



# CHAPTER 1

## ANCIENT GREECE AND THE HELLENISTIC AGE —The Origins of Modern Culture

### Introduction

The history of Ancient Greece runs from 2000 BC until the Romans conquered the country in 146 BC. This period can be divided into five ages:

- 2600–1200 BC: Bronze Age cultures. The Cycladic culture on the small islands south of Greece, and the Minoan culture on Crete were replaced by people from the north—the Mycenaeans.
- 1200–700 BC: Iron Age cultures. New people arrived from the north, defeating the Mycenaeans. These were the three tribes of Hellenes or Greeks, (Dorians, Ionians and Aeolians), who settled in the mainland of Greece and also crossed the Aegean Sea to Asia Minor (today's Turkey).
- 700–490 BC: the Archaic or the Lyric Age. The Greeks created a literature. City-states developed, each with its own constitution. The Greeks established colonies around the Black Sea and in the western Mediterranean.
- 490–338 BC: the Classical Age. Greek culture reached its highest point in politics, literature, art and philosophy.
- 338–c. 30 BC: the Hellenistic Age. The Greeks were defeated by King Philip II of Macedon in 338 BC. Alexander the Great, son of Philip, then created an empire that reached from Greece to India.

### Part 1 The history of Greece

#### In Part 1 you will study

- the Achaeans, who created the Mycenaean civilisation
- the second migration, which created the Greek civilisation
- the Greek defeat of the Persians
- the Classical Age
- the end of Greek independence in 338 BC
- the Hellenistic Age



## 1 The predecessors of the Greeks

### 1.1 ● The Achaeans and the destruction of the Minoan civilisation (2000–1200 BC)

Greek civilisation resulted from two great migrations of people—the first was in the Bronze Age and the second in the Iron Age. In about the year 2000 BC Indo-European tribes began moving outwards from an area between the Black Sea and the Caspian Sea towards Europe, Western Asia and India. As the tribes separated into communities, different languages developed. These are the Indo-European languages, among which was Ancient Greek.

The first group of Indo-Europeans, called Achaeans, settled on the mainland of Greece and created the Mycenaean culture. Over a period of six hundred years they occupied the mainland and smaller islands, and then the large island of Crete. There they appear to have destroyed the pre-existing Minoan culture.

The Minoan civilisation was a wealthy trading culture that existed from about 2600 BC to about 1400 BC, and takes its name from the legendary King Minos. The remains of several large palaces can be found on Crete. They were decorated with beautiful frescoes<sup>①</sup> of men and women taking part in the dangerous sport of bull leaping, sea creatures, plants and bare-breasted women, who were priestesses. These may be connected with the early eastern Mediterranean worship of a Mother Goddess.

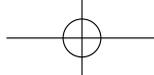


Fig. 1.1 Theseus killing the Minotaur from a black figure vase

The Greek legend of the Minotaur (Fig. 1.1), half man, half bull, comes from Crete. This monster lived in a labyrinth<sup>②</sup> built by the god Hephaestus<sup>③</sup>. The legend is connected with the caves and many-roomed palaces of the island, and may also be the mythological account of the defeat of the Minoans by the Achaeans. The story tells how each year young men and women were sent from Athens as tribute to be fed to the Minotaur. Theseus, son of the king of Athens, volunteered to go, so that he could kill the monster and thus end the tribute system. On Crete he met Ariadne, daughter of King Minos. She fell in love with him, gave him a sword and also a thread to help him find his way back out of the labyrinth. Theseus killed the Minotaur and sailed home, abandoning Ariadne

① wall paintings    ② a network of tunnels

③ the god of fire and metal working and the son of Hera and Zeus



on the way. As he neared the mainland he failed to change the ship's black sail to a white one, which had been agreed as the signal for success. His father, seeing the black sail and thinking his son was dead, threw himself into the sea. The Labyrinth has become a common metaphor in western literature, to do with confusion and entrapment, and the Minotaur, particularly in the paintings of Picasso (1881–1973), a symbol of brutality and danger.

The Achaeans brought their language, their gods, and a monarchical<sup>①</sup> form of government to Greece. They built great fortresses, of which Mycenae, “rich in gold”, is one of the finest. It has a great stone “Lion Gate”, and many huge underground, royal tombs. It was this fortress that gave its name to the Mycenaean civilisation.

The rulers who lived in these fortresses traced their ancestry to the gods. One of these rulers was Agamemnon, “king of men” whose fortress was Mycenae. It was here that he was murdered by his wife, Clytemnestra, and her lover, Aegisthus, when he returned after the ten-year Trojan War. This was fought in the thirteenth century BC against Troy, a great city in Asia Minor. The war was caused when the Trojan prince Paris took Helen, the wife of the king of Sparta, back to Troy with him. Homer's epic poem, the *Iliad*, is about the Trojan War.

## 2 The Greeks arrive

### 2.1 ● The coming of the Greeks and the development of their culture, 1200 BC–900 BC

The Mycenaean civilisation collapsed as the Hellenes invaded Greece in about 1200 BC. The three tribes of Hellenes, the Dorians, the Ionians and the Aeolians, spread out across the land and sea, adopting the religious sites and gods of the Achaeans. The Dorians remained on the mainland, the Ionians crossed the Aegean Sea and settled in Asia Minor, which became known as Ionia, and the Aeolians settled round the entrance to the Black Sea. These different tribes were connected by their common religion and language, though they each worshipped different gods among the twelve gods of the Mycenaeans<sup>②</sup>, who were said to live on Mount Olympus.

The geography of Greece and the wide distribution of Greeks meant that there were many independent city-states, united by language, religious outlook, mythology and temperament. The Greeks developed a culture of the land and of the sea, in which there were many small states rather than one controlling empire. These states were highly competitive and frequently at war with each other, yet managed, in spite of this, to retain the idea of being one people. To be Greek

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<sup>①</sup> having a king    <sup>②</sup> see Appendix 7



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meant to belong to one culture rather than to belong to one country. They talked of the Greeks (or Hellenes) and not of Greece, and they liked to draw a proud distinction between themselves and the surrounding “barbarians”. This variety within unity is one of the striking things about ancient Greek culture.

At this time, from 1200–700 BC, the Hellenes formed their religion, adopted an alphabet, wrote their first great epics, and developed the first constitutions for city-states.

### 2.2 ● Population growth and the establishment of colonies throughout the Mediterranean

Greek society was well developed by the eighth century BC. It also went through great economic change due to trade and to changes from animal to arable<sup>①</sup> farming. As a result the population increased dramatically. To absorb this increase the Greeks established colonies throughout the Mediterranean and around the Black Sea coast, taking their culture to other parts of the world. The area to the west in southern Italy and Sicily became known in Latin as *Graecia Magna*—Greater Greece. This expansion increased Greek knowledge of the world and took Greek culture right along the southern coasts of Europe as far as the Atlantic Ocean, exercising a lasting influence on the culture of the continent.

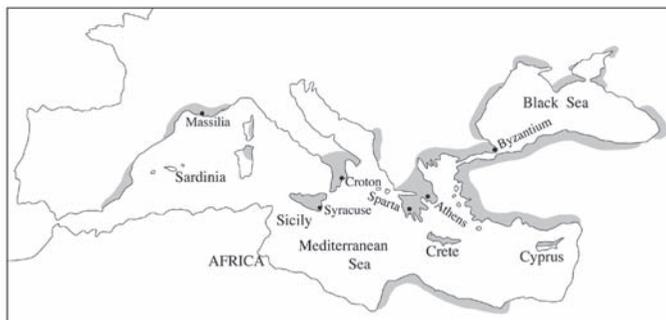
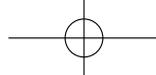


Fig. 1.2 Greek colonies. During the eighth and the seventh century BC the Greek city-states set up colonies throughout the Mediterranean area.

At the same time warships and heavy infantry<sup>②</sup> were developed to protect the expanding Greek world. The heavy infantry showed a social change from aristocratic, single combat, which had been the method of fighting used in the Trojan War. Fighting now involved all citizens of the expanding towns. The soldiers, called *hoplites*<sup>③</sup>, were drawn from those who could afford to pay for their own weapons and armour. They carried a sword and spear, and fought in a tight square formation called a phalanx. This method of fighting ensured

① farming using a plough    ② foot soldiers    ③ a heavy armed foot soldier of ancient Greece



supremacy for Greek armies that lasted until the fourth century BC. The first great test of Greek fighting ability came when the Persians invaded Greece in the fifth century BC.

### **2.3 ● War with the Persians—490 and 481 BC**

The fifth century BC opened with events that shaped the future of Greek civilisation and Western culture. In the 490s and 480s BC the Greeks, whose total population has been estimated to be between one and two million people, defeated Persian invaders, whose vast empire was the greatest in the world, reaching from Asia Minor across to India and down to Egypt in the south.

There were two Persian invasions; that of King Darius in 490 BC and that of his son Xerxes ten years later. In the first campaign the Athenians, almost alone, defeated the huge army of Darius at Marathon, saving Athens from destruction. Sparta, another city-state, was unable to send an army as they were engaged in a religious festival at the time. Even when all Greece was threatened, religious duty came first.

