times. Commodities were carried from the East Indies and from China to India and from there they were sent to Western markets. Although the Hindus, for religious reasons, did not go overseas for commodities, many articles passed through their hands en route to foreign markets. Trade centers in India were crowded with foreign merchants and sailors.

The Caste System. A caste system, closely associated with Brahmanism, was one of the most outstanding features of Indian society. The priests allied themselves with the aristocracy and took advantage of the prestige that the religion afforded them. They believed that Brahma, the supreme god, formed society into four groups. The priests, whose mission it was to study, teach, and perform the sacrifices, were believed to have been taken originally from the mouth of the god. The warriors, who were detailed to protect the people, supposedly came from his arms. The class delegated to raise the cattle, till the soil, and engage in

commerce was believed to have come from his thigh. The fourth class, the servants, came from his foot. All people not included in these classes were regarded as unclean and were excluded from society. There were more than 40 grades of outcasts who were not allowed to approach a man of another class or to practice any honorable trade. They were not permitted to own any animals except dogs and asses, which were branded as unclean beasts. They were supposed to wear only the garments of the dead, to use broken dishes for their meals, to have only iron ornaments; and they were forbidden to settle permanently in any one place. A person born into one of these classes could not advance. It was sacrilegious to violate the restrictions, and the ensuing defilement would incur the everlasting hatred of the gods.

3. ART

Architecture. In India, architecture was slow to develop, in spite of the abundance of building stone and the prevalence of the necessary geometrical and technical knowledge for building great edifices. No stone buildings of note were constructed before the time of Asoka. This is due to the fact that the religion did not stimulate the building of great churches. All that was needed for performing religious ceremonies was an altar erected in any convenient place, frequently in the open air. Such buildings as were fashioned for the purpose of worship were carved out of solid rock. The cave temple at Karli (built about 78 B.C.) was 126 feet long and 45 feet wide. On the inside, it looked very much like a medieval cathedral, having portals, a vestibule, a rounded apse, and a semicircular roof. Asoka, who was the great creator in Indian civilization, was not satisfied with the past and, inspired by descriptions that were brought to him of buildings in the West, he decided to erect structures worthy of Buddha. Monasteries and sanctuaries embellished with elaborate statues of Buddha were constructed. In a later period, the followers of the Hindu faith raised over their holy places temples with enormous towers, terraced like the pyramids. These are heavy and massive in appearance and are adorned with decorative columns, pillars, and cornices. The general effect is not pleasing; they are out of proportion and fail to produce a finished appearance.

The Moslems destroyed a great part of the Hindu architecture.

When once alien hands had touched a sacred building, the Hindus abandoned it and permitted it to fall into ruin and decay. Where Moslem influence was slightest, Hindu architecture is best preserved. Indian architecture found its way wherever Buddhism went. Its direct influence can be seen in Java, Ceylon, Siam, Burma, Mongolia, China, and Japan. Two of the most beautiful Buddhist temples that are in a good state of preservation are Boro Budur in Java and Angkor Wat in Indo-China. Boro Budur, which was

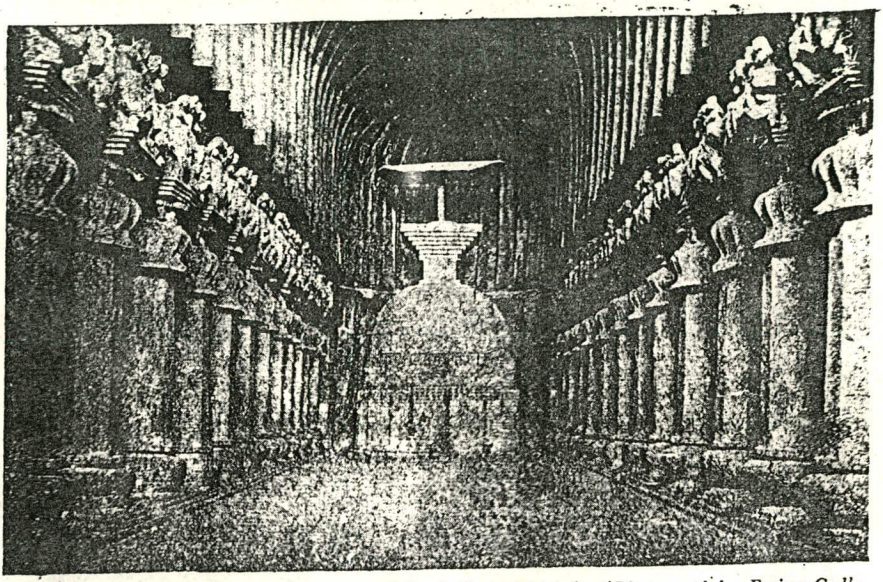


FIG. 24.—General view of the interior of Karli Cave Temple. (*Photograph by Ewing Gallo way, New York.*)

built in the 8th century, contains 436 statues of Buddha besides numerous scenes depicting his life. Angkor Wat is acclaimed by many as one of the wonders of the world. The massive building is surrounded by a moat, 12 miles in length, which is crossed by a bridge, guarded on either side by large statues. At the top of the terraced building is the sanctuary of the god, which is 200 feet high.

Sculpture. Most Indian sculpture, as well as architecture, dates from the reign of Asoka. The pillars in some of the large buildings are surmounted by capitals representing carved lions or saints. Scenes from the jungle, with elephants and other native animals, fantastic demon forms, and the seated Buddha with his feet beneath him are the chief subjects. Most of the sculpture of India is

associated so closely with architecture that it is difficult to consider the two separately. There is some evidence of a Hellenistic influence, but Indian art retained its individual characteristics. The sculptors showed skill in the grouping of figures and in the use of light and shade in the reliefs. The sculpture of India does not rank with the literature, the architecture, or the philosophy, but it may be asking too much to expect a people to excel in everything.

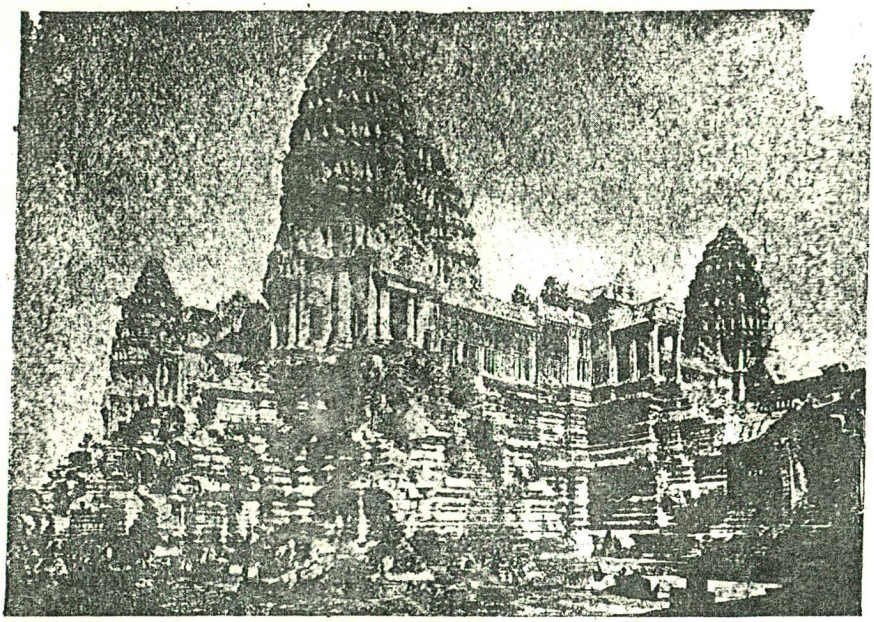


FIG. 25.—Inner Shrine, Angkor Wat, French Indo-China. (*Photograph by Ewing Galloway, New York.*)

Indian art is a striking symbolical representation of the diversity of social customs and religious beliefs. The aesthetic ideal was not, in any clear-cut fashion, differentiated from religious feeling. The one aim seemed to be the glorification of the "Universal One" in both Buddhistic and Hindu circles. Art was regarded as a divine force and as an approach to reality, rather than as an effort to understand and portray nature. Consequently, purely secular art did not exist.

4. RELIGION AND PHILOSOPHY

Indian religion and philosophy, which are inextricably intertwined, seem strange and fantastical to the Occidental. They

represent a concept almost entirely foreign to the Western point of view, but any student of philosophy and comparative religions is profoundly impressed by them. In our own time, Gandhi and Tagore have commanded the respect of the thinking world.

Brahmanism. Brahmanism was the outgrowth of the simple religious rites brought into India by the Aryans. The services became ritualistic, necessitating priests to preside over the sacrifices. The original Brahman priest sang songs in praise of the gods and made sacrifices according to strict formulas. Much literature was produced, commonly referred to as the *Vedas*, the most famous of which was the *Rig-Veda*. This work contains over 1,000 hymns, some of which date back to 2000 B.C. *Veda* means "knowledge" or information that aids man to win the support of the gods. The priests, who became very wealthy from accepting fees for performing sacrifices, were superior to rulers and princes in the social scale. They even claimed supremacy over the gods. According to their ritual, "the whole world was created by sacrificial rite: from the sacrifical rite the very gods are sprung. . . . Assuredly the sun would not rise if the priest did not make sacrifice."

The excessive wealth that the priests possessed and their many nefarious practices led finally to their downfall. New sects arose; even rival priests challenged the positions held by the old order. The *Upanishads* (literally, sitting near the teacher) are discourses written by saints and sages between 800 and 500 B.C. in an attempt to answer the questions: Whence are we born? Where do we live? and Whither do we go? Three steps were necessary in the attainment of perfection. The first step was the attainment of *Atman*, the silent and formless depth of the soul, quite beyond body, mind, or the individual ego. "Not by learning is the *Atman* attained, not by genius and much knowledge of books. . . . Let a Brahman renounce learning and become as a child. . . . Let him not seek after many words, for that is mere weariness of tongue." The second step, *Brahman*, or "self," was presented as the most important single thing: absolute, infinite, impersonal, and indescribable. Ultimate peace could be attained by becoming an integral part of Brahman. If one could annihilate his individual self, he might reach a state of mind called *nirvana*, which would mean the end of all forms of desire and would create the perfect bliss of mental satisfaction. The third step provided the union of

Atman and *Brahman*, the uniting of the soul of the individual with the impersonal Soul of the World.

Transmigration of the soul was generally accepted. Release from the burden of reincarnation was a *universal* ambition. Death might be the beginning of further torment, for one who had not committed enough good deeds while on earth might be reborn as a dog, a pig, or a slimy weed. The monistic theology found in the *Upanishads*, with its mystic and impersonal conception of immortality, has dominated the thought of India from earliest history to the present time.

Jainism. Numerous heresies soon developed because the people could not fathom the intricate reasoning involved in the *Upanishads*. Some ridiculed the *Vedas* as instruments of revealed truth and offered a more materialistic interpretation. According to one group (*Charvakas*), things not perceived by the senses do not exist and, as a consequence, all phenomena are natural. They branded religion as an aberration and decried the idea of immortality. These arguments had a devastating effect on existing religious practices and paved the way for the establishment of new beliefs. Jainism was founded by a young prince named Mahavira (599–529 B.C.). He left a luxurious home to live a life of self-denial for a period of twelve years before he reached spiritual satisfaction in *nirvana*. His friends and followers hailed him as Jina, the conqueror.

He emphasized the fact that he had succeeded in his struggle without the aid of priests, but with willful self-annihilation. He forbade his followers to kill anything; only one form of destruction was permitted and that was self-destruction. Suicide, especially by slow starvation, was highly approved as a great spiritual victory. Right faith, right knowledge, and right living were the "three jewels"; they were sufficient in themselves to ensure salvation. The extreme asceticism demanded by its leaders limited the appeal of this belief. Dissension broke down the unity of the organization, but today there are approximately 1,300,000 adherents of Jainism in India.

Buddhism. Buddhism was similar to Jainism in some respects, but it had much more influence. Siddhartha Gautama (563–483? B.C.), born of wealthy parentage, left his home and family to seek enlightenment in the wilderness. First he lived with a group of

hermits, but he became dissatisfied with the progress they were making and set out to seek salvation alone. For six years he wandered until, when almost at the point of desperation, he suddenly saw the "Light." Enriched by his experience, he returned to his native land to spread the good news and teach his fellow men. He condemned excess and advocated what he called the four truths: both birth and death bring grief and life is utterly vain; the vanity in life is caused by the indulgence in desires; vanity ends with the ending of desires; and sane and intelligent decency can end all desire. Right belief, right resolve, right speech, right action, right livelihood, right effort, right thought, and right meditation composed the noble path that one should follow.