The second campaign in 480 BC was decided at the land battles of Thermopylae and Plataea, and the sea battles of Salamis and Mycale. At the narrow pass of Thermopylae, Persia's vast army of 250,000 men was delayed for three days by a small force of Greeks. On the last day Leonidas, the Spartan king, dismissed the majority of his troops and with three hundred Spartans and 1,000 allies, held the pass and died. Xerxes lost 20,000 men. He advanced and burnt Athens. Then, at Salamis he watched from his golden throne as the 380 Greek ships destroyed his fleet of 1,200 vessels. It was an astonishing victory. Shortly after this at Plataea the armies met again. The Greeks were ready and had taken their oath: "I shall fight to the death. I shall put freedom before life. I shall not desert colonel or captain dead or alive, I shall carry out the general's commands, and I shall bury my comrades-in-arms where they fall and leave none unburied." Their army of 109,000 defeated the Persian army of 300,000. On the same day, several hundred miles away at Mycale in the northern Aegean, the Greek fleet destroyed what was left of Xerxes' fleet.

The effect of this astounding series of victories was immense. Not only was Greek culture saved, but it confirmed the Greeks' confidence in their own abilities, and their belief in their way of life. In Athens it confirmed their faith in democracy.

### **2.4 The Classical Age and the wars of Greece—the fifth and fourth centuries BC**

After this victory Athens became the leading city of Greece and the Classical Age of Greek culture began. Athens founded an empire and became immensely wealthy. Architecture, sculpture and drama reached new heights and democracy



was further developed. The period from 450 to 430 BC is sometimes called the Periclean age after the politician Pericles, who guided the city in this period, and was responsible for the building programme. He died in a plague in 429 BC, two years after the beginning of the disastrous Peloponnesian War. This war was between the ancient rivals, the city-states of Athens and Sparta, and because of a plague in Athens and great losses in a military attack on Sicily, Athens lost the war, and was defeated in 404 BC. The war was followed by political confusion in Athens during which the philosopher Socrates was put to death for allegedly “corrupting the youth of Athens”.

Sparta was now the greatest power, and further wars followed among the Greeks until they exhausted themselves. Sparta was defeated in 362 BC. During this time the state of Macedonia to the north of Greece evolved as a great power under Philip II. Philip invaded Greece and defeated the Greeks at the battle of Chaeronea in 338 BC. Now, for the first time ever, Greeks came under the rule of outsiders and the story of Greece as a country of independent states ends. The Hellenistic Age begins.

### **3 The Hellenistic Age (338–30 BC)**

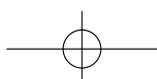
#### **3.1 ● The empire of Alexander**

Hellenism is the period during which Greek culture spread throughout Asia Minor and the Middle East in the empire of Alexander the Great. After the battle of Chaeronea in 338 BC, the Greeks came under Macedonian rule. Philip was assassinated in 336 BC, and his son Alexander (356–323 BC) took the throne at the age of twenty. In less than thirteen years he created an empire that reached over 3,000 miles from Greece to India. Alexander, who had been educated by Aristotle, greatly admired the Greeks, and he took their language and their culture with him to blend with the conquered peoples in this vast space.

The Macedonian defeat of the Greeks changed the Greek way of life as they lost the independence given by democracy. For centuries men had taken an almost daily part in politics, deciding issues of war and peace, administering justice, finance and civic organisation. The city had provided meaning to life. At a stroke this was removed by Macedonian rule, creating a situation that Greeks had never met before. The effect was to turn people inwards, diverting their energies into art and literature, into social and not civic concerns, into individualism and not collectivism, and into new forms of religious belief that gave them direction in their disorientation.

#### **3.2 The empire after Alexander**

When Alexander died aged 33 in 323 BC, his empire split into three: in Egypt the Greek Ptolemies ruled from Alexandria, in the centre of the old Persian





Empire, the Seleucid kingdom developed, based on Babylon (called Seleucia), and in the northwest the Antigonid kingdom evolved, based on Pergamum in Asia Minor.

In the eastern Mediterranean there were now three main cultural centres—Athens, Pergamum, Alexandria. In the west, Carthage was an important trading and military power in north Africa. To the north, across the Mediterranean Sea was Rome, a power of growing strength. *Magna Graecia*, an area of Greek culture, covered the coast of France, southern Italy and Sicily.

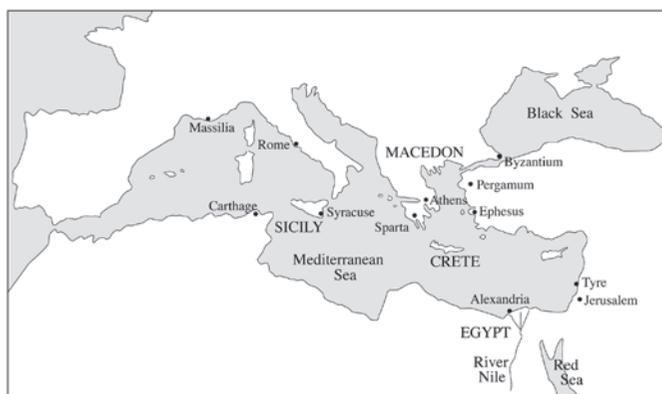


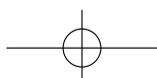
Fig. 1.3 The principal cities of the Mediterranean in the second century BC

Because Alexander had linked the Mediterranean with the lands that lay to the east, trade and communication increased greatly. A new eastern Mediterranean world was created into which Rome was drawn.

### 3.3 The nature of the new world

Alexander founded over seventy new cities. Built for the most part on the Greek pattern of a grid, with temples, theatres, gymnasiums, council chambers, public baths and other civic buildings, these cities were intended as centres of Greek immigration and culture; Greek plays were performed as far away as Afghanistan, and Greek sculptural style was blended with local traditions. A version of Greek (called *koine* or *dialect*) was used everywhere, in the way Latin was used throughout the Roman Empire and in medieval Europe, and as English is used today. Greeks and Persians were given equality, and intermarriage and mingling were encouraged—at Susa on one day Alexander arranged the marriage of 3,000 Macedonian soldiers to Persian women. A single financial administration was created, with one currency, making it into a huge economic zone, increasing trade and contact.

In this new world the cities were very mixed, enabling an interchange of ideas that was significant. A few cities were prominent—Athens, Seleucia,





Persepolis, Alexandria and Pergamum. Pergamum had a library of 500,000 manuscripts and Alexandria had major libraries, one of which contained over 700,000 manuscripts. The Egyptian pharaohs, the Ptolemies, who were Greek and not Egyptian, made Alexandria the cultural centre of the eastern Mediterranean with a great library and temple called the Museion (from which comes the word “museum”). This was a shrine to the Muses, who were minor goddesses of the arts and learning, and it included gardens and a great archive that attracted hundreds of scholars.

## Part 2 Religion, politics, and daily life

### In Part 2 you will study

- Greek religion and how it developed in the Hellenistic Age
- the development of the Greek city and different constitutions
- daily life in Greek city-states

## 4 Greek religion

### 4.1 ● The origins of Greek religion

Greek mythology and religion took its form in the Mycenaean age. The Mycenaeans created a pantheon<sup>①</sup> of twelve gods and goddesses with Zeus as the supreme god. These deities lived on Mount Olympus in the north of the country. They were seen as very human, with all the passions and faults of humans. They fell in love with mortals, had children by them, disguised themselves to carry them off, punished and destroyed them, helped and saved them. Although they might be like humans, the twelve Olympians were greatly feared and respected. Sacrifices must be offered to them and their will must be obeyed.

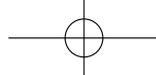
### 4.2 The development of religious worship by the Greeks

The Greeks adopted the Mycenaean religion and religious sites, such as that at Delphi, sacred to Apollo. These sites provided focuses of unity, competition and cooperation. They were used for religious festivals, which were usually athletic competitions. In fact, the first recorded date in Greek history is that of the first games at the sacred site of Olympia in 776 BC.

Religious athletic festivals were regularly held, such as the Olympic Games in honour of Zeus, the Isthmian Games at Corinth for Poseidon, and the Pythian Games at Delphi for Apollo. Thousands of athletes and male citizens from all over Greece came to these sacred festivals. The Olympic Games took place

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<sup>①</sup> a group of gods



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every four years, continuing amazingly for at least 1168 years, until banned by the Christian Roman emperor Theodosius I in 393 AD. Religious worship was so important to the Greeks that they actually stopped their wars to take part in festivals.

Delphi was the most sacred site, where the Pythian Games were held. The games were named after the Python, a serpent who was killed by Apollo before he took over the shrine. It was regarded as the central point of the earth and contained the Pythian oracle, which would be consulted by states and individuals in need of guidance. The Pythia was a woman who gave the word of Apollo when she was in a trance. This sacred place, like many others, held immense treasures, which were given by rulers and states, and which were also put there for safekeeping by states.

The importance of Delphi is shown in the fifth century BC play *King Oedipus* by Sophocles, when Oedipus is trying to solve the problem of the plague that is attacking Thebes. In the play he says—

But I have not been idle; one thing I have already done—  
The only thing that promised hope. My kinsman  
Creon, son of Menoecus, has been sent  
To the Pythian house of Apollo, to learn what act  
Or word of mine could help you. This is the day  
I reckoned he should return. It troubles me  
That he is not already here. But when he comes  
Whatever the god requires, upon my honour  
It shall be done. (1)

Religion was important both at home and in the city. Festivals, assemblies, councils, conferences, battles would all start with ritual—the first day of the seven-day Olympic games was occupied entirely by religion. Ancient Greek religion was strongly connected to ideas of fertility. Many-breasted images of mother goddesses and of Demeter existed, and the erect phallus, with its supposed power to keep away evil, was everywhere evident in Greek worship and cities.

Worship also reflected individual independence. There were no permanent priests; sacrifices and prayers were carried out by ordinary citizens. Animal sacrifice was usual, so the frequent sight of blood was normal. There was no sacred book, no dogma, and no requirement for humility and obedience. There were therefore neither religious controversies nor religious wars. Greeks made no effort to convert others, which would have been considered both ill-mannered and an infringement of liberty. Religious feelings of personal sin and individual



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wickedness, such as Christianity later cultivated, were quite unknown. You might offend the gods, but that was by acting thoughtlessly or foolishly.

### 4.3 ● Religion in the Hellenistic Age

As the world expanded people looked to new religions for security. The cult of Dionysos, connected to fertility, renewal and rebirth, was popular and so too was the Egyptian cult of Isis. Isis was the goddess of learning, women, marriage and children. This cult was a mystery religion that had initiation rites<sup>①</sup>, and promised eternal life through resurrection. Another Persian religion that later became significant among Roman soldiers, was the ancient cult of Mithras. Confined to men, this too had initiation rites. Astrology<sup>②</sup> too developed in the first century BC, mainly from Persian sources.

Judaism, the religion of the Jews who were based in Palestine, was an exception to these cults. It was based on a book and its members kept to themselves, not welcoming outsiders. It was also monotheistic<sup>③</sup>, and its members absolutely refused to worship the local or state gods. In 167 BC when the local king Antiochus IV attempted to make them more Hellenistic in their outlook, the Jews revolted and won. In many cities of the empire Jews obtained the right to live under their own religious law.

## 5 The early development of politics

### 5.1 ● The city-state

In the Lyric Age from 700–490 BC constitutions were developed for the many well-established city-states (*poleis*). Greek cities were quite intimate places. Except for Athens they were not very large, so citizens would probably know many of their fellow citizens. All public business was conducted with many men present, and so it would be quite easy to find out what was going on, and which person was proposing which policies. There were at least fifty important city-states on the mainland and islands, each self-governing and each with a different constitution. The number of different constitutions was very great—in the fourth century BC Aristotle made a study of over 150 different independent ones. In the present United Nations there are only about 200.

City-states tended to develop in a similar way to each other. They passed from kingship to aristocracy<sup>④</sup>, and then to oligarchy<sup>⑤</sup>. The oligarchies often then gave way to tyrannies, which meant rule by a single person or his family. These tyrannies appeared from the eighth to the fifth centuries BC. Of the 50 major cities in 700 BC at least ten were tyrannies. Many tyrants improved their

① ceremony to accept a new member    ② fortune telling using the planets, sun and moon

③ having only one god    ④ the rule of the nobility, the aristocrats    ⑤ the rule of the wealthy

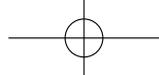


Fig. 1.4 Ancient Greece showing the principal city-states

cities by building new public amenities, temples and so on. Tyrannies often gave way to democracy<sup>①</sup> after the tyrants had broken the power of the aristocracies, which had held democracy back. Democracy was also made possible by the existence of slavery, which released citizens from some work and gave time for politics.

Two constitutions were developed that have come to represent the extremes of political culture—that of absolute obedience to the state and that of freedom and voluntary participation in the state. These were the constitutions of Sparta and Athens.

## 5.2 ● The constitutions of Sparta and Athens

**Sparta** had the most ancient constitution of the Greeks. It was one that put the military state first and required military training for all males. In the eighth century the Spartans defeated neighbouring tribes and divided them into *helots*, or slaves, and *perioeci*, or subject peoples. Then in the seventh century the semi-legendary figure, Lycurgus, created a military, totalitarian and communistic constitution.

The Spartan city-state was organised in the following way—

- only Spartan males could be citizens. They were forbidden to trade, farm or perform any art; their task was war. They had no coinage.

<sup>①</sup> government by the people or their elected representatives



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- the *perioeci* were auxiliary soldiers<sup>①</sup>, farmers and traders and the *helots* worked the land of the Spartans, “toiling like asses under great burdens” as the Spartan poet Tyrtaeus put it. They had to give the Spartans one half of the produce. They had no rights at all, and to prevent any rebellion Sparta declared war on them every year.
- there was a 30-strong Council and an Assembly. The Council consisted of men over 60, elected for life by the Assembly which was made up of all male Spartans over 30, the “Equals”. It could accept or reject decisions of the Council. It could not propose policies.
- two hereditary kings commanded the army and performed religious functions, and five magistrates or *ephors* had powers of administration and commanded the *krypteia*, a sort of secret police.

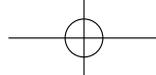
Babies who were considered weak were left out all night to live or die. Boys lived together with other males until they were thirty, undergoing military training promoting endurance, bravery and absolute obedience. They had only one piece of clothing, and had to sleep in the open all year round. They were encouraged to be cunning, and to steal food to get more to eat. If they were caught stealing, they were beaten because they had failed. Young men also formed a homosexual relationship with an older man, whose function was to help train them for war. The partner would also help them choose a wife. At thirty they could set up a home, but continued to eat with other men until they were sixty. Only the best became “Equals” with a vote. Girls stayed at home, but took part with boys in athletics, that were done naked. Plutarch (c. 46–c. 119 AD), the Greek historian, says in his *Life of Lycurgus* that “Spartan girls have to wrestle, run and throw the javelin so that when they have babies, those babies should be strong and healthy.” The Spartans were unique in mixing male and females in this way.

The constitution of Sparta lasted for three hundred years and was greatly admired by many Greeks for the loyalty and bravery it created. It was unique and a quite different development from the main currents of Greek thought and practice. It was democratic only in giving a vote to each male in the Assembly, but totalitarian<sup>②</sup> in its nationalistic and military purpose, oligarchic in giving lifelong membership of the Council, communistic in its living arrangements for men, and imperialistic in its treatment of *helots*.

● **The Athenian** constitution, on the other hand, changed and developed. It had two aims—freedom and equality. By the fifth century people were perfectly free to do what they wanted provided they did not harm the *polis*. Personal self-regulation was very important. Pericles, the Athenian leader of the fifth century,

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<sup>①</sup> soldiers who serve another group or nation    <sup>②</sup> characteristic of a one-party state



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talked about this in a funeral speech for soldiers who died in the first year of the Peloponnesian War between Athens and Sparta (431–404 BC). “There is a great difference between us and our opponents,... Our city is open to the world... this is because we rely... on our own real courage and loyalty. There is a difference too in our education systems. The Spartans... are submitted to the most laborious training in courage; we pass our lives without all these restrictions, and yet are just as ready to face the same dangers as they are. ... There are certain advantages, I think, in our way of meeting danger voluntarily, with an easy mind, instead of with a laborious training, with natural rather than with state-induced courage.” (2)

Athens passed through aristocracy, oligarchy, and tyranny to democracy, which it developed further than any other state before or since. The city first grew to prominence under the tyrant Peisistratus, who broke the aristocrats’ power and brought peace and prosperity to Athens. He also instituted a major religious and drama festival in honour of Dionysos and constructed great buildings. When the tyranny fell in 510 BC, people called for equality in justice and for democratic decision making. Ostracism<sup>①</sup> was introduced in 487 BC, which meant the Assembly could banish someone for ten years if he was considered a danger to the state. By 470 BC citizens had equality in speech, in legal rights, and in voting.

Nearly all officials, even the most senior, were selected by using the lot<sup>②</sup> from short-lists. Citizens put their names forward, a random selection was then made, using a very ingenious machine, and they did a city job for one year. Examples are supervising weights and measures, looking after roads, organising events and festivals, administering justice, and so on. Juries were selected by lot from a group of 6,000. A single jury could number anything from 101 to 1,001 men or even 6,001 in serious constitutional cases. People also took turns as priests at religious ceremonies. All citizens had a duty and a right to put themselves forward for office. Attendance at the Assembly was taken seriously. In the fifth century BC the Assembly met every ten days and was attended by up to 6,000 males—that was about one seventh of the voting population, which is quite remarkable. On some issues no decision could be taken unless there were at least 6,000 present. It was democracy with real responsibility.

Democracy and the *polis* were, alongside religion, central to the meaning of Athenians’ lives. They insist upon the advantages of democracy again and again. Euripedes, writing late in the fifth century, also makes the point in *Suppliant Women* where the constitution of Athens is contrasted with that of Thebes, “Athens is not ruled by a single man; it is a free city. Sovereignty belongs to the people,

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<sup>①</sup> being thrown out of the city-state

<sup>②</sup> a way of selecting people at random, e.g. using slips of paper, numbered balls, etc.



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who take turns to govern... Wealth receives no special recognition from us; the poor man has an equal voice in the state.” (3) Aristotle said that the purpose of the *polis* was to ensure people were happy.

“To the Athenian... self-rule by discussion, self-discipline, personal responsibility, direct participation in the life of the *polis* at all points—these things were the breath of life.” (4) It was a new and remarkable form of government, which only returned to Europe, in a less radical<sup>①</sup> form, in the second part of the twentieth century.

### 6 ● Society and education

In addition to religion there were two other aspects of Greek society which should not be forgotten and which were very important—war and slavery.

Greek society was very warlike. States were in a constant condition of rivalry, and in the fifth century Athens was at war in one of every two years. War was brutal, involving enslavement, subjugation and destruction, and its effects were often criticised by writers such as Euripedes and Aristophanes (Ch 1.9.1).