Gautama believed that individualism was sinful and that salvation could be found only in bringing salvation to others. He commanded his followers: "Go ye now out of compassion for the world and the welfare of gods and men . . . and preach the doctrine which is glorious." He did not go out of his way to deny the existence of a deity but, essentially, Buddhism was a theology without a deity. Gautama had no conception of an immortality that implied the continuance of the individual. Soon after he died, his philosophy was changed into a theology and he was adored as a god. Buddhist ethics advocated a simple way of life and the support of a monastic order to obtain release. The commandments were: (1) not to take life, (2) not to steal, (3) to refrain from unlawful intercourse, (4) not to tell lies, and (5) to refrain from drinking intoxicating liquors.

After Gautama's death, disputes arose among the monks as to interpretations of his teachings. The scriptures, or writings, on Buddhism were assembled by 500 monks, but even this did not end the controversies. Gradually, two forms of Buddhism appeared. The *Hinayana*, centered chiefly in Ceylon, tried to perpetuate the older ideas. *Mahayana*, a later form, was influenced by Western beliefs. A vast doctrinal literature was produced, the most famous being "The Lotus of the Good Law." It portrayed the coming of a Buddha:

> "Buddhas ye shall all become;
> Rejoice and be no longer uncertain,
> I am the Father of you all."

Buddha was described as a "savior god," eternal and absolute. He sat on a mountain peak and, when the world became too evil, he descended and gave it new form. Less emphasis was put in monastic orders and more leniency was given to laity. Self-mastery was the greatest individual virtue and love for others was the supreme social ideal. Prayers and magic were considered useful in the attainment of salvation. The last thought at the moment of death determined the fate of the soul. The soul, after death, went to purgatory, where it suffered many torments. The ultimate abode of the blessed was the "western paradise," where there were seven fountains flowing with the waters of the right virtues. Celestial flowers fell from heaven like rain; trees were filled with varicolored birds singing continuously and harmoniously.

Hinduism. In India, Buddhism was gradually replaced by Hinduism. Hinduism is not one religion, but a composite of faiths and ceremonies, which, varying in many respects, have at least three things in common: reverence for the cow, belief in transmigration of souls, and the acceptance of the leadership of the Brahmans. Divinity takes a threefold form, represented in Brahma the Creator, Vishnu the Preserver, and Shiva the Destroyer. The worship of Shiva recognizes the impermanence of forms and the leveling force of nature. Destruction and creation, birth and death are regarded as examples of the evil balancing the good.

The Hindus believe that there is no spiritual distinction between animals and men. Both have souls, which are continuously interchanged. The cow is the most sacred of all animals and should never be eaten. Snakes and crocodiles are considered divine. The elephant personifies man's animal nature, and an image of an elephant serves as a charm to ward off evil fortune. From outward appearance, Hinduism is not a monotheistic religion. There are gods numerous in name and identity, but the Hindu thinks in terms of a religious unity, which approaches pantheism and resembles monotheism. His recognition of one supreme god over all other gods is not unlike a Christian's interpretation of the Trinity, the Madonna, and numerous saints. Hindiusm, in its highest form, promoted true self-abnegation, and in its lowest form sank to the grossest sensualism. In 1921, there were 216,261,000 Hindus in India, which is three times the number of members of any other denomination in that country at that time.

Indian Philosophy. Aside from religion, although not entirely independent of it, several schools of philosophy developed in India. Many Hindu scholars turned their attention from theology and speculated in the broader fields of philosophy. Some of the philosophies were older than Hinduism, but they were promoted by it. The legendary founder of the philosophy known as Sankhya was Kapila (*ca.* 580 B.C.). Quest for knowledge, he believed, would release the soul from the body. Knowledge could be obtained by perception, inference, and analogy. Quest for this knowledge was controlled by the vices and virtues of the individual.

The philosophy of Yoga, contrary to Sankhya, was not agnostic but theistic. The way of release was through meditation, which would overcome disease and doubt and result in the attainment of knowledge. Bodily exercises were recommended to withdraw the mind from sensual experience. "The true philosopher is a physician of the soul, one who helps us save ourselves from the bondage of desire." A system of logic was advanced by Nyaya, known as the Aristotle of India. He believed that knowledge would give liberation and that the proof of a statement depended on perception, inference, analogy, and verbal testimony. Indian scholars generally turned to Nyaya for inspiration. An atomic theory was sponsored in the philosophy of Vaiseshika. All material objects were collections of atoms held together by force. There were four atoms: earth, water, light, and air, and all substance was formed from them. Knowledge could be gained through the study of philosophy and reflection on what had been learned, and through meditation on nature itself. All this would give the experience of harmony.

Evaluation. The great religions produced in India were basically ascetic and pessimistic. There was no greater influence among the teeming population than religion. All else, politics and materialism included, were secondary matters. Release from desire and release from life (Moksha) were the ultimate in Hindu religion. Self-denial was considered the only means of salvation and escape from reincarnation was the greatest aspiration.

Magic, witchcraft, mysticism, and divination were common. People sought a magician's aid to destroy an enemy, to restore sexual vitality, and to bless the home with children. Rituals and ceremonies abounded. Sacrifice and purification were rites commonly practiced. Every individual was in constant danger of

pollution, which could be removed only through ritual purification. It is estimated that even today there are 1,000,000 fortunetellers, 100,000 snake charmers, and 2,728,500 priests. India has the appearance of a nation burdened with priests and ceremonies. In many cases, this is due to the inability of the masses to comprehend the intricate philosophy of the religions. Many philosophers today are worshiped as gods by people who cannot understand their philosophy.

5. LITERATURE AND LEARNING

a. Literature

The Vedas. The Sanskrit[1] language, one of the oldest in the Indo-European group, is closely related to Greek and Latin. One famous linguist (Sir William Jones) declared that it is "more perfect than Greek, more copious than Latin, and more exquisitely refined than either." Sanskrit was apparently a classic and literary form rather than a language of the people. The *Vedas* (meaning "knowledge") are the oldest examples of Sanskrit literature. Four of the many *Vedas* have survived, the most popular being the *Rig-Veda*, which contains 1,028 hymns, or psalms of exultation to the sun, moon, stars, sky, earth, wind, rain, fire, etc. Most of them reveal an endeavor to learn the secrets of nature and an attempt to gain mastery over obstacles that are met in everyday life (see the extract from the creation hymn, page 13). Religious thought, the spirit of a chivalrous age, sacrificial banquets, and drinking bouts are described. A physician's dialogue with herbs is recorded. Physicians, priests, and carpenters are accused of running after rich clients. Drunken priests are likened to frogs. The principal content is a rather monotonous recital of sacrifices and rites for divine worship.

Epics. The *Mahabharata* and the *Ramayana* are two great epics in Indian literature. The *Mahabharata* contains over 200,000 lines on religion, court intrigue, warfare, gambling, etc. In scope and content, it resembles Homer's *Iliad.* The main theme of the story is centered around a war fought by gods and men over a beautiful woman. The *Ramayana*, like Homer's *Odyssey*, tells the story of the adventures of a hero. Rama, after having won a beautiful woman for his wife through a feat of strength, lost her to

[1] *Sanskrit* means, literally, "prepared," "perfect," or "sacred."

a treacherous rival. He regained her after a terrific struggle and together they ruled their kingdom. Besides being great literary masterpieces, these two works have a strong religious influence. The pious Hindu regards the heroes as gods and believes that reading the stories is a religious experience. "If a man reads the *Mahabharata* and has faith in his doctrines, he becomes free from all sin, and ascends to heaven after death."

Fables. Indian literature is rich in fables, which were used to illustrate lessons in politics and morals. The *Panchatantra* (*ca.* 500), the source of many fables known in the Occident, is supposed to have been invented by a wise Brahman for use in the instruction of a king's sons. A monkey drew an ax out of a tree and was caught himself. A sparrow overcame an elephant, a weaver went wooing as a god on the wings of an automatic bird, a mouse played the part of the daughter of a Brahman, and a boy lived the life of a serpent.

Classical Sanskrit literature reached its height at the time of Gupta (*ca.* 319). Mythical and religious subjects no longer dominated; more emphasis was put on form and expression than in the earlier period. Kalidasa (5th century) was India's greatest poet. His works show a marked individualism and abound in description, feeling, and emotion. His *Cloud Messenger* is the story of a banished spirit, separated from his beloved wife as a punishment for misconduct. *The Cycle of the Seasons* is the story of love interwoven with the seasons. Kalidasa also produced the best drama of this period—drama which, in technique, was similar in many ways to the Greek. A play began with a prologue, invoking the divine favor of the audience, and continued with a dialogue between the stage manager and the actors, in which the play was described. Some of the plays had as many as 10 acts, but in the course of the whole performance the actors never left the stage. Pleasant scenes dominated the plays; about the only exception was the introduction of a drunken person now and then to amuse the audience.

b. Learning

Education. The Indians regarded learning as a canon, "a sacred compendium of all knowledge." Native schools existed by the thousands before British occupation of India. Literacy at the time of the great king Asoka was higher than later under Western domination. The purpose of education was not merely drill-

ing in the three R's but also the development of character and discipline. As a result, religion dominated instruction, regardless of the subject, and the *Vedas* were the most important textbooks. The Brahman priests and the Buddhists were exponents of learning, interpreters of the scriptures, and scientific investigators. Science began as a religious speculation on the nature of the deity.

A student at the age of eight was entrusted to an intellectual guide, with whom he lived until he was about sixteen years old. He could then go to one of the great universities that were so prominent in ancient and medieval India. The University of Nalanda (destroyed 1197) had 10,000 students, great libraries, observatories, dormitories, and over 100 lecture rooms. The students were subjected to a life that was almost monastic. The desire even to look upon a woman was considered a great sin. The final instruction given to a young man about to enter the affairs of the world was that a real education came one-fourth from a teacher, one-fourth from one's associates, one-fourth from individual initiative, and one-fourth from experience.

Only the study of language escaped the imprisonment of philosophy and religion. Writing seems to have appeared quite late. Not until the time of King Asoka was there a universal written language, although stories and philosophies were handed down from generation to generation by the spoken word long before that time. The alphabet shows Western influence, possibly Persian or Aramaic. Alexander's conquest brought in a new type of writing, which, after much hesitation, was transformed and adopted.

Metaphysics and Ethics. Metaphysics and ethics were emphasized. From the former, the Indians deduced the doctrine of right action and salvation. Reincarnation according to guilt and merit, the doctrine of pain and its cause and conquest, the dissolution in the One—all had a metaphysical basis. Divine commands of conduct were lacking in Indian religion. Good or evil came strictly in accordance with natural law; man acted virtuously in his own interest without compulsion. Each person had to work out the basis for his conduct, unhampered by outside influence.

Mathematics and Astronomy. The Indians excelled most civilizations of this age in mathematics. They understood and applied the Pythagorean theorem and made numerous calculations in arithmetic. They regarded extracting roots as elementary

mathematical operations; they devised a zero sign and worked out a decimal system in which the position of figures determined their value. In writing figures or designating numbers they used the initial letters of the names of the numbers. They taught the Arabs the fundamentals of algebra and, through the Arabs, taught the whole world. What we know as Arabic numerals were known in India hundreds of years before they were adopted by the Arabs. The Indians knew the 28 phases of the moon, the fact that the earth rotates on its axis, and the explanation of the eclipses.

Medicine. Indian scholars studied anatomy and physiology. Methods of diagnosis were carefully worked out; a great number of remedies for diseases were listed, with specific instructions for applying them. These medical scholars advocated cleanliness in the treatment of wounds, massages for muscular troubles, and diet for indigestion. Sushruta (5th century B.C.) and Charaka (2d century) were two outstanding figures in medicine. Sushruta wrote a valuable book on medicine in which he described many surgical operations, including cataract, lithotomy, and hernia. He enumerated and described 121 surgical instruments and advocated dissection. Charaka published an encyclopedia of medicine and helped to establish the practice of medicine on a high ethical basis. Antiseptic surgery, anesthesia, antidotes for poisons, and vaccination were practiced in India by the middle of the 6th century of the Christian Era.

6. ESTIMATE OF INDIAN CIVILIZATION

Indian civilization was essentially religious in character. Religion was the core of Hindu life; everything, even life itself, was subsidiary to it. Science was used to contribute to religion. Astronomy was the outgrowth of the worship of heavenly bodies. Grammar and philosophy were the result of an attempt to make every prayer and formula literally and phonetically correct. The government, insofar as a centralized government existed, was an absolute monarchy, which ruled a populace concerned primarily with individual salvation. Complete political unity seemed to be an impossibility, and India entered modern times with numerous petty states, which have succumbed to invaders. There was a sharp distinction between social classes and an aversion against mixing with some. The economic system was controlled by princes allied with priests and warriors.

Classical civilization in India compares favorably in many respects with that of Greece and of Rome. The *Mahabharata* and the *Ramayana* rank with the *Iliad* and the *Odyssey* as examples of great literature. Science had advanced further in India than in classical Greece or Rome. The Occident borrowed from India much that was important for cultural progress.