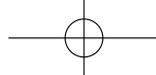
Slavery was accepted as a normal part of life. In the mid-fifth century BC Athens had a population of about 300,000 people, about one third of whom were slaves. Most slaves were in domestic service, with the rest in agriculture or in the silver mines. The lives of slaves varied considerably; some were well treated and even earned enough to buy freedom, while others lived an extremely harsh life with brutal treatment, such as those who worked the silver mines. Slaves had no rights. Citizenship with voting rights was confined to men with two Athenian parents. Women, children, foreigners and slaves did not have the vote.

Society was overwhelmingly masculine and women were restricted in what they could do. They took a prominent part in religious festivals, but these were the only mixed public events at which you would see them. Mostly they stayed at home, looked after the little children and managed the slaves, living apart from the men of the house. Their education would be almost exclusively related to the home, although girls learnt to dance, and took part in single-sex athletics. They could not attend nor take part in the Olympic games or other major athletic festivals, though unmarried women had their own games dedicated to Hera at Delphi. Girls married at about fifteen years of age. The main function of women was seen as producing children for the *polis*. Any sickly babies would be left out at night on a hillside to die, and there is evidence that more girls than boys were left out so that an imbalance in the population existed.

Men and boys had a different life from women. There were schools, to which

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<sup>①</sup> extreme



a boy would go accompanied by his slave. The aim of Greek education was to produce a healthy, moderate and sensible man, who could play the lyre<sup>①</sup> and sing, knew the stories of the heroes, could think independently and who was fit, strong and brave in battle. Discussion and thinking would prepare the boy for public debate. Great importance was attached to fitness. There could be no higher achievement in the Greek world than winning a prize in the games. Winners were honoured by their city-state and received very valuable prizes. Athletics were done naked and had been since 720 BC when Orsippos took off his loincloth<sup>②</sup> during a race in the Olympic Games and won. Young men trained every day in such things as running, wrestling, boxing, jumping, and throwing the spear and discus. Competition was fierce and some sports, such as wrestling, were extremely brutal sometimes ending in death. In Sparta wrestling and boxing were forbidden, because no Spartan could ever admit defeat, and those matches ended only when one contestant gave in.

An important part of the education of a young male was his sexual relationship with an older man. The function of this relationship was to prepare the young man for manhood, to develop moral values, to help them become a brave warrior and to become a useful and active member of the city-state. Throughout Greece this was important. The elite of the Boeotian army, for example, was a company of lovers who, it was felt, would fight and defend each other better if they entered battle in each other's company.

## Part 3 Literature and historical writing

### In Part 3 you will study

- the beginnings of Greek literature (800–700 BC)
- the development of literature in the Lyric Age (700–490 BC)
- drama in the Classical Age of the fifth century BC
- literature in the Hellenistic Age
- the writing of history

## 7 Early Greek literature

### 7.1 The beginnings of Greek literature in the age of Homer (800–700 BC)

During the ninth or eighth century BC the Greeks adopted their alphabet from the Phoenicians, a trading people of the eastern Mediterranean, which meant that Homer's *Iliad* and *Odyssey* could be written down. The *Iliad* is the story of fifty

<sup>①</sup> stringed instrument like a harp, played with the fingers

<sup>②</sup> short cloth worn round the body below the waist



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days in the ten-year Trojan War, and the *Odyssey* is the story of the return home of king Odysseus (Ulysses in Latin). The *Iliad* was probably written down in about 750 BC, and the *Odyssey* some years later. The *Iliad* takes its name from Ilios (Ilium in Latin), the Greek name for the city of Troy.

These two epics are among the greatest works of world literature, and also give us a great deal of information about the society of the time. One writer considers that “there is nothing remotely resembling these amazing achievements”. (5) Their influence was immense, providing a point of historical and mythological unity for the Greeks and strengthening their human values and religion. The *Iliad* particularly, formed an essential part of every Greek male’s education in all Greek states for many hundreds of years. Its themes have influenced poets, novelists and playwrights into the twenty-first century.

“Troy was evidently attacked repeatedly and had to defend itself again and again”. (6) It was finally destroyed around 1180 BC and “everything currently suggests that Homer should be taken seriously, that his story of a military conflict between Greeks and the inhabitants of Troy is based on a memory of historical events.” (6) Homer and legend both say that it was the Mycenaeans who crossed the sea to destroy the city.

### 7.2 ● Homer’s *Iliad* and *Odyssey*

The story of the *Iliad* begins with a quarrel between the goddesses Hera, Athena and Aphrodite about who is the most beautiful. The Trojan prince, Paris, is the judge. He chooses Aphrodite, who then makes Helen fall in love with him. Helen is a daughter of Zeus and wife of Menelaus king of Sparta. She is also the most beautiful woman in the world.

Helen and Paris leave for Troy. Menelaus seeks vengeance and the Greeks assemble an army under Agamemnon, king of Mycenae. During the siege of Troy Agamemnon and Achilles, the great Greek hero, quarrel and Achilles refuses to fight, until his friend Patroclus is killed by Hector. Then many heroes die—the Trojan Hector is killed by Achilles, who is then shot in the heel by Paris and dies as a result.

The Greeks finally gain victory through the cunning of Odysseus, who suggests that they leave at the city gate a wooden horse containing Greeks, who can enter Troy when the horse is taken into the city. The Trojans take the horse into the city. Troy is destroyed and its people enslaved. Dead Hector’s little son is thrown from the walls by Odysseus.

The returning Greeks themselves face disaster, because they neglected the gods. Most of the fleet is destroyed in a storm, and many are drowned. Odysseus wanders for ten years on his way home. Agamemnon is murdered by his wife.



## CHAPTER 1

### *Ancient Greece and the Hellenistic Age*

The *Iliad* portrays many human emotions and one of the most touching moments is when the Trojan prince Hector says goodbye to his wife, Andromache, and his little son, before he goes to fight and die at the hands of the Greek hero Achilles. Hector, tired from battle and “bespattered with blood and filth”, finds his wife, Andromache, with their little son, looking over the battlefield from the walls of Troy.

Andromache bursts into tears when she sees him and asks why he has to fight. “You do not think of your little boy or your unhappy wife, whom you will make a widow soon. There will be no comfort left when you have met your doom—nothing but grief.” Achilles has already killed her brothers and father and now Hector is going to fight him, and could die. “So you, Hector, are father and mother and brother to me, as well as my beloved husband. Have pity on me now; stay here in the tower; and do not make your boy an orphan and your wife a widow.”

Hector replies that he must fight. It is his duty and fate. He knows deep in his heart that Troy will be destroyed and his one fear is for his wife. She will become someone’s slave and be dragged away as Troy burns. “Ah, may the earth lie deep on my dead body before I hear the screams you utter as they drag you off.”

Hector holds out his arms to take his boy, but the little child is frightened of the great man in his shining helmet with its great plume on top. Hector laughs and takes the helmet off and takes his son in his arms.

Hector handed the boy to his wife... She was smiling through her tears, and when her husband saw this he was moved. He stroked her with his hand and said: “My dear, I beg you to be not too much distressed. No one is going to send me down to Hades<sup>①</sup> before my proper time. But Fate is a thing that no man born of woman, coward or hero, can escape. War is men’s business; and this war is the business of every man in Ilium, myself above all.” (7)

The *Odyssey* tells of Odysseus’ ten-year journey home. On the journey he has many adventures: he blinds the one-eyed giant, Cyclops, who eats some of his companions; his companions are temporarily turned into pigs by the sorceress Circe; he descends to Hades; he is bewitched; he is nearly lost by shipwreck; he spends eight years with the nymph<sup>②</sup> Calypso but, as he longs to go home, the gods order her to let him go; he is shipwrecked again and then finally reaches Ithaca. When he arrives only his old dog recognises him, and then, as he takes a bath, his aged nurse sees an old scar on his leg and realises who he is.

His son Telemachus has tried to find him and Penelope, his wife, has

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<sup>①</sup> the underworld where the dead went    <sup>②</sup> mythological beautiful young woman



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faithfully waited for him, refusing offers of marriage. Penelope says she will marry when she has finished her weaving, but every night she undoes what she has done in the day. Odysseus plans revenge on those who have offended his honour. A shooting competition is proposed using Odysseus' bow. No one is strong enough to use it and so Odysseus, still disguised as a beggar, steps forward amid the laughter of the others, draws it and kills them all. Odysseus then reveals himself. The goddess Athena protects him from the vengeance of the families of those he has killed.

### 8 Literature of the Lyric Age (700–490 BC)

#### 8.1 Mainland literature

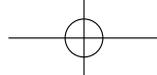
Not much literature besides the *Iliad* and the *Odyssey* exists today from the period of Homer. A few poems remain, however, both from the mainland of Greece and from an Ionian island called Lesbos.

The mainland poet **Hesiod** lived at the same time as Homer and two works exist that are possibly by him—*Theogony* is a poem in praise of Zeus and *Works and Days* are the thoughts of a unhappy farmer, or shepherd, addressed to a disreputable brother. His message is that life is hard and the virtues of work, honesty, and self-reliance are required. Here he contrasts the effect of Boreas, the bitter north wind, on a wealthy young girl and on an old man, perhaps himself.