V. CHINESE CIVILIZATION

1. THE LAND AND THE PEOPLE

The Land. The broad territorial expanse of China and the great number of people inhabitating the land make it one of the most important countries in the world. The population of China is around 380,000,000, and the territory in which they live covers 1,500,000 square miles, a little more than half the size of continental United States of America. The climate is monsoonal, but in the northern part it is much colder than India. Northern Manchuria is cold and has a short growing season. A great part of China, however, is warm. The city of Peking is in latitude 40 degrees north, or about as far north of the equator as Valencia and Naples. Shanghai, in middle China, is on approximately the same parallel as Cairo in Egypt; and Canton, in southern China, is near the Tropic of Cancer.

China has many contrasting topographical features. There are barren deserts, rugged mountain peaks, broad upland plateaus, and wide fertile river valleys. The three important river valleys are the Si-kiang in the south, the Yangtze Kiang near the center, and the Hwang Ho farther north. All these rivers rise in the western highlands and flow eastward. In the uplands, the soil is an accumulation of wind-borne dust, called *loess*. There were no forests to clear for agriculture, and the level land made transportation easy. The handicaps to agriculture are insufficient rainfall and the tremendous amount of erosion that accompanies the seasonal downpours. Navigation also is hindered by the excessive amount of sediment in the streams. China has great quantities of natural resources—coal, iron, and oil—which were not important in the classical period, but have become the source of attraction in modern times.

Contacts with the Rest of Asia. China has been rather well

isolated from the rest of the world by the physical features of the western frontier. Broad desert wastes and high mountains there make formidable barriers. The northern boundary is not so well protected; therefore, a Chinese emperor built a great wall (*ca.* 200 B.C.) to keep out the Mongolian invaders. One of the approaches to China from Siberia was through the Gobi desert and the Kalgan gap, northwest of the city of Peking. Another contact was along the Wei Ho, a tributary of the Hwang Ho, over the edge of the plateau of Tibet and the Mongolian desert into what is now called Western Turkestan. The first Chinese culture seems to have developed along the Wei Ho. The mountain pass in the plateau of Tibet is called the Jade Gate because jade was brought into China over this route. Chinese and Indian civilizations were brought together over the difficult pass made by the Yangtze in eastern Tibet. For centuries this has been an important trade route.

The People. Because of the difficulty of reaching Chinese territory, there has been less racial mixing in this case than in the civilizations we have already described. The Chinese belong to the Mongolian race; they are short and have rounded skulls and faces, with prominent cheekbones, slanting eyes, coarse black hair, scanty beards, small hands and feet; and they tend toward corpulence. As there were many types of Chinese, so there were many cultures, which developed more or less independently of each other. Space does not permit a description of each, but it may be possible to give a general impression of Chinese civilization.

2. POLITICAL INSTITUTIONS

History. China has few archaeological remains, but the Chinese have an abundance of historical records. Each of the more important rulers appointed a board of historians to record the important events of his reign. These writings were more than mere political annals, for they contain accounts of agriculture, social and economic conditions, plagues, and wars. The Chinese preferred actual history to epic poetry, and recorded what they believed to be realities rather than mythology. The accounts begin with the creation and state that there were 13 celestial emperors who reigned for 18,000 years. A great part of this, of course, is not dependable; but from about 700 B.C., the histories are comparatively trustworthy.

Mythological Rulers. The earliest political documents contain little more than a list of royal names. Chinese mythology records names of rulers as far back as 3000 B.C. Fu Hsi (2852 B.C., according to legend) was the first civilized ruler and taught his people marriage, writing, fishing, music, painting, domestication of animals, and the feeding of silkworms. His successor, Shen Nung, supposedly introduced agriculture, commerce, and the science of medicine. Later rulers contributed the compass and the wheel, built houses, and invented the calendar. These stories, although they are fictional, have played an important part in Chinese history.

Shang and Chou Dynasties. It is rather well established that there was a Shang dynasty (1766–1122 B.C.) in the Hwang Ho Valley. Not much is known about the progress made in that time, although Chinese historians claim that a high civilization was developed. The Shang dynasty was superseded by the Chou (1122–225 B.C.), under which Chinese culture made notable progress. The Chou ruler was both king and priest, functioning equally as priest and as secular ruler. He was an appointee of heaven, but he could be dismissed when his people did not prosper. Public officials were chosen with great care. Before they were given positions, they were examined in archery, horsemanship, reckoning, writing, music, and ceremony. The emperor was expected to be an example to his people, prospering and suffering with them. People and emperor alike feasted in years of plenty; in years of famine they starved together on equal terms. With the decline of the Chou dynasty, the empire disintegrated into a number of small feudal sta-

The Feudal Age. As powerful nobles soon found means of superseding the emperor, a number of independent states were formed. Confucius gives an excellent description of the state of Lu, one of the many feudal organizations, in his *Spring and Autumn Annals.* Countless petty wars, treacheries, intrigues, deeds of heroism and adventure, in addition to numerous examples of social and economic conditions, are depicted. Great emphasis was placed on the army, in which men carried weapons of iron hooks, clubs shod with iron, daggers, and many of nondescript design. War lords waged war on each other, entered into alliances against a powerful lord to destroy him, and then fought among themselves over the spoils. Finally, there arose in the

province of Ch'in, under the leadership of Shih Huang-Ti (246–210 B.C.), a power strong enough to enforce its claim to the inheritance of the Chou kings.

Han Dynasty (206 B.C.–221). Shih Huang-Ti (221–210 B.C.), sometimes called the first emperor, was one of China's greatest rulers. The name *China* comes from Ch'in, the province over which he ruled. He chose capable and energetic citizens for important offices, and he ruled with the idea of giving benefit to the greater part of the people rather than to a selected few. Chaos followed for a short time after his death, but order was restored under the Han dynasty, which fell heir to the good work of Shih Huang-Ti. For four centuries, this dynasty maintained peace and prosperity in a great part of China. The boundary was extended, and an official census in 156 gave the population as 50,000,000. Wen Ti (179–157 B.C.), one of the greatest rulers of the period, was fondly referred to as the Peace Emperor. He encouraged learning, lessened the burdensome military obligations, and reformed the penal code.

Wu Ti (140–87 B.C.) finished subduing the rebels and began the task of centralization of the vast territory of China. The empire was divided into 13 provinces, ruled by governors appointed by the emperor. Taxation was made uniform, and public improvements were started. This emperor relied chiefly on the power of the middle class and made political promotions on the basis of ability and accomplishment. He patronized art and literature. In the Imperial Library at this time there were 3,123 volumes of the classics, 2,705 on philosophy, 1,318 of poetry, 2,568 on mathematics, 868 on medicine, and 790 on war. The Chinese accept this period as their Golden Age, and to this day they call themselves "Sons of Han." Barbarian invasions finally ended the period about 221.

T'ang and Sung Dynasties. The T'ang dynasty under the Emperor Tai Tsung (627–649) reunited the empire and added more territory than the Han dynasty had possessed. Learning was prized highly and a civil service law was enacted. Another Tatar invasion ended the T'ang rule, but upon the ruin arose the Sung dynasty (960–1279). T'ai Tsu (960–976), the soldier emperor, attempted to restore civil service on the basis of Confucian principles. Economic life was carefully supervised by the state. Wang An-Shih (1021–1086) was remarkable as administrator

and scholar; as chief minister, he tried to benefit the masses. "The state," he said, "should take the entire management of commerce, industry, and agriculture into its own hands, with a view to succoring the working classes and preventing them from being ground into the dust by the rich." These experiments were ruined by threats of invasions and the violent opposition of the conservatives. Wang was dismissed, and the Chinese government fell back into disorder and corruption. The Tatar hold on China was too strong to shake off. In 1279, the last Sung prince was murdered and the whole of China passed under the control of the Mongols.

3. ECONOMIC AND SOCIAL DEVELOPMENTS

Government Control. The great floods and extreme droughts in China necessitated centralized supervision of economic activity. Irrigation was developed very early, the work being supervised and financed by the rulers. Great canals were constructed, which were used for both drainage and irrigation purposes. The Han emperors undertook at least 56 water-control projects. By the 6th century of the Christian Era, the elaborate water-control projects in the Yangtze Valley were completed. Irrigation was a boon to agriculture, for which the Chinese showed great aptitude. Iron implements superseded those of stone about the middle of the last millennium B.C. While millet was the original Chinese cereal, rice and wheat were introduced rather early. Soy beans, buckwheat, and tea were common in the 2d century B.C. The pig and the sheep were the chief domestic animals and the common fowls were chickens and geese.

Crafts. Carpentry was the chief building craft, as the Chinese preferred wood to brick and stone. Bamboo, introduced from India, was used in combination with wood. Couches, armchairs, and small tables were produced in quantities during the Han dynasty. Porcelain was the greatest Chinese ceramic achievement. Glass was produced as early as 200 B.C., but not extensively. Iron was used, and it is quite evident that smelting of ores was introduced into China, possibly from the far West.

Silk was one of China's greatest contributions in textiles. For a long time, silk was considered a luxury that only the nobility could afford. Rich merchants, however, were able to purchase silk; and

by the 2d century B.C., it was widely used. Cotton, which became the principal material for the clothing of the common people, was introduced from India about 200 B.C. Paper was produced about the same time, tree bark, hemp, rags, and small pieces of silk being used to make various grades and designs.

Trade and Commerce. Silk, salt, and iron were the earliest commodities in Chinese trade. Some other articles were added—jade, lacquer, and rhubarb—and found their way to markets on the Mediterranean Sea before the beginning of the Christian Era. Canals and improved waterways encouraged internal trade, in which manufactured goods of the lower valleys were exchanged for raw materials of the upper valleys and the highlands.

During the Chou dynasty, a metal medium of exchange appeared; and in the 5th century B.C., a money economy developed, along with increased trade. In 221 B.C., barter was prohibited, and a round coin with a square perforation became the official currency. Counterfeiting, which was common, was dealt with severely. In 113 B.C., a copper coin having only the value of the copper it contained superseded all other coins. Moneylending and banking were practiced extensively in the 5th century B.C.

Social Groups. In the early period, the nobility and the priests enjoyed most of the social privileges in China. By the time of Wu Ti (140–87 B.C.), however, the old nobility ceased to be important and its place was taken by favorites of the ruling family—princes, female favorites, and eunuchs; but the mercantile and industrial magnates soon won favor among the rulers. The lot of the peasants was generally miserable. Slavery and forced labor were common. The typical peasant was a "resigned and needy insect," interested in little more than enough to eat. He was almost as much a part of nature as the soil that he tilled and the animals that he kept. The following lament is typical.

"How free are the wild geese on their wings,
And they find rest on the bushy yu trees!
But we, ceaseless toilers in the king's service,
Cannot even plant our millet and rice.
What will our parents have to rely on?
O thou distant and azure Heaven!
When shall all this end?"

4. THE ARTS

Chinese Art. The Chinese, unlike the other peoples we have studied, put little emphasis on art, and in spite of their long unbroken line of cultural development, there are periods from which

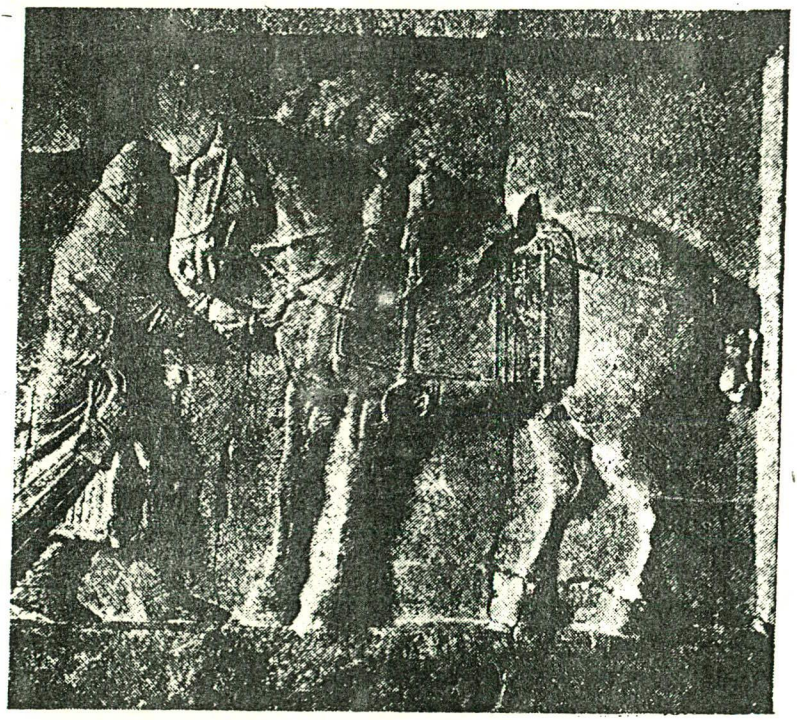


FIG. 26.—Whirlwind Victory, the horse of Tang Tsi Tsung (7th century). (*Courtesy, University of Pennsylvania Museum.*)

there are no artistic remains. Professor Thorndike[1] thus characterizes Chinese art:

> In art the Chinese have preferred the picturesque to the monumental, in social life the ceremonial to the material. They worship their ancestors with continued funeral rites rather than with enduring tombs. China is not a graveyard like Egypt; it is an ancestral home.

Sculpture. There were several bronze works of the Shang and Chou dynasties, decorated with figures of animals and monsters.

[1] *History of Civilization* (Crofts), 246.

Bronze vessels used in sacrificial ceremonies were made with a wealth of variety in decorative lines and designs. There are examples of stone relief representing the period of the 2d century B.C., but the first examples of sculpture worthy of particular note are figures of a female deity called Bodhisatta Avalokiteshvara, which were produced in the T'ang period. There are also works in miniature displaying mastery of form and movement: coquettish



FIG. 27.—"Spring Morning in the Palace." Portion of an early copy of a scroll painting by Chou Wen-Chu (*ca.* A.D. 970). (*Courtesy, University of Pennsylvania Museum.*)

ladies, dancing girls, warriors, and wrestlers, represented with precision.

Painting. Chinese art reached a much higher plane in painting; the later works were executed in water colors on woven silk. To the Chinese painting was a branch of calligraphy, or beautiful penmanship. They painted their pictures for their own enjoyment and only infrequently displayed them. One of the prerequisites of belonging to Chinese society was the ability to paint and to write poetry. The subject matter varied in the different periods, but landscape paintings, portraiture, and historical subjects were generally popular.

Wang Wei (699–759) was a great landscape painter and teacher of art. For centuries his manual on landscape work was a standard, and it was largely due to his influence that perspective was employed in pictures. He was poet as well as painter, and many of his poems were inscribed upon pictures. To him "Every poem is a picture, and every picture is a poem." Mu Hsi and Laing K'uei were masters in black-and-white production. One of Mu Hsi's pictures, "Evening Bells from a Distant Temple," shows mountains, treetops, and roofs of houses rising out of a heavy mist. This gives a dreamy effect, characteristic of Chinese paintings. Liang K'uei was famous as a portrait painter. Works representing priests, hermits, and individual portraits of some of the famous poets have been preserved. All his paintings are highly imaginative and were intended to provoke thought and contemplation.

Porcelain. The porcelain of the Chinese, one of the greatest of their arts, reached its height in the Sung dynasty. Excellent materials were available near Ching-te-chen, where the most famous factories were located (6th century). Innumerable articles were made: plates, cups, bowls, beakers, vases, bottles, jars, chessboards, boxes, and candlesticks. The most famous are the jade-green pieces (*celadon*), which cannot be reproduced. Chinese and Japanese families have pieces of celadon that have been handed down from generation to generation as priceless heirlooms.

Architecture. The Great Wall of China is one of the most impressive of Chinese architectural accomplishments. It was built for a purely utilitarian purpose; but its grandeur, simplicity, and homogeneous beauty command attention. Winding for miles over plain, desert, and mountain, it has vaulted gates and mighty square towers, which dominate the landscape. Shih Huang Ti (246–210 B.C.), the builder of the Great Wall, also built himself a beautiful palace, which was described by the poets as a world wonder. Many Chinese buildings were constructed of wood and had curiously curved tilted tops. Pagoda towers, which are popularly associated with Chinese architecture, did not appear until later. These, with their numerous stories and peculiarly shaped roofs, gave the landscape a picturesque effect. In order to put their buildings in the proper setting, the Chinese took as much pains with the landscaping as they did with the building itself.

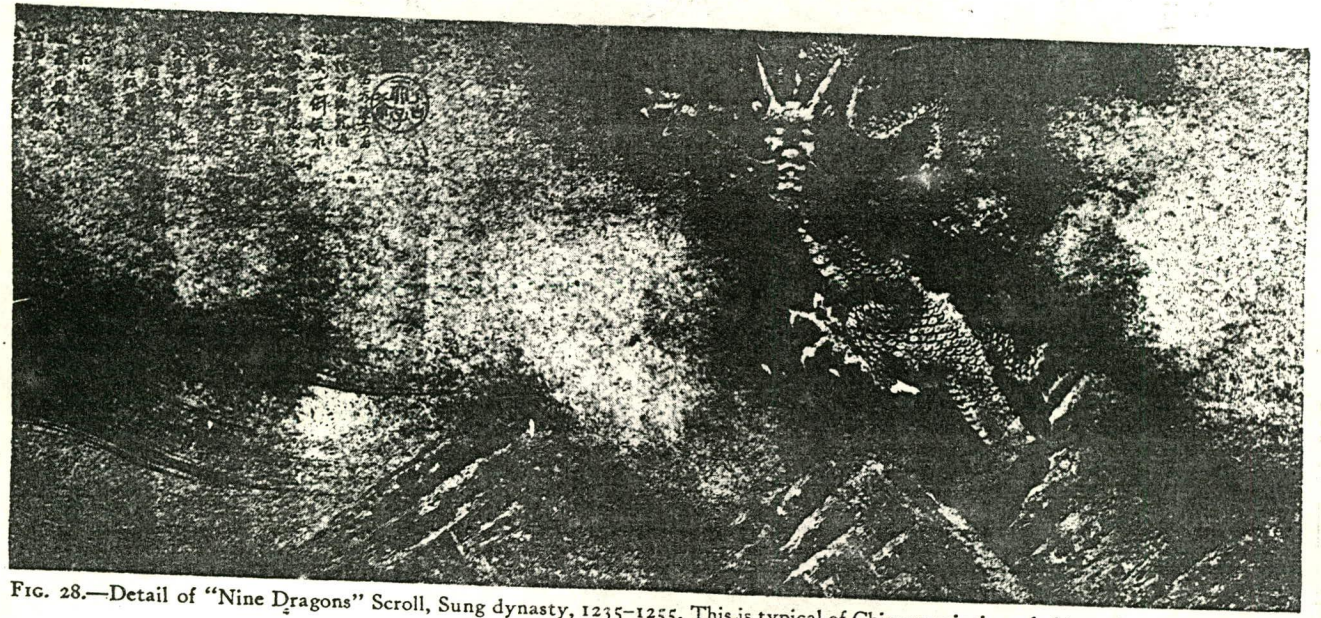


FIG. 28.—Detail of "Nine Dragons" Scroll, Sung dynasty, 1235–1255. This is typical of Chinese painting of this period in both subject matter and style. (*Courtesy, Boston Museum of Fine Arts.*)

5. RELIGION AND PHILOSOPHY

The Chinese outlook on life represented a point of view somewhere between a philosophical religion like that of the Indians and a pure philosophy like that of the Greeks. Both Confucianism and Taoism are philosophies, but out of them a nature religion sprang. Buddhism was accepted by many Chinese and has played an important part in their history.

Religious Practices. Early Chinese religion was essentially a worship of spirits, but there was a tendency toward monotheism in the worship of the Supreme Ruler, the Spirit of Heaven. The Chinese have always believed that spirits and ghosts of the dead actuate natural phenomena. Heaven was the chief nature spirit, the forefather of the emperor, and chief of the ancestor spirits. Heaven was not considered a place, but the will of God, or, as more correctly interpreted, the order of the world. Once each year the emperor, clad in robes as azure as the sky, made offerings to heaven and to earth, from which he claimed descent.

The people could not easily worship heaven and earth, so they worshiped their own ancestors. The spirits of the departed lived somewhere—no one ever took the trouble to speculate just where—and the chief interest in them was that they came back to help the living. Family feasts commemorated the departed ones. Such a feast was a great occasion; the finest of everything was prepared and consumed in the midst of booming drums, screechy flutes, and singing. There was no such thing as prayer for the departed soul. No Chinese dared to imagine that his ancestors were in need of help. The worship was personal and direct, without manifestations of fear or incantations of priests.

Philosophy. Philosophy is a second nature of the Chinese. Judged from the Occidental point of view, their religions are philosophies. They regard life and death philosophically and accept good and evil fortune alike with fatalistic self-control The Chinese are as sensitive to beauty as they are insensitive to pain. Philosophy seems to have been ever present with them. As early as 1250 B.C., Yu Tze expressed a profound philosophy in these words, "He who renounces fame has no sorrow." During the turmoil of the period of the Chou dynasty, the learned men of China sought through philosophy to find how to achieve social

order and stability, which was something that the existing government had not accomplished. These men wandered from city to city, visiting provincial courts and the wealthy men of trade and industry. The latter were more receptive to the philosophers and aided their cause materially. K'ung Ch'i, or Confucius (*ca.* 551–478 B.C.), was the most outstanding exponent of this move.

Life of Confucius. Confucius was not the founder of a religion nor was he even a religious reformer. In his own words, he was "not a maker but a transmitter, believing in and loving the ancients." Like Gautama, Confucius at first lived a life of luxury. His restless and penetrating mind would not allow him to remain inactive. Like Socrates, Confucius was a great teacher. He established a school, in which he taught history, poetry, and rules of propriety. The latter he stressed particularly. "A man's character," he said, "is formed by the Odes, developed by the Rites (ceremony and courtesy), and perfected by music." He followed no set rules in pedagogy, but sought to satisfy the curiosity of his students. "I do not open up the truth to one who is not eager, nor help out anyone who is not anxious to explain himself. When I have presented one corner of a subject to anyone, and he cannot from it learn the other three, I do not repeat my lesson." The actual number of his students was small, but his influence was far-reaching, even more so after his death than while he was still living.

An opportunity to apply his political theories came when he was appointed chief magistrate of the city of Chung-tu. He was very successful in suppressing crime and in organizing a good government. Everything was prescribed: the food that the people should eat, the clothing that they should wear, and the kind of houses in which they were to live. "Loyalty and good faith marked every man, chastity and submissiveness graced every woman." Confucius incurred the hatred of selfish politicans and was forced to leave his home to wander over China, looking for a place that would accept his ideas. In privation his life ended. "There is not one in the empire who will make me his teacher! Verily, my time has come to die!" was his last remark.

Confucius, a Moral Philosopher. Confucius, despite his reputation in later times, cannot be called a religious reformer. It is doubtful if he ever contributed a new religious idea, practice, or

experience to the established beliefs in China. He spoke very little of gods and religious rituals. He is reputed to have disregarded fairy tales, feats of strength, outrageous crimes, and gods. When questioned about spirits he replied, "So long as thou art not able to serve men, how canst thou serve the spirits?" In place of searching for gods, "What a superman seeks is in himself." "To give oneself earnestly to the duties due to men, and, while respecting spiritual beings, to keep aloof from them, may be called wisdom."

Concerning afterlife he declared, "So long as thou dost not know life, how canst thou know death?" Some of his ethical principles are sound and acceptable in any religion. "What you do not like when done to yourself, do not do to others. You should love all but cultivate friendship only with your equals; spend the most of your energy in improving your mind. If you employ a man, trust him; if you don't trust a man, do not employ him." Confucius was a strict disciplinarian. Everything had to be done in accordance with prescribed orders. He was almost fanatic in observing rules, and his insistence on opposition to changes has become a curse to the Chinese. Confucius placed great emphasis on morality; much of his philosophy is devoted to it. He summed up thus the qualities that he thought the "Higher Man" possessed:

> The Higher Man has nine things which are subjects with him of thoughtful consideration. In regard to the use of his eyes, he is anxious to see clearly. . . . In regard to his countenance, he is anxious that it should be benign. In regard to his demeanor, he is anxious that it should be respectful. In regard to his speech, he is anxious that it should be sincere. In regard to his doing of business, he is anxious that it should be reverently careful. In regard to what he doubts about, he is anxious to question others. When he is angry he thinks of the difficulties his anger may involve him in. When he sees gain to be got he thinks of righteousness.

After his death his followers deified him. In A.D. 1 he was canonized "Duke Ni, the All-Complete and All-Illustrious." Sacrifices were ordered to be performed for him after the year 57. In 492, he was canonized the "Accomplished Sage," and in 1907 the Empress Dowager ranked him with the deities "of Heaven and of Earth."

Influence of Confucius. It would be difficult to overestimate the influence of Confucius on the Chinese people. Most Chinese scholars took pride in being his disciples. Schools for the teaching of the master's philosophy sprang up here and there, becoming

intellectual centers that kept Chinese civilization alive during the centuries of political collapse. For more than 2,000 years, the philosophy of Confucius molded and dominated the Chinese mind. Confucianism, Christianity, and Buddhism furnish the most conspicuous examples in the history of civilization of efforts to convert into idealism the natural brutality of mankind. Unfortunately, the interpretations of Confucianism have not been altogether wholesome. In some respects, it has outlived its usefulness The strict rules of propriety that fitted almost every vital action into a prescribed mold hampered the free performance of individuals and froze the nation into a conservatism, hostile to progress.