Boreas  
Goes through an ox's hide, through the fine coat  
The goat wears, but his windy force cannot  
Pierce through the thick-piled fleece of a sheep; he makes  
The old man bend, round-shouldered as a wheel.  
He does not pierce the soft-skinned girl who stays  
Indoors with mother, innocent  
Of Aphrodite's works. She bathes  
Her tender skin, anoints herself with oil,  
And going to an inner room at home  
She takes a nap upon a winter's day. (8)

Another mainland poet, **Theognis** was an aristocrat, who lived about 550 BC. His world is threatened as values change and Zeus is questioned. He writes to his young companion Kurnos. This extract shows common Greek preoccupations—the gods decide our fate, and we are blind and limited.

No mortal, Kurnos, makes his own success,  
Nor his own ruin, for the gods bring both.  
Nor is there any man who knows at heart



If in the end he works for good or bad.  
 Often he thinks he'll fail, and then he wins,  
 Often expects to win—and then he fails.  
 No one gets all he wants; all men stop short,  
 Checked by the boundaries of the possible.  
 We think our thoughts in vain, all ignorant,  
 The gods do everything just as they want. (8)

## 8.2 ● Ionian literature

Across the sea in Ionia there was an entirely different poet, **Sappho** (612–580 BC). She was head of a school on the island of Lesbos, where girls learnt dance and song. She married a merchant, had a daughter, and travelled widely in the Mediterranean. Her poems are more sophisticated and advanced than those of Hesiod. They are lyrical—a newly invented form of poetry sung to the lyre. She writes passionately about love and particularly of her love for women.

Some say an army of horsemen, some an army on foot  
 and some say a fleet of ships is the loveliest sight  
 on this dark earth; but I say it is whatever  
 you desire: and it is possible to make this perfectly clear  
 to all; for the woman who far surpassed all others  
 in her beauty, Helen, left her husband,  
 the best of men,  
 behind and sailed far away to Troy; she did not spare  
 a single thought for her child nor for her dear parents  
 but (the goodness of love) led her astray  
 (to desire, which) reminds me now of Anactoria  
 although far away.

...

When I see you, my voice stops, my tongue is broken, a thin flame runs  
 beneath my skin, my eyes are blinded, there is thunder in my ears, the  
 sweat pours from me, I tremble through and through, I am paler than  
 grass, and I seem like one dead. (9)

## 9 ● Drama in the Classical Age

From the sixth century BC drama was the most important form of literature, having a deep, religious purpose. The size of theatres reveals its importance—the theatre of Dionysos at Athens, for example, held 17,000 people.

Drama was either comedy or tragedy. Tragedies were about the gods and semi-mythical aristocratic families and were required to conform to rules that



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were called the “unities”—the action of the play had to take place in one day and in one place, and have only one story line. Comedy satirised issues of the day, such as political decisions, the jury system, and so on. Dramas had a chorus of about fifteen people, who commented on the events of the play or entered into a dialogue with the actors. These were always men and they wore high shoes, masks and costumes. Music played an important part in the performances, and dialogue would sometimes take the form of chanting or singing. Four writers dominate the literature of the fifth century; three tragedians, Aeschylus, Sophocles and Euripedes, and one comedy writer, Aristophanes. These four writers produced some of the world’s greatest drama, in uencing the theatre to our own day.

### 9.1 Dramatists of the Classical Age

**Aeschylus’** (525–456 BC) tragedies remind his audience that individuals who break the moral law are punished by the gods, and thus bring disaster upon themselves, the group or the *polis*. His plays have little movement and no dialogue; single actors appear on the stage and tell their tale, while the chorus listens, comments and responds. Often the gods also appear on stage.

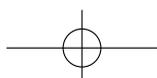
Seven of Aeschylus’ plays survive, including the *Oresteia* (467 BC), which tells the story of Orestes, son of Agamemnon and Clytemnestra. On his way to Troy Agamemnon is required by the gods to sacrifice his own daughter, Iphigenia, before he can sail. When he returns, he is murdered by his wife, Clytemnestra, in revenge. Their son, Orestes, urged on by his sister Electra, takes vengeance and kills his mother. Such evil and unnatural acts cause yet more evil and retribution follows, so Orestes is pursued by Furies. He is put on trial and the goddess Athena acquits him, thus showing that justice can replace disorder.

Aeschylus’ message is that the group is more important than the individual; the *polis* and the family suffer by wrong acts, which pursue us through generations. In his *Seven Against Thebes* Eteocles, son of Oedipus, prepares to fight and die and kill his own brother. As he realises how his family is endlessly cursed, he says,

O, god-maddened, god-hated race sown  
In endless tears, my father’s and my own!  
The curse has borne its fruit. (10)

Again and again in Greek tragedy the audience is warned that they should live balanced and religious lives. “Call no man happy until he has died” (*Oedipus*, Sophocles), “No mortal should be called happy before he has died and you see how he passes his final day and goes below.” (*Andromache*, Euripedes)

**Sophocles’** (496–406 BC) plays are more psychologically and dramatically





advanced than those of Aeschylus. He is concerned with how people balance their free will and their fate. Folly and lack of awareness are punished. If we are too rigid, if we are too proud, if we are too hasty, we will suffer. Through suffering we may come to a proper understanding.

His greatest play is *Oedipus the King*. Oedipus leaves his home in Corinth when he is told a prophecy made by the Delphic oracle that he will kill his father and marry his mother. In his travels he kills a man in a quarrel. He then comes to Thebes, where he saves the town from a plague by answering the riddle of the half-human, half-animal Sphinx. He is welcomed, made king and marries the queen Jocasta, who is, in fact, his mother. They have two sons and two daughters. Oedipus is confident, intelligent, rational and active. After fifteen years famine and plague hit the town, and at this point the play begins. Oedipus does what he can for his *polis*. He consults everyone, including the Delphic oracle. He rejects as foolish talk the accusation by Teiresias, the blind priest, that he himself is polluting the *polis*. He hears that his parents are dead, and this gives him proof that the prophecy cannot be true—more religious rubbish. Yet the truth slowly comes out. Jocasta realises before him what the truth is and hangs herself. Later, in a horrifying and symbolic act he blinds himself. Earlier he had been psychologically blind, now he is physically blind.

The play is very powerful. The audience knows the story and watches this man blindly carrying out his own investigation into himself, dismissing what is told to him, assuming he knows the truth. All the time the audience knows what terrible things await him. He does discover the truth, only to suffer. He could not defy the gods. Oedipus by self-discovery finds his enemies in himself—he is a modern hero with darkness inside.

*Antigone* is the story of the death of one of Oedipus' daughters, Antigone. After the fall of Oedipus, Jocasta's brother Creon becomes the king of Thebes. There is then a civil war and Antigone's brothers kill each other as one attacks the city. Creon orders that he is not to be buried. Antigone disobeys Creon and buries him, for which she is condemned to death. Her lover, son of Creon, kills himself, and his mother also commits suicide. Creon has brought this disaster on himself and all his family. Antigone is the example of an individual conscience. The theme has been used in modern plays.

Both of these great dramas illustrate two fundamentals of Greek thought which were carved



Fig. 1.5 Oedipus answers the riddle of the Sphinx. The Sphinx asked, "What walks on four legs when young, two legs when in middle years and on three legs when old?" Oedipus answered correctly—the answer is a man.



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as injunctions on the temple of Apollo at Delphi—*Know yourself* and *Nothing in excess*. If you do not follow this advice, then disaster will occur.

**Euripedes** (c. 485–406 BC) had witnessed war and its effects on a grand scale. From 431 BC the Athenians were involved in the Peloponnesian War, which they lost through plague and a military disaster. This long war was brutal—prisoners were slaughtered, populations enslaved. Euripedes was outraged by war and its brutalising effect. Great passion, horror and brutality are either present in his plays or in the background.

*The Trojan Women* (417 BC) shows the appalling effect of the fall of Troy on its women. It is believed also to be a criticism of his own city in punishing the city-state of Melos for remaining neutral in the Peloponnesian War. The Athenians were savage. As a historian, Thucydides, reported, they “put to death all the men of military age... and sold the women and children as slaves.” What is remarkable is that even in times of war, free speech was allowed in Athens. The play shows how Hecuba, once queen of Troy, is to become a slave. The play ends in her sorrowing over the death of little Astinax, her grandson, thrown by Odysseus from the walls of Troy.

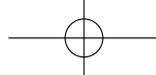
Unhappy boy, how pitifully the walls of your father's city,... have shaved the locks of your head, which your mother tended like a garden, smothering them with her kisses! Amid them the blood laughs out where the bone is broken. I cannot conceal the horror of this. O these little hands, lying all broken at the joints, such sweet remembrances of your father's hands! (11)

*Medea* is about a woman who is enraged with jealousy because her husband, Jason, has betrayed her, she having given up everything for him. “The man who was the world to me (Oh! How I know the truth of this) has proved to be the foulest of traitors, my own husband!” (12) She murders first the new woman he has taken, and then her own two children to destroy his hope of descendants.

Euripedes digs deep into human psychology in his plays and even in the horrific *Medea* he succeeds in creating sympathy for the heroine.

**Aristophanes** (c. 450–c. 388 BC) was a writer of comedies, which usually related to current events or people. Comedy used masks just as tragedy did, and the chorus wore costumes representing animals and other types of creature. Actors had a large artificial phallus that could be hidden or revealed as required.

The tone was usually coarse and satirical, criticising aspects of the city-state. Aristophanes mocks abuses of the jury system, financial corruption, politicians, philosophers, and modern trends. He also criticises the savagery of some Athenian behaviour in the war. In his anti-war play *Lysistrata* women refuse to have sex with their husbands and lovers unless they stop fighting; sex, however,



wins in the end. Even in the Peloponnesian War he attacked warlike policies, which again shows a remarkable tolerance of free speech.