Lao-tse. As a philosopher, Lao-tse was much more mystical in his beliefs than was his contemporary, Confucius. The earliest account of the life of Lao-tse was written at least five centuries after his death, and then none of his writings was extant; nevertheless, he has had a great influence on Chinese life. His approach was the persistent Why? He took nothing for granted and reveled in cornering a man of influence, in matters of religion or philosophy. Inactivity, he contended, was the choicest jewel of character. "Do nothing, and people will become good of their own accord." He believed that education fitted people for thievery: "Abandon wisdom and discard knowledge and the people will be benefited a hundredfold." The perfect man must have humility: "When merit hath been achieved, take it not unto thyself. If thou dost not take it unto thyself behold it can never be taken from thee." Next to humility, frugality, he insisted, is "most important. The wise man doth not accumulate. The more he spends for others, the more doth he possess of his own; the more he giveth to others, the more hath he for himself." He believed that man should let nature take its course and that, if he could live in accordance with nature, he might achieve immortality.

Taoism. The most radical and fanciful of the Chinese beliefs is Taoism. It was based upon some interpretations of the teachings of Lao-tse, who was deified. He was depicted as having been born, already old and wise, after having been in his mother's womb for 80 years. Taoism was dominated by a priestly class, called "Professors of Taoism," who claimed to have supernatural power. These priests controlled the lives of many people and exacted many ridiculous things from them. For example, they recommended the

sending of an expedition to search for an island where the elixir of life could be found. The explorers brought back some water, which the professors claimed was the coveted substance, and the emperor drank so much of it that he died. Taoism was the combination of a pantheistic conception of absolute being with the superstitions of the people. Through this means, a strong hold was secured on many classes. For centuries the Taoist faith had millions of adherents in China. It was broken down, or at least submerged, by Buddhism, which was introduced into China from India in the 1st century of the Christian Era.

Later Chinese Philosophies. There were many philosophies in China in addition to those of Confucius and Lao-tse, but most of them can be traced to these two outstanding men. Mencius (372–289 B.C.), whose Chinese name is Meng-tse, was second in fame to Confucius as a Chinese philosopher. The *Book of Mencius* is recognized as one of China's philosophical classics. This philosopher preferred a monarchy to a democracy because of the impossibility of educating the masses. "Correct what is wrong in the prince's mind. Once rectify the prince, and the kingdom will be settled," he contended. He advocated revolutions but denounced other war as a crime. "There are men who say: 'I am skillful at marshaling troops, I am skillful at conducting a battle.' They are great criminals," he said.

The prolific works of Hui Tzu (3d century) contain many brain twisters. He claimed that an egg must contain feathers, as a chick has feathers when it is hatched; that fire is not hot, but man merely feels hot; that it is impossible to reach the end of a stick by dividing it into halves; and that one and one make three, since together they make one and separately they make two. Chu-hsi (1130–1200), a disciple of Confucius, reinterpreted Confucianism and established a school of speculative philosophy that endured for seven centuries. He rejected the idea of a personal god and advocated a rule of the universe that included the law of morals and of politics. Morality was to him harmony with the laws of nature. Statesmanship was the application of morality to government. Chu-hsi directed the compilation of a history of China in 59 books, which is still a standard work.

China's philosophy—her most priceless gift to the intellectual world—is one of the chief evidences of the greatness of Oriental civilization. Its influence on the West has not been great, but

many Occidental scholars have recognized its significance. Leibnitz, Rousseau, Voltaire, Goethe, Benjamin Franklin, and Tolstoi were influenced by the study of Chinese philosophy and expressed their admiration for it. Classical Chinese philosophy was permeated by two fundamental concepts: concern over the affairs of man while on earth and a deep-seated utilitarian attitude toward institutions. Tradition had a divine sanction, since Heaven had instructed the ancestors. Unfortunately, the resort to tradition often perpetuated ancient wrongs and hindered the achievement of later good.

6. LITERATURE AND LEARNING

a. Literature

Writing. The Chinese believed that their written language and system of writing were divine in origin. According to tradition, a four-eyed individual conceived the idea by observing bird tracks and, when the discovery was made, "the sky rained grain, and demons mourned by night." The Chinese language has no alphabet, no syntax, no parts of speech, and no spelling. In the written language, there are 40,000 characters, which are expressed in the spoken dialects with about 700 monosyllabic word sounds, or vocables. Each vocable, as a consequence, must have about six "tones" in order that its meaning may be determined. It is possible through gestures and tones to make the vocable *I* mean any one of 69 things.

In the written language, there are some 600 signs, or fundamental characters. About 214 of them, called "radicals," enter as elements into most of the characters in the language. Every word and every idea has a separate sign. A straight line with a curve over it indicates "morning," a man and a woman standing together means "talkative," and the word *quarreling* is represented by a woman with two mouths. Many of the words are phonetically the same. Distinctions are managed by making phonetic characters indicators of classification. For example, the syllable *king* may mean "bridge," with *mouth* it means "strife," with *hand* it means "to carry," and with *heart* it means "impatience." The average Chinese never masters 40,000 characters, but manages to get along with 3,000 or 4,000 signs. Writing was intended for the nobility and the learned people; therefore, the difficulty of comprehending it was considered an asset.

The Writings of Confucius. In Chinese literature, Confucius is as outstanding a figure as he is in philosophy. Not only did he produce literature, but also, in the *Shi Ching*, or *Book of Odes*, he preserved much that belonged to an earlier period. This work consists of the extracts from various authors—going back to the Shang dynasty—whom Confucius thought worthy of preservation. The 305 odes that constitute the *Shi Ching* deal with diversified subjects, such as religion, war, and love affairs. The following extract from one of the odes reveals the sentiment of a lonesome lover:

"The morning glory climbs above my head,
Pale flowers of white and purple, blue and red.
I am disquieted.

"Down in the withered grasses something stirred;
I thought that it was his footfall I heard.
Then a grasshopper chirred.

"I climbed the hill just as the new moon showed,
I saw him coming on the southern road,
My heart lays down its load."

The *Li Chi*, or *Record of Rites*, the *I Ching*, or *Book of Changes*, the *Ch'un Ch'iu*, or *Spring and Autumn Annals*, and *Shu Ching*, or *Book of History*, are the most original works of Confucius. The *Li Chi* is an attempt to present material for the development of character and the maintenance of social stability and peace. The *I Ching* is a commentary on metaphysics, the *Ch'un Ch'iu* constitutes the history of the state of Lu, and the *Shu Ching* is a history of China in the early period.

Poetry. The Chinese are by nature poetical; consequently, the greatest of their literature is in the form of poetry. Much of its original character is lost through being translated, but, in spite of that difficulty, we can grasp its beauty and spirit, even in the language of translation. The Chinese believe that poetry is the representation of a moment's ecstasy and, consequently, must be brief. Discussions and statements of fact are avoided by the poets. They intimate and suggest, but leave to the reader the task of finding the meaning that is beyond the words. Many great poets

lived during the Han dynasty, and during the T'ang period Chinese poetry reached its height.

Tai Li Po, or Li Tai Po (705–762), the greatest of China's poets, left 30 volumes of verse. Almost every educated Chinaman knows much of Li Po's poetry by heart. His drinking songs glorify wine and its effects. He declared that one should drink because of the season, because of loneliness, because of company, and because the effects of wine are wholesome. He makes dead heroes live again, and ruined palaces regain their splendor in his *Wandering Guest.* Tu Fu (712–770), sometimes called the "Keats of China," a personal friend but a professional enemy of Li Po, lived a life of misery and want. In place of romance, he saw starvation and suffering. He concentrated on sadder themes, such as trying to console mothers whose sons had been called to war:

"Last night a government order came
To enlist boys who had reached eighteen.
They must help to defend the capital. . . .
O Mother! O Children, do not weep so!
Shedding such tears will injure you.
When tears stop flowing then bones come through,
Nor Heaven nor Earth has compassion then . . . "

Prose. There were numerous and important prose writers in China, but they were not accepted by the Chinese as outstanding in the field of literature. Philosophical works and encyclopedias may be considered exceptions to this general rule. Fiction hardly existed before the Mongol invasion, and even in a much later period the novels were not regarded by the literati as worthy of mention. Not until the 19th century were drama and the stage counted among that legitimate forms of art.

b. Learning

Educational Theories. Confucius, the "Uncrowned King," was a dominant figure in Chinese learning, apart from his philosophy. His ideas on pedagogical procedure were followed by many cultured Chinese. "Learning undigested by thought is labor lost; thought unassisted by learning is perilous." He summarized his own educational progress as follows: "At fifteen I had my mind bent on learning; at thirty I took my stand: at forty I

was free from doubt; at fifty I understood heaven's decrees; at sixty I never relapsed into any known fault; at seventy I could follow my own inclinations without going wrong." Ideal men, those whom he expected to direct the welfare of the state, should be well versed in nature, logic, ethics, politics, and history. Education, he believed, should be independent of state control. Theoretically, any man could become a state official if he could pass the examinations. Chu-hsi (1130–1200) had a theory of education that included the suppressing of appetites, creating a thirst for knowledge, and teaching conduct through examples.

Science. Chinese mathematicians knew the theory of geometry. Chang Ts'ang (d. 152 B.C.) made the first known mention of a negative quantity. The value of π was calculated correctly to six decimal places. In the 8th century, a system of numeration had been developed; the value of the numbers depended on their positions. Eclipses were correctly calculated in the time of Confucius and a lunar calendar was invented. Chinese priests and diviners used astrology. They often enjoyed court favor and were consulted on all important matters. In this procedure, some scientific data were compiled; careful notations were made of clouds and winds; in the 1st century A.D., a map of the stars was made in which 320 large stars were located. Chemistry grew out of search for the elixir of life. Water, fire, wood, gold, and earth were considered to be the basic elements. Chinese scientists believed that life originated in water and that man evolved from primitive marine life; also that, at death, the body returned to particles of the five elements.

In spite of the fact that the practice of medicine was dominated by superstition and magic, scientific practice gained considerable headway. The Canon of Medicine, compiled in the Chou dynasty, described the functions of several organs; and in it several diseases were listed, with recommended treatments. Various organs were named and the work of each was described; the heart was the prince, the liver the general, the gall bladder the central office, the lungs the minister, and the kidneys skilled workers. Diseases were associated with seasons—headaches and neuralgia in the spring, skin diseases in the summer, fevers in the autumn, and throat and lung complaints in the winter. Chang Chung-Ching (2d century A.D.), the "sage of medicine," did con-

structive work in treating typhoid fever. Hua T'o, who lived in the same century and was the most famous surgeon in ancient China, performed many delicate operations and used anesthetics. However, in spite of all the progress made in science, divination and magic were practiced extensively in China.

7. ESTIMATE OF CHINESE CIVILIZATION

Chinese civilization represents the longest unbroken chain of development known. Voltaire remarked, "The body of this empire has existed 4,000 years without having undergone any sensible alteration in its laws, customs, language, or even in its fashions of apparel." A tradition of poetry goes back to 1700 B.C. The Chinese, who were civilized when Greece was inhabited by barbarians, have seen the rise and fall of countless governments and civilizations. They possess a social organization that has included a greater number of persons and has endured longer than has any other known to history.

The religious leaders and philosophers of China have hardly been surpassed in any age or by any civilization. Confucius is outstanding among the philosophers of the world. The Chinese produced ceramics and painting which, in their kind, are unequaled. The Great Wall and the many irrigation projects demonstrate their skill in engineering. Until the recent intrusion of Western imperialists, China remained comparatively free of outside influence. This may be one reason why progress has been so slow in recent times, because new blood and new ideas, even though they may be introduced by barbarians, give a stimulus to further progress. The religion of the Chinese has been partly responsible for their backwardness. Ancestor worship is not conducive to new ideas, but this is perhaps the fault of the people, not of the religion. It has been a convenient excuse for their indifference to change.

VI. ANCIENT CIVILIZATIONS IN AMERICA

Although the ancient civilizations in America, from the point of view of chronology, do not belong in the same classification as the Greek, Roman, and Oriental civilizations, still from the conception of classical culture that has been given, they deserve consideration at this time. There are remains in the Western Hemisphere of a cultural development that should be ranked with those

to be seen in the Eastern Hemisphere. In the long-neglected ruins of Central and South America exist evidences of political organizations, social developments, ecclesiastical orders, architectural works, and economic activities equal in many respects to those of our European ancestors. Just why study of these civilizations has been neglected is hard to explain, unless it is that our scholars are inclined to follow in the footsteps of their European colleagues. In recent years, however, progress has been made, and in the not-too-distant future, a more complete story of the early civilizations of the American continents may be expected. At the present time, there are over 4,000 known archaeological remains in Mexico.

1. THE LAND AND THE PEOPLE OF ANCIENT MEXICO

Inaccessible Mexico. Citizens of the United States have but recently begun to realize the many rare qualities of the lands to the south of their own great country. Popularly speaking, Mexico is too often regarded as a barren waste almost unsuited for human habitation, and the people are thought by many to be of inferior development, bordering on the edge of barbarism. Yet, several years ago, Cecil Rhodes, the British empire builder, said, "Mexico is the treasure house of the world." A great part of the habitable regions of Mexico and Central America is on a rather inaccessible plateau rising several thousand feet above sea level. Stuart Chase[1] has aptly stated, "Topography, more than any other single factor, has saved Mexico from becoming Hispanicized, westernized, mechanized, or Americanized; saved, by and large, from borrowing anything but itself."

Topographical Features. The principal centers of ancient civilizations in America are in the territory of which Mexico City is the center, in Guatemala, on the peninsula of Yucatan, and in Peru. Approximately one-third of Mexico is a wedge-shaped plateau. The coast line is bordered by a low plain, ranging from 40 to 70 miles in width, very hot, and almost jungle-bound. Yucatan is low and hot, the redeeming feature being winds that blow from both sides of the peninsula. From November to May is the dry season, with incessant sunshine; from May to October, the rainy season, during which every afternoon the rain pours down, although each morning the sun shines. The territory extending

[1] *Mexico* (Macmillan), 1.

from the Isthmus of Panama to central Mexico, although it lies within the tropics, exhibits great extremes of climate, topography, plant and animal life. A contrast of luxuriant forests with open, thorny deserts, within the space of a few miles, is not exceptional. Volcanoes are numerous, and disastrous earthquakes are frequent.

The People. The racial origin of man in the Americas has not been determined. The theory generally subscribed to is that ancestors of the American Indians crossed over Bering Strait when a land mass connected Asia with North America, and that these Indians are proto-Mongolians. The American Indians, however, seem to be of different racial origin from the Mayas, the Aztecs, and the Incas. There are theories that they might have crossed from Europe via Greenland, or that they are descendants of the inhabitants of the lost continent of Atlantis, or that they might have crossed over the South Atlantic from Africa. Some believe (Dr. Franz Blom, for example) that the early Americans had no connection with either Europe or Asia and that they have developed independently in America. There is no proof that any cultural contacts had been made with any of the civilizations of Europe or Asia until the Spanish conquest. There seems to have been considerable racial mixture and a number of distinct languages are known. In California alone, there were over 100 distinct languages or dialects among the natives.

2. POLITICAL INSTITUTIONS

Scarcity of Information. Very little is known about the political systems of these people, principally because their conquerors destroyed most of the Maya *Codices* (books published by the natives before the conquest). Bishop Landa, who accompanied the Spanish army, believed that these books were creations of the devil, that they tended to prevent the conversion of the people to Roman Catholicism, and that they encouraged the continuation of idolatrous practices. Only two of the original books have been preserved in anything like entirety; one is in Dresden and the other is in Paris. They deal essentially with astronomical and calendric materials. The Spanish chronicles describe some of the *Codices* that were destroyed as containing discussions of history, medicine, and divination.

Mayan Government. The year 613 B.C. is considered by the

Mayas as their zero year. They had a calendar at that time and must have developed other lines of culture as well. The first Mayan empire was founded in Guatemala at about the time of the beginning of the Christian Era, but the peak of their accomplishment was in the 5th and 6th centuries. The Mayas settled in Yucatan in the 7th century; their largest cities were Chichen Itza and Uxmal. A priest king was, in theory, the absolute ruler; but there seems to have been considerable local autonomy in the various cities. There is little evidence of warfare among the cities. Trade flourished, each city specializing in some particular art. Copan, in Honduras, had excellently sculptured stelae; Tikal had beautiful wood carvings; Palenque had stucco moldings and engraved jade; and Quiriguá had wonderful zoomorphic monuments.

Toltecs and Aztecs. In the 12th century, the Mayas were conquered by the Toltecs—a warlike people who subjected most of the Maya cities, forcing the inhabitants to pay tribute. Some of the rulers were capable administrators, who succeeded in bringing about order and economic stability. Quetzalcoatl (d. 1207), one of the most remarkable figures in ancient American history, was not only an able ruler, but artist, scientist, and humanist philosopher, as well. Civil war destroyed the Toltecan power in 1220, and the Aztecs overran the territory. They were a brusk and warlike people, but they added to the picturesqueness of the cities by building fortifications and bridges. The military class, who ruled the country, enjoyed most of the social and economic prestige. The officers of the state were elected mostly from powerful families, the chief being succeeded by his son or his brother. If there were no sons or brothers, the eldest nephew was chosen; and if all such relatives were lacking or proved to be inefficient, the priests selected a leader. The high priest sat in the chief's council and exerted a great deal of influence. When Cortez conquered Mexico (1519), Montezuma was the ruler or "Chief of Men," as he was called. Through his influence the various tribes in lower Mexico and Yucatan had been united into one confederation, but there is reason to believe that Aztec culture was on the decline when the Spaniards arrived.

3. MAYAN AND AZTEC ART

Architecture. If architecture can be taken as a measure of civilization, the ancient people in America rank very high. Temples,

palaces, and fine buildings were produced in abundance; their number and their beauty are just beginning to be realized and appreciated by present-day travelers. There were huge pyramids, on which were temples, monasteries for the priesthood, palaces for the rulers, astronomical observatories, courts for athletic contests, and vapor baths. Buildings were constructed around the sides of plazas or on top of terraces. Beautifully sculptured monuments, ranging from 5 to 25 feet in height, surrounded the build-

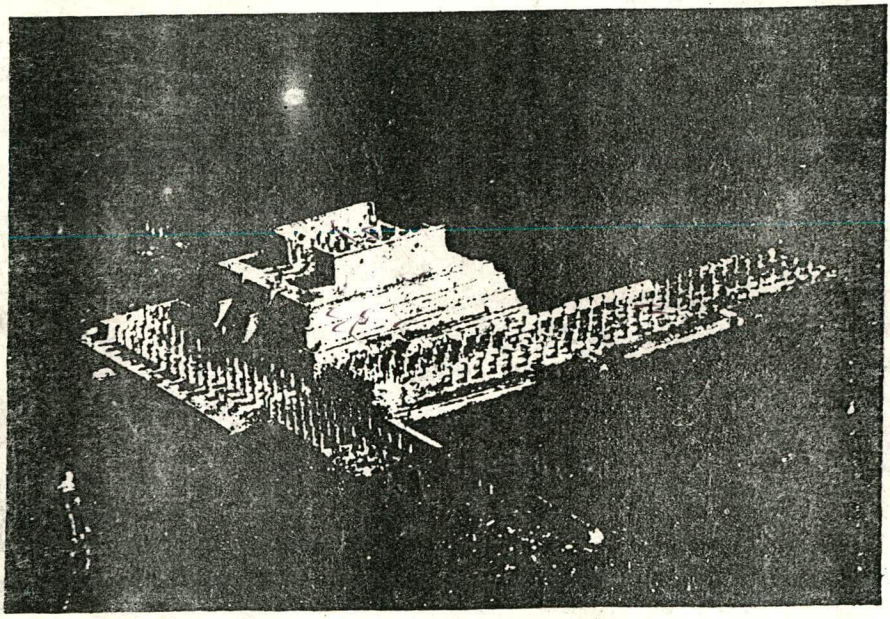


FIG. 29.—Temple of Warriors.

ings. The true arch was not used by the Mayas. Roofing was accomplished either by means of the cantilever arch, or with beams supported by pillars. The cantilever arch was constructed by bringing the inner faces of the walls together by overlapping courses, like two inverted stairways connected at the top with flagstones. This necessitated a very heavy wall and limited the width of the building to no more than 18 feet.

Most of the buildings were constructed upon pyramids or, as in the case of the Temple of the Warriors at Chichen Itza, upon a pyramid standing upon a pyramid. Some were more than 200 feet high and were approached by steep stone stairways with the rise

proportionately greater than the tread. The Pyramid of the Sun in Mexico is 750 feet square and 216 feet high. The buildings were decorated with elaborate stucco and bas-relief ornamentation. The private homes were built of bamboo, thatched with palm leaves and tied together with vines. The homes of rulers and priests, although they were of stone, were not so elaborate as the temples. The proportions, surface development, and artistic appeal of the Temple of the Warriors at Chichen and the Temple of the Plumed Serpent may be compared with the best in Grecian architecture.

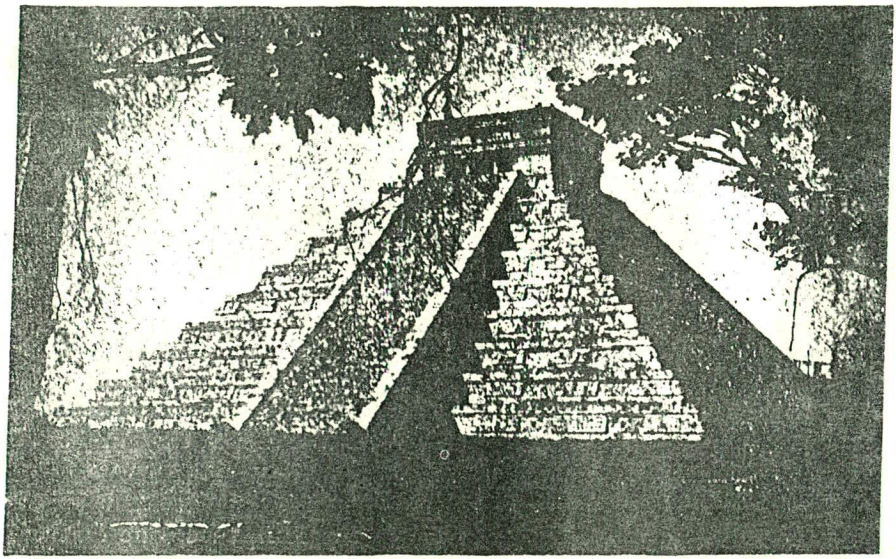


FIG. 30.—El Castillo or Temple of the Plumed Serpent.

Aztec architecture was more grandiose than the Mayan, but not so delicate and beautiful.

Sculpture. The Mayas used sculpture essentially for the worship of their gods. Images, decorations for temples, and monoliths were all conceived in honor of their deities. Their work in stone is interesting in light of the fact that it was wrought with stone tools. Most of the sculpture was executed in relief. The sense of perspective in this type of work was further developed among these artists than it was in any other contemporary civilization. The human figure in profile measures up to the standards of any work of that type. However, human forms were not emphasized, because

the gods were not conceived of as being in the image of man. They were half human and half animal, with grotesque elaborations. The serpent motive dominated Mayan sculpture, but not realistically. Parts of other creatures were added, such as the plumes of the tragopan, the teeth of the jaguar, and the ornaments of man. A human head was generally depicted in the distended jaws of the reptile, to emphasize its intelligence. An understanding of the serpent symbolism of the Mayan artists enables one to appreciate the truly emotional qualities of Mayan sculpture. Of the great

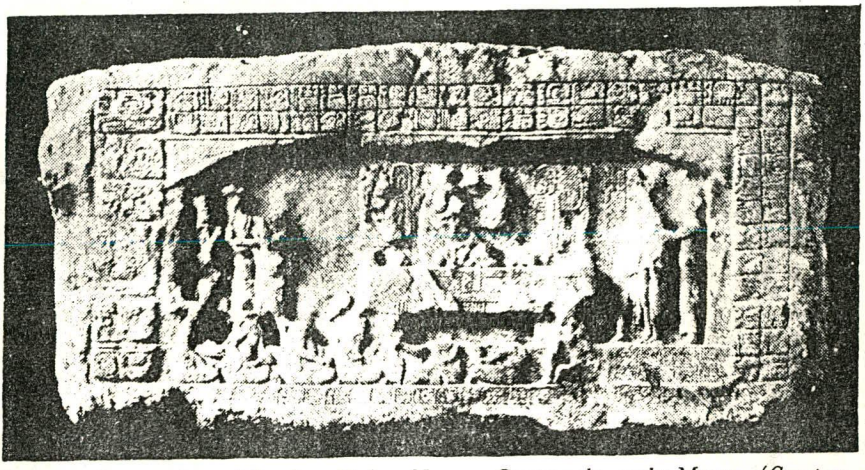


FIG. 31.—Restoration of lintel 3, Piedras Negras, Guatemala, early Mayan. (*Courtesy, University of Pennsylvania Museum.*)

monuments that are typical of Aztec sculpture, one of the most famous is the Calendar Stone, or the Stone of the Sun. It is a single piece of porphyry that originally weighed about 40 tons. On the face are represented the divisions of the year and a record of the cosmogonic Aztec myth of the creations and the destructions of the world. In the center is the face of the sun-god, underneath which are two plumed monsters meeting face to face. In each reptile's mouth is a human face in profile.

Painting. What remains of the painting of these people is, no doubt, a poor tribute to their genius in this art. The *Codices*, wall frescoes, and ceramics are about the only examples that have survived. The *Codices* are pictographic, but in making the figures the Mayas used a combination of colors that gives them a beautiful,

artistic effect. A part of one of the Aztec *Codices* shows the soul of a man, represented in elaborate detail, as a prisoner journeying through the other world. He has a wooden collar about his neck and is provided with weapons for self-protection. He encounters many obstacles: peaks that threaten to topple, serpents, alligators, and barren deserts. After all these dangers are passed, he arrives at the door of the Lord of Hell, where he greets all his friends.