The *Wasps* is typical of his satire. A father spends all his time on the juries in the law courts, for which he gets a daily payment. At one point a dog is put on trial for stealing a cheese. The father is both judge and jury and is tricked into acquitting the dog, and as a result falls down in a faint.

Father: (*faintly*) Tell me, was he really acquitted?

Son: Yes, he was indeed.

Father: May heaven forgive me!

Son: Bear up now, don't take it to heart.

Father: How can I ever look myself in the face again? I have acquitted a prisoner! Oh, gods above, forgive me, it was an accident, it wasn't like me at all. (13)

## 10 Literature in the Hellenistic Age

Athenian drama of the fourth century did not follow in the tradition of the fifth. The loss of an independent civic life meant that the individual became of greater interest than a person's relationship to the city and to the gods. The "new comedy" of the Athenian **Menander** (342–292 BC) was a comedy of manners, of social behaviour. It included stock characters, mistaken identities and the repetition of similar plots. People were sympathetically presented, and suffering heroes and heroines were often discovered to be long-lost relations or sons or daughters of kings—happy endings resulted. Drama was now designed to please and not particularly to instruct.

International contact between scholars, wealthy people and traders, made the literature of the time a literature of the Mediterranean world. However, while the ancient civilisations of the east interchanged ideas and styles, there was a new force rising in the West, which had different needs and requirements of its authors. This was Rome where, during and after the Punic Wars against Carthage (265–42 BC and 218–201 BC), there was a growth in self-consciousness and a demand for epic poetry to celebrate greatness. (Ch 2.7)

## 11 Historical writing

In historical writing the Greeks again broke new ground by separating history from myth and literature, and beginning the process of reporting and analysing the past.

**Herodotus's** (484–420 BC) books about the wars between Persia and the Greeks (490–479 BC) were the first systematic histories to be written in the West. He believed men, gods and fate all have an influence on events. The new



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elements in his work are his impartial presentation of both sides of the argument and his personal comments. He travelled widely and had great curiosity about all he saw and heard. He often discusses whether the information he has gathered is to be believed or not. Sometimes he rejects information on reasonable grounds, as when he discounts treachery before the battle of Marathon, “Is it likely that these men, who were obviously greater tyrant haters than Callias... should have wished to see Athens... under foreign control?” and at others he reveals his non-rational beliefs, as when no Persians were found dead on holy ground after the battle of Plataea. “My own view,” he says, “if one may have views at all about these mysteries, is that the goddess herself would not let them in.” (18)

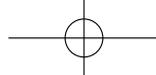
**Thucydides** (455–400 BC) took the Peloponnesian War (431–404 BC) as his subject, a war in which he had been an Athenian general. He had been exiled for failing to save a city and he then took up history. His work is considered the greatest historical writing of the ancient world. He seeks patterns in history and approaches it with the rationality of a political scientist. All responsibility for events is placed on humans—no gods or fates intervene, nor do externals such as economics or ideologies play a part, as they would in a modern history. He often reports in dialogue form, which has the effect of making the facts very lively.

**Xenophon** (431–c. 350 BC) was Athenian, a pupil of Socrates, and was disillusioned with democracy. He too was exiled. In 401 BC he became a mercenary in the service of the Persian king, Cyrus, and, when the latter died and the Greek generals were betrayed and murdered, Xenophon led ten thousand Greeks back home through 1,500 kilometres of difficult, hostile land in at times freezing weather. He is famous for his story of this epic and courageous journey, the *Anabasis* or *Expedition*, in which the fate of the ordinary soldier comes alive. His style is praised and his influence on later Roman historians was very great. He was highly valued throughout Western history particularly in the late Renaissance.

## Part 4 The arts

### In Part 4 you will study Greek and Hellenistic

- architecture
- sculpture
- pottery
- music



## 12 ● Architecture

The wealth of Athens increased in the sixth century BC and the city built new and beautiful public buildings. The Greek temple was an entirely new architectural form, which has had an enormous influence on the architecture of the West. Temples were developed from the form of a house. Simple wooden pillars were developed into columns, made of marble or other stone and were then extended round the building. In the seventh century BC different styles of capital<sup>①</sup> to the columns were developed—Ionic, Doric and later Corinthian. The roof was developed to form a pediment<sup>②</sup> at both ends, where sculptures were placed. These were at first made of terra cotta<sup>③</sup> and then of marble and were brightly painted.

Some temples, like those at Samos and Ephesus, built in the sixth century BC, were extremely large, measuring approximately 90 metres in length with double and even triple rows of columns round the central chamber.

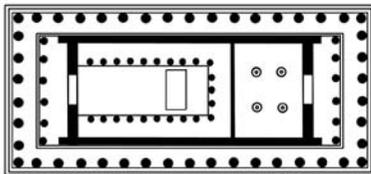


Fig. 1.7 This illustration shows the plan of the Parthenon, the temple to Athena. Temples, sacred to a god or goddess, were not used as places for people to worship in and so they had no large open space inside. They were locked for most of the time and usually contained a statue of the deity and the treasures of the city-state. Greeks also had many sacred locations, which could be small groves of trees, which were holy to a particular god.



Fig. 1.6 The Parthenon of Athens. This fifth century BC temple stands on the Acropolis, the highest point in Athens. The sculptures which once stood in the pediment were removed by Lord Elgin in 1806 and have since been in the British Museum, London. Negotiations about their return to Athens have been continuing for some time.

The Greeks buildings reflected their view that harmony was fundamental, and so the proportions were most carefully worked out. A golden ratio was said to have been discovered by the mathematicians in the colony of Croton in southern Italy. When applied to buildings, this ratio is particularly satisfying, and Greek temples such as the fifth century BC Parthenon are said to have used it deliberately.

The high point of architecture and sculpture in Athens dates from the age of Pericles. The buildings on the Acropolis had been destroyed by the Persians in

① the top of a column where it is decorated    ② the triangular shape at the roof end  
③ a type of clay



480 BC. Tribute from the states of the Delian League, the empire of Athens, enriched the city and from 447 BC a programme of public works was begun. The principle building in this programme was the Parthenon, one of the world's great buildings. It shows the finest sculptures of the classical period. The designer was Phidias and the architect Ictinus.

## 13 Sculpture

### 13.1 From archaic to classical sculpture

The earliest Greek sculptures were influenced by the Egyptians, with whom the Greeks had many contacts. They are of naked men, with a smile on their face, standing with hands to the side of the body and one leg forward. The statues of women were clothed. Throughout the later years of the sixth century BC the pose softens and the weight is transferred to make a more natural posture.

The Parthenon has many sculptures. Those of the pediments were carved in place and show the birth of Athena, the chariots of the sun and moon, the contest for Attica between Athena and Poseidon, and the river Ilissus. Within the columns a frieze<sup>①</sup> goes right round the building showing the Panathenaic festival that took place every four years, when a new robe was presented to Athena. The frieze shows four hundred different people and over two hundred animals as they walk up to the Parthenon on this most holy of days. There are also metopes or panels that show mythical heroes.

Artistic technique advanced in the fifth century BC. Sculptures came to express harmony of mind, body and action. One of the greatest sculptors was Polyclitus of Argos, who worked mainly in bronze, and who wrote a guide for



Fig. 1.8 Sculptures from the Parthenon of Athens. The sculptures of the Parthenon are among the finest of Greek sculptures. These are from the pediment and show how the marble was painted.



Fig. 1.9 Part of the Parthenon frieze, showing people and horses in the Panathenaic festival procession. The carving shows Athenian style at its best. The representation of the people and animals is accurate and the feeling of movement is well captured.

<sup>①</sup> a long narrative sculpture telling a story or series of events



later sculptors. Sculptors learnt to make the body more fluid and natural. Instead of the weight of the body being placed centrally, resting on both legs, it was moved to one side a little so that it curved. The arms were moved out from the sides of the body in different gestures. Balance and rhythm were achieved by an inner and outer equilibrium. Many copies were made by Romans and these are all that we have of Polyclitus' work.

The Greeks had a great appreciation of the beauty of the human body and many free-standing figures were of naked men. These sculptures had no ethical message, they were simply representations of idealised beauty. What they reflect is both what Protagoras said, that "man is the measure of all things" and what the Chorus in Sophocles' *Antigone* asks, "Is there anything more wonderful on earth,... than the miracle of man?" This optimistic perception would be rediscovered in fifteenth century Europe during the Renaissance.

### 13.2 • Sculpture in the Hellenistic Age

Hellenistic sculpture reflects the change in spirit of the times, just as literature, religion and philosophy did. There is a greater interest in the individual, giving rise to portraiture, and stronger, less harmonious emotion. Individual feeling is expressed, rather than that the sense of universality in classical Greek male sculptures. In figure sculptures the classical wholeness and unity of body and mind is lost. In portraits there is often a feeling of inner emotional tension within the realism.

In the early second century BC, Eumenes II, an Antigonid ruler, commemorated the victories of his father by building the colossal altar to Zeus and Athene in Pergamum. This marble building includes the largest relief in Western art and shows the gods and giants in battle. The struggle of the gods, aided by the mortal Hercules, is one of immense drama, action, movement and pain, as they defeat the forces of darkness and chaos.