Minor Arts. The work of the craftsmen, who were organized into guilds, shows skill and accuracy. Manual skill was held in high esteem and justly rewarded by the government and by society. While Spaniards acknowledged the superiority of the native work, their artistic appreciation gave way to their desire for gold. The finest pottery was made by the Incas, but the Mayas were not far behind. They were skilled in weaving cloth, using some cotton but principally a fiber taken from a species of cactus. Into the fiber they wove brilliantly colored feathers taken from hummingbirds, parrots, and macaws. This is an art that the modern descendants of the Aztecs have retained.

The Mayas were proficient wood carvers, but they were less skilled in metalwork than were the Incas. Some of their ornaments of gold have been found in the cenotaphs at Chichen Itzá, but stone was their favorite medium for artistic expression. Jade and other semiprecious stones were carved into beautiful and fantastic shapes by the Mayas, who valued their jade ornaments as priceless possessions. The Aztecs were especially skilled in making mosaics. One shield contains 15,000 pieces of turquoise inlaid so as to produce representations of human figures. Pottery vessels and ornaments of gold, silver, copper, and jade also were abundant.

4. MAYAN AND AZTEC RELIGION

Mayan Gods. Agriculture was the mainstay of the Mayan economic system, and about it many of the religious practices centered. Many of the numerous gods were earth gods associated with the directions, east, west, north, south. There were gods of forests, rain, plains, fertility, and animals. Prayers and an appropriate ceremony were performed before a tree was cut, before seeds were planted, and before a hunt started. The prayer offered before cutting a tree is interesting.

O God, my mother, my father, Huitz-Hok, Lord Hills and Valleys, Che, Lord Forest, be patient with me for I am about to trouble your very soul, but suffer it, I pray you. I am about to dirty you—to destroy your beauty—I am going to work you that I may obtain my daily bread. I pray you suffer no animal to attack me, nor snake to bite me. Permit not the scorpion or wasp to sting me. Bid the trees that they may not fall upon me, and suffer not the ax or knife to cut me, for with all my heart I am about to work you.

The rain-gods in Yucatan were called Chacs and were thought to have bags containing water and wind, and to have a drum, besides. The god opened the rain bag to give moisture to the earth; when the wind bag was opened, the wind blew; and when the drum sounded, there was thunder. Itzamna, a most important god of the sky, controlled the decay and the rebirth of life. The sun-god, Kinichahau, was associated with the jaguar and was depicted on many of the buildings. "Lord Big Eye," the morning star, was the source of the power of all the earth gods, as well as the patron of agriculture and of hunting. He was symbolized as a cross between a dragon and a snake, with a body covered with feathers. Hunahau, the god of the underworld, was depicted as a skeleton covered with decomposing flesh. His kingdom, called Metnal, was a dark, gloomy, damp place, where the condemned souls lived. Kulkulcan, the Feathered Serpent, was the patron deity of the city of Chichen Itza.

Ceremonies and Sacrifices. Mayan religion was closely associated with the months of the year, and elaborate ceremonies were performed in celebration of each. The new year, beginning with the month Pop, was a time of great festivity. The fasting that preceded the occasion lasted two or three months; temples were renovated and new personal possessions were acquired for the event. In the month of Zip, feasts were held for the chase; in Tzec, for the beekeeper gods; and in Xul, in honor of Kulkulcan, the Plumed Serpent. This last was the most elaborate celebration of the year, with feasting and ceremony that lasted four or five days.

Every month during the year, and sometimes several times during one month, ceremonies took place. In some of them human sacrifices played an important part, especially among the Aztecs. At one time, they are supposed to have sacrificed 70,000 persons in dedicating a temple. The heart of the victim was the most prized. It was offered to the idol of the god, while the rest of the

body was thrown to the crowd of spectators, who devoured it as a kind of communion service. Young men and women, vases, jewelry, and valued possessions were thrown into deep pools of water to appease the rain-god and ensure sufficient rainfall for the growing season. There was also self-mutilation, the giving of one's own blood to the god being considered a worthy deed. Of the numerous priests who preformed these rites, the chief priest was called Ah Kin Mai. Priests figured very prominently in Mayan society and were influential in governmental affairs.

Aztec Gods and Their Worship. Aztec religion followed the same general type as that of the Mayas, with a little advancement toward human forms and attributes for their gods. The great multiplicity of gods is baffling. There were universal gods, special gods, and patron gods of trade guilds. Pageants, incense burning, and human sacrifice were practiced widely. The Earth Mother, the Sky Father, the Jaguar, the Serpent, and anything else beautiful and powerful were placed in the category of deities. The origin and character of the universe was pretty well defined in Aztec mythology. There were five suns, each standing for a world epoch. The first was devoured by a Jaguar, the second was destroyed by a hurricane, the third by fire, and the fourth by a flood. In each case, one human pair escaped and lived to repopulate the world. The belief is that the present sun will be destroyed by an earthquake.

Evaluation. The Aztecs especially resorted to excessive human sacrifice in their religious practices. During the terrible experience of the Spanish conquest, sacrifice was conceived to be the thing needed to appease the angry gods. It was a natural expression of the people's terror, but at the same time it indicates a set of degenerate moral and ethical standards. The excesses of the Aztecs, however, should not be accepted as typical of the standard of earlier peoples. All evidences point to a primitive religion, even when culture was at its peak, but there is nothing to prove that these excesses were typical with the Mayas. Aztec culture was well on the road to decline when the Spaniards arrived.

5. MAYAN AND AZTEC LITERATURE AND LEARNING

Literature. Very little is known of Mayan and Aztec literature. The *Codices* of the late Aztec period (most of them dating no

earlier than A.D. 1000) are hardly representative. The Aztec language had no alphabet, merely a complicated hieroglyphic system. The Mayas and the Aztecs apparently intended to preserve their history, mythology, and literature in their sculpture and architecture. Unfortunately, much of this has been lost through the destruction of their buildings. The whole system of written expression is most perplexing. No personal or place name has been definitely recognized and translated, although great quantities of material have been found. Several late Aztec poetic writings have been preserved by the natives. Nezahualcóyotl, or Flaming Coyote (d. 1472), was very popular. One part of his work has been translated as follows:

"All the earth is a grave, and naught escapes it;
Nothing is so perfect that it does not fall and disappear.
The rivers, brooks, fountains, and waters flow on,
And never return to their joyous beginning;
They hasten on to the vast realms of Tlaloc,
And the wider they spread between their marges the more rapidly
Do they mould their own sepulchral urns.
That which was yesterday is not today;
And let not that which is today trust to live tomorrow."

Science. The calendar is the greatest scientific achievement of the Mayas. It was calculated from mathematical and astronomical investigations and so arranged that they could distinguish, without duplication, any given day in 370,000 years. They measured time in *katuns*, or 20-year cycles. The year, consisting of 365 days, was divided into 18 months of 20 days each. The five remaining days were considered unlucky, but were added to complete the year. One of the main uses of the calendar was to be a guide for the farmers. Lucky days for planting were recorded and harvesting dates were carefully noted. The Mayan mathematical system had the zero, but instead of a decimal system they used a vigesimal, nineteen numbers and a zero. Practically all of the essential elements of our own arithmetic, including numeration by position and the symbol zero, were used by the ancient Maya 2,000 years ago, and at least five centuries before the Hindus developed the fundamentals of arithmetic in India.

6. THE INCAS

Geography. The modern countries of Ecuador, Peru, and Bolivia embrace an area in which the civilization of the Incas flourished. Along the river valleys and around lakes, many of them high in the Andes Mountains, people lived who made notable cultural progress. The land around Lake Titicaca, about 40 miles wide and 120 miles long and more than 12,500 feet above sea level, was one of the most famous of these centers. In this stimulating climate, the natives were able to grow crops, raise llamas for meat and wool, and use the copper that existed in abundance. The supply of various kinds of stone, of unsurpassed quality for architectural and sculptural purposes, was limitless.

Political History. There are few dependable accounts of the history of the Incas. They left no written language and, as a result, the only source of information comes from archaeological remains and folklore. This is especially true until about 600. There is evidence that the Incas lived on the coast before pushing into the highlands. The most advanced center of Inca culture was near Lake Titicaca. A great dynasty was ruling here when Francesco Pizarro arrived.

The government seems to have been loosely organized except when an unusually powerful emperor reigned. Sinchi Roca (1105-1140) was one of the most outstanding rulers. He was a great conqueror and accumulated sufficient wealth to rule in splendor. Generally speaking, the government was despotic and paternalistic. Descendants of the older families, supported by the priests, formed the privileged class. The lower classes lived in complete subjection. Everything was planned for the individual—his occupation, even his marriage (men were to marry at twenty-four, women at eighteen years of age). The laws were severe and penalties were cruel. Plant and animal life was protected; it was illegal to kill a female llama. A nun who violated her vows was buried alive, a thief was conspicuously branded, and a liar had his tongue nailed to a board for the third offense.

There was no money economy. Gold and silver were used only metals for occupational use or for decorations. Value depended on the usefulness of a commodity. If an individual had an excess amount of maize but an insufficient supply of cotton, one was

exchanged for the other. Land was regarded as common property without individual ownership. Every man was expected to serve the state according to his ability. All of this was determined by governmental officials. Tribute and taxes were paid for in manual labor. All commoners had to take turns working in the mines.

Religion. Practically all matters, both public and private, were controlled by religious restrictions. The people spent much of their time in elaborate religious ceremonies. Elaborate preparations were made for such occasions. Everyone dressed in the most gorgeous attire obtainable. Finely woven cloth glowing with many colors, gorgeous raiment aglow with brilliant plumage of birds, condor costumes with outstretched wings were used for adornment. A band consisting of syrinxes, trumpets, shell clarions, drums, and rattles provided the music. At dawn, the Emperor marched in stately procession to the Holy Terrace, where the people prostrated themselves, resting upon their elbows, facing the sun and kissing the sunbeams in adoration of their god.

A great feast, called the Feast of the Sun, followed. A black llama was sacrificed along with many other animals and birds. The cooked meat was devoured by the people for religious purification. Ceremonies were held at planting time to ensure good crops. Special pageants were conducted to prevent illness, to produce rainfall, and to ensure military victory. Women, as well as men, participated. A specially selected group of women, known as Virgins of the Sun, guarded the Sun Temple. Human sacrifice was practiced, but not so extensively as among the Mayas and the Aztecs.

Art. The Incas, like the Mayas, built massive pyramids, constructing both round and square buildings, with cobblestone domical roofs. Huge monolithic gateways are characteristic of many of the buildings at Tiahuanaco. One measures thirteen feet five inches in length, seven feet two inches in height, with a doorway five feet six inches by two feet nine inches cut through the center. The Temple of the Sun at Cuzco was one of the largest and most revered buildings of the Incas. This edifice was about 1,200 feet in circuit. It had only one outside entrance, and that led into the main sanctuary, a room 296 feet long by 52 feet wide. The gabled roof had an inner shell of wood embellished with very thin sheets of beaten gold. In addition to temples and sanctuaries,

roads, forts, bridges, and palaces were constructed. Weaving was a highly developed art. Use was made of cotton and wool for clothing, tapestry, and embroidery, much of the work being elaborate in design and beautiful and artistic in effect. Some of the weaving was so intricate that modern experts have been unable to find out just how the results were accomplished.

Literature and Learning. There is little evidence of written records, at least in the early period of Inca history. Records were kept by means of knotted strings called *quips*, most of which have been destroyed, while those that remain defy translation. However, there are many stories having literary merit that have been orally perpetuated by professional bards. The hymns and prayers for religious ceremonies are similar in some respects to those found in the Old Testament.

The following is one of the prayers that were preserved by the Spanish priests.

"O Pachacamac!
Thou who hast existed from the beginning,
Thou who shalt exist to the end,
Powerful but merciful,
Who didst create man by saying,
'Let man be.'
Who defendest us from evil,
And preservest our life and our health,

Art thou in the sky or upon the earth?
In the clouds or in the deeps?
Hear the voice of him who implores thee,
And grant his petitions,

Give us life everlasting,
Preserve us and accept this, our sacrifice . . . "

For reckoning time the Incas had an elaborate system that resembled the Maya calendar. They practiced medicine in a primitive manner. Purging and bleeding were common practices. Medicaments were simple herbs, and no attempt was made to form compounds. Surgical operations were performed on the skull,

broken bones were set, and fillings were put in teeth. Evidence of practices has been discovered in skeleton remains that were found in excavations.

7. ESTIMATE OF ANCIENT CIVILIZATION IN AMERICA

Even with the scanty knowledge available concerning the ancient peoples in America, one is forced to admire their accomplishment. Their religion sounds fantastic and barbaric; but it should be kept in mind that much of our information comes from missionaries whose interests and convictions induced them to paint a black picture (perhaps much too black) of the practices of the natives. The artistic developments of those early inhabitants of America, especially in architecture, command the respect of every serious student of archaeology. It can be concluded that an American style of architecture had been perfected before the arrival of Europeans. In pure science, considerable advance had been made, as the calendar testifies. Final judgment cannot be passed because of too little information about the life and ways of these people, but the diligent work of leading archaeologists in the field will surely bring to light much new information concerning their interesting civilization.