Another second century BC sculpture, the *Nike of Samothrace*, also shows features of invention and vigour. The sculpture commemorates the victory of Rhodes over Antiochus III (222–187 BC). It is based on the classical ideals of balanced composition, but has contrasting movements to increase the dramatic effect. The body is thrust

Fig. 1.10 The Great Altar at Pergamum had a frieze 2.30 m. high and 400 m. long. It is the largest work of relief art in the whole of Western art. It shows the war of the gods and giants, the triumph of light and order over the forces of darkness and chaos. The giants rose in rebellion against the gods and the oracle said that the gods could only win if helped by a human. Hercules decided the battle with his arrows. Here the sea gods are fighting.



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forward as the drapery of the clothing flows backwards and the head (which is missing) was turned away against the movement of the right arm.

A portrait head of Alexander from the third century BC, shows a restless energy which would not have been found two centuries earlier. The portraits of the ruler Demetrius I Soter of Syria (mid-second century BC) and of a Boxer (mid-first century BC) both express a similar restlessness and an uneasiness of spirit. The ruler's form is restless and his face expresses doubt. The Boxer sits in an uncomfortable pose, and has many realistic features, such as scars and blood, and his ignorant face is unhappy.

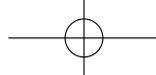
The most famous agonised sculpture of the period is the late Hellenistic Laocoon group. A serpent is killing Laocoon and his sons because of his defiance of the gods. There is intense emotion in their death struggle. The group shows another feature of Hellenistic art, which can be seen as a decline. The group is meant to be seen only from the front; it does not embrace the space it stands in.

### **14 Pottery**

Pottery was a very important commercial and artistic product. Early Greek pots had lines, triangles, squares, and circles on them, and from about 800 BC they included figures such as stylised horses. By the sixth century BC figures replaced the geometric designs and Black Figure pottery appeared. This was replaced in about 530 BC by the invention in Athens of the new technique of making Red Figure pottery, which allowed greater artistic freedom and more accurate representation. Corinth and Athens were the centres of very profitable pottery production.

### **15 Music**

Greek music was in part derived from Egypt and was an important part of religion and of drama. Parts of plays were sung or chanted, and religious festivals and processions were always accompanied by music. Music was considered to help create a harmonious mind. Music was dedicated to Dionysos, god of wine and mystic union with nature and to Apollo, the god of reason. Performances included singing, dancing or solo instrument playing. Very little is known about the actual music as only few pieces have survived, but Greek musical theory, with concepts such as notes, intervals, scales and modes, laid the foundations for Western music, and was adopted by the Romans.



## Part 5 Philosophy and science

### In Part 5 you will study

- philosophy and science from the seventh to the third centuries BC
- the development of philosophy and science in the Hellenistic Age

## 16 Philosophy and Science from the seventh to the third century BC

### 16.1 • The pre-Socratic philosophers

The islands of Ionia, to the east of Greece in Asia Minor, produced the earliest Greek mathematicians, astronomers, and philosophers. They are known as *pre-Socratic* because they lived in a time before the Athenian teacher and philosopher Socrates (470–399 BC). A key pre-Socratic development was the application of a rational<sup>①</sup>, naturalistic interpretation to the world. Philosophers looked at other nations' cosmological<sup>②</sup> explanations of the world and saw they were myths not scientific explanations.

**Thales** of Miletus (624–548 BC) was an astronomer and mathematician. He predicted the eclipse of the sun in 585 BC using tables from Babylonia the home of the greatest and most influential astronomers. Their mathematical base was sixty and they divided the day into twelve hours, the hour into sixty minutes, and the minute into sixty seconds. Their year was divided into twelve, from which eventually came the division of 360 degrees in the circle. Thales studied geometry with the Egyptians, who used it in land measurement. He is important because he excluded gods from his explanation of the world. He was what we would call a rationalist<sup>③</sup> and empiricist<sup>④</sup>.

**Anaximander** (610–547 BC) of Miletus, believed that the earth was surrounded by fire, which could be seen shining through mist as sun and stars. He also believed that humans were once fish, which adapted and slowly evolved into humans. Like Thales he excluded gods from his explanations. **Anaximenes**, (c. 544 BC) also of Miletus, made progress by suggesting that there was condensation, and in this way tried to explain how solids appeared in the world. But why did things change at all? This question was considered by **Heraclitus** of Ephesus (c. 535–475 BC), who said that everything was in constant change. Opposites caused tension which then caused change. He was the first dialectical<sup>⑤</sup> philosopher and greatly influenced Socrates and Plato.

① using reason    ② relating to the study of the universe    ③/④/⑤ see Appendix 1



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The importance of these thinkers is not so much in their conclusions, as in the fact that they are prepared to look for rational causes. Materialism<sup>①</sup> and atheism<sup>②</sup> also developed in Ionia.

Far to the west in *Graecia Magna* (present day Italy and Sicily) there was an important philosophical centre at Croton. Here **Pythagoras** (c. 570–c. 490 BC) founded a mystical religious brotherhood. He was also the founder of all mathematics in the western Mediterranean and discovered “the most important theorem in the whole of mathematics” (14)—that the square on the hypotenuse of a right angled triangle is equal to the sum of the squares on the other two sides. This is significant because Pythagoras was expressing space in terms of number and also providing a proof. He also showed that there is a mathematical relationship between the length of a string on a musical instrument and the note it will give; harmonious notes are produced by dividing the string into two, three, four parts and so on.

He also believed that number represented an eternal, real and permanent world of the mind; he was therefore an idealist<sup>③</sup> philosopher. Number was true and permanent in a way that the evidence of the senses could never be. This distinction between truth provided by reason and truth given by the senses was of the utmost importance in the development of philosophy. Pythagoras also believed that humans had a soul, which was released on death.

He suggested the stars moved in perfect circles or spheres, between which there was divine music. The great fire was in the centre of the cosmos, and the earth and the other heavenly bodies moved round it.

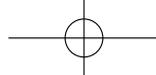
The philosopher **Parmenides** of Elea (c. 510–450 BC) also lived in *Graecia Magna*. His view was that reason and not observation gives the truth. He took an entirely opposite view to Heraclitus and believed that there was no motion—it was all an illusion of the senses. The argument about how we know anything continued, and still does. Does reality lie in the ideas of the mind or is it in the world that the senses reveal to us?

### 16.2 ● Sophists and Socrates (470–399 BC)

The Greeks had no universities, a gap that was filled from the fifth century BC by travelling teachers, called sophists, who provided instruction for payment. They taught a range of subjects—mathematics, music, astronomy, history. Greeks were also very interested in ethical<sup>④</sup> and moral<sup>⑤</sup> behaviour. Such issues were discussed independently of religion. This separation has become much more difficult for some Western people to conceive of now, because in Christianity

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①/②/③/④/⑤ see Appendix 1



there is an insistence on a link between moral behaviour and religion, which is not philosophically valid.

The Athenian thinker **Socrates** also discussed morality. He claimed he knew nothing—he just brought knowledge out of others; he was a “midwife to knowledge”. Yet in spite of teaching “nothing”, he is regarded as one of the most influential teachers in Western history. His influence rests on his way of teaching, his death and the works of his great pupil, Plato.

Socrates spent his time in the open square of Athens asking questions. He was well-known for his good nature, his self-control, his courage in war, and his questioning mind, all of which he demonstrated at the moment he took the poison that killed him. He had been condemned to death, in a period of revenge-taking, by the Athenian state for “corrupting the young”. Instead of trying to escape, he accepted the verdict and died wondering whether death was a loss or a gain. He thought he might possibly meet great people and “continue his search into true and false knowledge... and find out who is wise, and who pretends to be wise”, because “in another world they do not put a man to death for asking questions”. So, telling his friends gathered around him to be happy, he died.

### 16.3 Plato (428–c. 347 BC)

Socrates had lived through the Peloponnesian War and died in the political turmoil that followed. His follower and friend, the young aristocrat Plato, immediately escaped from Athens and travelled for about ten years throughout the Mediterranean, where he was certainly influenced by the Pythagorians. When he returned he founded a school called the Academy, which was the first to have that name, and which lasted for almost 1,000 years until closed by a Christian Roman emperor in 529 AD. Extraordinarily, none of Plato’s thirty-six works has been lost.

Plato and Socrates were interested in the following questions. What are knowledge, justice, truth, virtue? Can virtue be taught? How should we be governed? Do we have a soul? Plato believed we have a soul that survives us after death and that it is permanent. As an idealist philosopher, he also believed that the truth is permanent and does not change. The truth can be known only through the mind, through intuition. The senses will mislead us, so they cannot give the truth. His thoughts were developed in the theory of Forms, which has been very influential indeed. We can look at four aspects of Plato’s thought—his definition of reality, his theory of knowledge, his definition of what is good, and his theories about government.

**Reality.** Plato has two worlds—the world we see and the world of Forms (in the mind). Knowledge of Forms is innate; they are abstract and we know them through our souls, through intuition. Every object we see copies a Form. These



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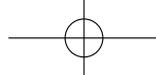
objects are just shadows of a Form—there is, for example, a perfect “Form” horse, and all horses copy this Form imperfectly and differently. We make sense of what we see because we know the Forms intuitively. That is how we know a good horse from a bad one.

**Knowledge.** In Plato’s *Meno* Socrates takes an uneducated slave boy and by asking him questions, demonstrates that the boy can recognise mathematical truths. Where does this knowledge come from? Plato says that the slave is remembering or recollecting this knowledge—knowledge that his soul has always contained. All learning of things is recollection. If we did not know them already, how would we recognise them?