VII. DECLINE OF CLASSICAL CIVILIZATION

The division of history into periods is an artificial way for the historian to organize the vast amount of material and the long expanse of time that he must survey. Actually, there was no sharp line of demarcation between periods that could be detected at the time designated. There was no general cataclysmic end of one era, followed immediately by the glorious dawning of another. Similar trends developed, matured, and disappeared at different times in various sections of the world. The Industrial Revolution is just developing in Russia and in the Orient, although it began in western Europe over 200 years ago.

Contributions. Classical civilization, especially in Europe, made a considerable contribution to the growing stream of history. It left for later developments a priceless heritage. Peaks of accomplishment were reached in some fields—philosophy, literature, and art, for example—which have not been surpassed. However, there

were many shortcomings. New elements had to be introduced to make modern culture possible. The period of transition from the classical to the modern, for convenience sake, is called the Middle Ages.

Weakness of Social Science. Some of the reasons for this change are worth considering. Social science in the classical period failed to present a practical understanding of either political or economic phenomena. Roman law was the greatest achievement in the field of social thought; yet in actual fact, even this did not keep pace with prevailing economic conditions. It did not solve the problems for which it was intended.

Poverty was widespread. Those who possessed wealth were insolent and aggressive. The impoverished and disinherited resorted to looting and brigandage. Children often were sold into slavery by their parents. Fraud and greed prevailed in an alarming degree. There was universal decline in loyalty to public institutions and obligations. In Rome, for example, morale in the army declined to such a point that this institution became a menace to the state. In the 3d century, the armies of the Rhine, the Danube, and the East split off from government control and became autonomous. Varying types of breakdown were prevalent in all centers of classical culture.

Impractical Nature of Classical Thought. The prime interest of thinkers was in speculations concerning such matters as elements, moral law, and the absolute. As a result, there was no particular increase in practical information for improving the material welfare of man. Plotinus (204–270) expressed shame, humility, and embarrassment because he possessed a physical body. The investigating of natural phenomena was very much neglected. Logic and allegory were the principal instruments used in the pursuit of knowledge. The overuse of rhetoric and the love for flowing language diverted philosophical attention from concrete realities. Thinkers secured satisfaction from words and phrases, instead of from facts and achievements. Aristotle illustrates the point. He was obsessed with a desire for finality and definiteness, which led him to make premature conclusions.

Labor was regarded as degrading, and mechanics of all kinds were looked upon as vile. Matter was deemed spiritually corrupting. Unchanging reality, the goal in thinking, left leaders helpless

when changes occurred, in spite of their theories to the contrary. Men, having been taught how to act, rather than how to produce, were confused by the changes in their material surroundings.

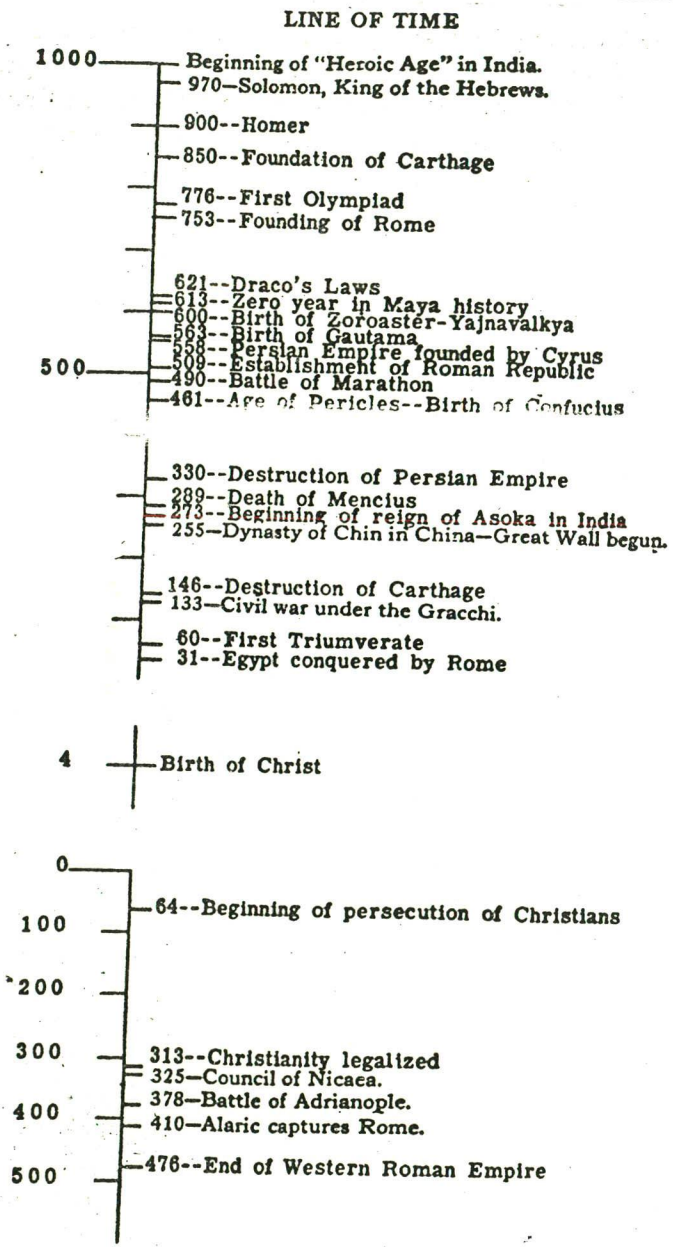
Classical learning was restricted almost completely to the urban ruling class, while both urban and rural workers had only slight knowledge of classical learning; therefore, as the supremacy of the ruling classes declined, culture was engulfed in the thoughts and ideas of the uncultured masses.

Thinking, in classical times, was based upon a rather primitive view of human life, dominated by uncanny powers that lurked everywhere. Success in government was regarded as a favor bestowed by state deities, and oracles determined public policies. Primitive concepts were preserved and elaborated upon in all centers of classical culture. There was a general reluctance to face reality and to attack the problems of life.

Originality gradually disappeared from all fields of cultural activity, including even literature. The classical mind, after making extraordinary advances in the realm of the abstract, fell into a state of stagnancy. There followed a period of changing and shifting values; and in the midst of this chaos, Christianity began to surpass the ancient pagan culture.

Although the above generalizations apply specifically to classical civilization in Europe and in the Near East, they can be applied generally to the classical cultures in Asia and in America. These were dominated by religion, philosophy, or some form of mysticism. Individualism, in any form, was virtually unknown. Governments existed under the sanctifying cloaks of mysticism and supernaturalism. Science was essentially theoretical and not utilitarian. Society was rigidly stratified. Too often the privileged people were so static both morally and mentally that they not only failed to make contributions to intellectual progress themselves, but also stifled attempts made by other classes.

Transition. New trends were in evidence, some of which go far back into the classical period. The rise of Christianity was one of the most important of the dynamic forces in western Europe. It was older, in fact, than the Roman Empire, but it grew to importance as the empire declined. Classical culture declined in various other parts of the world, but in most instances there was lacking any such experience as came to Europe in the rise of



Christianity. In Asia, a degenerate classical culture persisted until rather recently.

Review Questions

1. Define classical civilization. Does it deserve that title?
2. What influences made possible the rise of Greek civilization? What material advantages did they have?
3. Contrast the Athenian and Spartan concepts of government.
4. How did the Greek state differ from earlier attempts at government?
5. What was Plato's idea of Democracy?
6. "There the sons of Athens set the stone
   That freedom stands on yet." Explain this quotation.
7. What was Aristotle's conception of the ideal form of government?
8. Why did the Greeks excel in art?
9. What were the three orders of Greek architecture? Describe.
10. Describe the various schools of Greek sculpture.
11. The Greek gods were deified men. What effect did this have on the religion?
12. Classify and describe Greek philosophy.
13. What are the more outstanding examples of Greek literature?
14. What advances did the Greeks make in science?
15. Distinguish between Hellenic and Hellenistic civilization as to (*a*) art, (*b*) religion, (*c*) philosophy, (*d*) science, and (*e*) government.
16. What was the Greek idea of education? How was it applied?
17. Account for the decline of Greek civilization.
18. Identify or define carefully: Hellas, ephors, archons, Draco, Pisistratus, Cleisthenes, Periander, *polis*, Marathon, Delian League, Council of Old Men, Pericles, Xenophon, Philip, Eternal Hellenic Confederacy, Seleucus, Lysimachus, Ptolemy, Plato, Aristotle, Terpander, Pythagoras, Parthenon, "The Trojan Women," Phidias, archaic, Scopas, Demeter, Apollodorus, Sophists, Gorgias, Zeno, Diogenes, Hesiod, Sappho, Aeschylus, "Electra," Hippocrates, Poseidon, and Apollo.
19. From whom did the early Romans borrow their civilization?
20. Trace the evolution of the Roman government to the formation of the empire.
21. What changes were made during the empire?
22. Describe the Justinian Code. What contributions did the Romans make in law?
23. What was the Roman conception of citizenship? How did this change in the later empire?
24. Enumerate the principal weakness of the Roman economic system. How does this compare with some modern economic problems?
25. Compare Greek and Roman art. How did they differ?
26. Why did the Romans persecute the Christians? Why was Christianity made a state religion?
27. What influence did Oriental religion have on the Romans?
28. Describe Roman philosophy. Show the Greek influence.

29. What contributions did the Romans make in literature?

30. What progress did the Romans make in science?

31. Identify or define: patrician, plebeian, *coloni*, praetor, imperial cult, barrel vault, *Corpus Juris Civilis*, *collegia*, Hannibal, Cato, Laws of the Twelve Tables, Diocletian, Edict of Toleration, Cybele, Galerius, Panaetius, Apuleius, Ovid, Vergil, Lucretius, Varro, Pliny, and Quintilian.

32. Describe the geography of India.

33. How did the early government of India differ from those in the West? Account for this.

34. What was the basis of the caste system?

35. Describe Indian art. Compare it with that of the West.

36. Describe the various religious groups of India.

37. In what ways has religion been a retarding influence in India?

38. Characterize Indian literature.

39. What was done in the field of education? Compare this with the West.

40. What scientific advances were made in India? How do they compare with those in Europe?

41. Identify or define: *Vedas*, Siddhartha, Chandragupta, Gupta, Brahma, Asoka, Angkor Wat, Boro Budur, *Upanishads*, Atman, Jainism, Mahavira, Gautama, Moksha, *Mahabharata*, *Ramayana*, *Panchatantra*, Sushruta, and Charaka.

42. Describe the land and the people of China.

43. Trace the evolution of the Chinese government to 1279.

44. What type of political system did the Chinese have? Compare it with those in the West. Account for the difference.

45. Characterize Chinese art. Compare it with that of the West. Account for the difference.

46. Describe Chinese religion. Compare it with the Greek.

47. What part did Confucius play in Chinese history?

48. What was the character of Chinese philosophy after Confucius?

49. What progress did the Chinese make in science?

50. Identify or define: Fu Hsi, Shih Huang-Ti, Wang Wei, Mu Hsi, Yu Tze, Lao-tse, *Book of Mencius*, Tai Li Po, Chu-Hsi, and *Book of Odes*.

51. Why is there so little known about the ancient civilizations in America?

52. What are some of the theories about the origin of the early Americans?

53. Describe the Maya and the Inca governments. How do they compare with the governments of the same period in Europe and Asia?

54. What progress was made in the arts? Compare with that of Egypt.

55. How would you classify the religion of these people? What part did religion play in their lives?

56. What evidence is there of scientific progress?

57. Identify or define: Titicaca, *Codices*, Toltecs, "El Castillo," Cortez, Lord of Hell, Chacs, Kulkulcan, Ah Kin Mai, and *katuns*.

Problems

1. There were two rather basic divisions in the Roman Empire. The West was predominately Roman and the East predominately Greek. Give as many illustrations as you can to illustrate this.

2. Compare and contrast the civilizations of India and China with those of Greece and Rome. Why such a gulf between the two civilizations?

3. What proof can you give of contacts between the Orient and the Occident in classical times?

Map Study

Denoyer-Geppert Outline Map No. 18090

1. Indicate the principal rivers, mountains, and seas in Greece and Italy.
2. Locate the main cities of Greece and Rome and show why each was important.
3. Locate the principal Greek colonies.
4. Trace the voyages of Hannibal and Alexander the Great.
5. Show the divisions of Alexander's empire after his death.
6. Locate the important Italian tribes before the Roman conquest.
7. Show the Roman Empire at its gretest extent.

Denoyer-Geppert Outline Map No. 8009

1. Locate the principal topographic features of Asia and the Americas showing seas, rivers, mountains, plateaus, and deserts.
2. Bound the empires of Asoka and Gupta.
3. Locate the principal cities of ancient India, China, and America.
4. Locate the remains of Maya, Aztec, and Inca civilizations in America.

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