In the *Theaetetus* he distinguishes knowledge from belief and opinion—a very important distinction.

**Beauty and goodness.** Plato believed that the supreme human purpose was to see and understand the Form of the Good, which is perfect and unchanging. In the *Symposium* he suggests we come to this understanding through love. Sexual love is the start of the perception of the beautiful and the good. Slowly we understand that Beauty and Good are actually the same, and once we see that, we want to follow the Good. From this comes the idea that no one does wrong on purpose; we do wrong through ignorance.

**Government.** The *Republic* and the *Laws* deal with government. He presents three types of people: the lowest class are governed by their appetite, the soldier is governed by his will, the philosophic person is governed by reason. In the best form of government, which Plato considers to be aristocracy, justice occurs when each of these types of person does his appointed task; this means that justice is served when everyone keeps his or her place. Plato describes his ideal state in the *Republic*. This is ruled by a group of carefully trained men and women over fifty, who are all philosophers. “It is the business of the rulers of the city... to tell lies, deceiving both its enemies and its citizens for the benefit of the city”. There is strict censorship, no art, and systematic breeding of people, but the “greatest principle of all is that nobody... should be without a leader. Nor should the mind of anyone be accustomed... to do anything at all on his own initiative... even in the smallest matter... he should get up, or move or wash, or take his meals only if he has been told to do so. He should teach his body... never to dream of acting independently, and to become utterly incapable of it.” (15) His ideas are taken further in the *Laws*, where the individual is completely controlled by the government, religion is compulsory and unbelievers are imprisoned or killed. The contrast with the Athens of Pericles is very great. “Plato is the only one among all the teachers of antiquity who, from sheer love for a perfect world, came to preach a doctrine of intolerance.” (16)



Plato's deep influence is found throughout the cultural history of the West, giving structure to thought and lending support to authoritarian regimes and authoritarian thinking. Early Christianity used his thinking in support of ideas about the soul and the body, the nature of reality, intuition (which was called "revelation"<sup>①</sup>), perfectibility, and the authoritarian unchanging state. His ideas have been influential right up to today.

#### 16.4 Aristotle (384–322 BC)

Aristotle was in fact very much more than a philosopher. He was a pupil of Plato's from 367 BC, a teacher at the Academy, and later was tutor to the young prince Alexander of Macedon. Aristotle was then sent to Athens, and in 335 BC founded his own school called the Lyceum. His range of studies included rhetoric, ethics, logic, astronomy, biology, physics, politics, poetry and drama, meteorology, psychology, theology, economics, town planning—the list is endless. He is credited with having written over 400 books.

Aristotle was not an idealist<sup>②</sup> philosopher like Plato, but an empiricist<sup>③</sup>. His approach was practical and systematic. He rejected Plato's theory of Forms, and believed that our senses gave us knowledge. By using our senses we are able to define things in a systematic way, using ten separate categories. These categories specify name, quantity, quality, relativity to other things, location, position, time, having certain features, acting upon other things, and being acted on. So, for example, we can take an object we call a *pen*, it weighs so many grammes and is 15 cm long, etc, it is green and made of plastic and metal, is made in China, is in my study, on my desk, this morning (and will continue to exist), it has writing on it, it can leave a mark, it can be used by me. Aristotle's systematic categorization and analytical methods had a profound influence on Western thought and scientific method. He showed that by examining many examples of one class of things, it was possible to understand their nature, and this was the method he applied to every part of his vast studies. He saw humans as social and intelligent animals; this set them apart from other animals. For him the soul and the body were one and not separable.

In his moral philosophy he was less interested than Plato in abstraction and perfection than in moderation and practical behaviour. He pointed out that knowing the good was not enough; you also had to take account of the will. He did not look for the ideal state, as Plato had done, but sought solutions to the problems of living by looking at what was possible and then seeking the most harmonious solution.

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<sup>①</sup>/<sup>②</sup>/<sup>③</sup> see Appendix 1



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He showed people how to think in a disciplined way, inventing deductive<sup>①</sup> logic. Here for example, is a syllogism. Aristotle was the first to show this could be expressed as a formula as in algebra:

All Athenians are Greeks.	<i>All A are B</i>
I am an Athenian,	<i>X is an A</i>
Therefore I am Greek.	<i>Therefore X is B</i>

It will not work if you say:

All Greeks have black hair.	<i>All A have B</i>
I have black hair	<i>X has B</i>
Therefore I am a Greek.	<i>Therefore X is A</i>

Aristotle's influence both on Western and on Islamic learning has possibly been greater than that of any other human. His greatest influence was in bringing a rational, analytical method to the West through the works that came to Europe from the Arabs. He established the beginnings of scientific method by stressing observation, logical procedure and classification. His lack of experimentation delayed progress. He influenced medieval learning with reason, logic and classification, the early Renaissance and the Enlightenment by his science, seventeenth century studies of plant life, seventeenth century theatre by his theories of drama, nineteenth century German philosophers by his empiricism, and today there is particular interest in his moral philosophy. The list could be made longer.

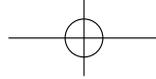
### 16.5 Philosophers in the Hellenistic Age

We have seen that under Hellenism, people looked to new religions and philosophies for meaning. Much of the philosophy of Plato and Aristotle had appealed to intellectuals, who liked to wrestle with difficult problems, but one of Aristotle's central ideas concerned living a worthwhile life, and this idea was more generally fruitful. What the common man and woman needed was something accessible; they found this in two lasting philosophies, Epicureanism and Stoicism.

**Epicurus** (341–270 BC) developed a philosophy from the materialism of Democritus (460–370 BC), a Greek philosopher who believed that everything was made up of tiny atoms. He rejected any life after death, assuming that we disintegrate into another collection of atoms. There is no soul, and there are no gods. "It is fear that first made the gods," said Democritus. Epicureanism recognises, just as Buddhism does, that much of our pain comes from unsatisfied desires, and so it teaches that we should try to live a rational and simple life.

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<sup>①</sup> see Appendix 1



Epicurus advises people to live luxuriously—on bread and water. We should enjoy simple pleasures, such as the garden and mutual affection with our fellow humans, and avoid things such as politics and competition. Epicureanism has at times been distorted to include luxurious living and a wasteful existence, which was not the intention of Epicurus.

**Stoicism** was founded by **Zeno of Citium** (c. 335–c. 263 BC) who taught it at Athens in the Stoa Poikile (Painted Portico), from where this philosophy obtained its name. Zeno taught the dignity of the individual. Everyone was equal in human dignity and in humanity, an idea that profoundly influenced the development of law, particularly the idea of natural law in Roman times. No one should be seen as a slave by nature, for example. We were part of the human community and thus linked to each other and to the divine. Nature was good, divine wisdom was reasonable and knew what it was doing and should therefore be accepted; whatever our fate brought us, we should accept. Each person could learn to bear his or her fate. Yet by our will we could overcome our fate. The “good will” was everything, a key point taken up by the important eighteenth century philosopher Emmanuel Kant in his ethical system. (Ch 7.3.7)

Stoicism developed well past the Hellenistic period because it had a wide appeal to Romans as well as to Christians. The Christian St. Paul, (died c. 64 AD) uses a Stoic idea when he says God “made of one blood all nations of men”. Christian acceptance of the will of God is also linked to Stoicism. Christians may or may not (and need not) understand the will of their god, but their faith teaches them to accept it. Stoicism was also taught by **Epictetus** (56–c. 135 AD) a slave who was given his freedom. He stressed the value of the will as being the only thing that really belongs to the individual. At the other end of the social scale the Emperor **Marcus Aurelius** (r. 161–180 AD) wrote a book of meditations on Stoicism. There is current interest in this philosophy’s view of our common humanity, as we live in the global village.

Another philosophy of the time was **Scepticism**. This was taught by **Pyrrho** (c. 360–272 BC) who came across Indian ascetics when he travelled with Alexander, and was impressed by their indifference to events. He concluded that finding the truth was impossible; it is better not to try. Pyrrho taught that it was unwise to believe anything, and thus you would be free of all worries; his philosophy strongly influenced thought in Europe in the seventeenth century.

## 17 ● Science in the Hellenistic Age

Learning expanded considerably in the Hellenistic period through the great cultural centres of Alexandria in Egypt and in Pergamum in Asia Minor. Many scholars worked at the great libraries editing and preserving works of



literature. Sophocles' works, for example, were loaned by Athens to Alexandria for copying. Very many scholars and teachers were Greek, and Greek education dominated the Mediterranean. It continued to be an engine of thought and learning throughout the whole Roman period, especially after Rome conquered Greece in the middle of the second century BC, bringing Greek influence into the Roman world. Throughout the Hellenistic period considerable advances were made particularly in science and mathematics. Technological advance and experiment also took place, but apart from the technology of building and shipbuilding did not progress much under the Romans.

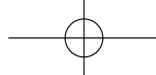
### 17.1 Mathematics

Several immensely important mathematicians lived in the Hellenistic Age, many working at Alexandria. Enormous advances were made in mathematics from about 600 BC until 600 AD. The first mathematician of the period was **Euclid** of Alexandria (c. 325–265 BC), who compiled the *Elements*, which became the standard work on number and geometry for over 2,000 years until non-Euclidian geometry was added in the late nineteenth century. Euclid is still in use today. His twelve books cover plane geometry, setting out several axioms and proofs and dealing with properties of circles and polygons. He deals with irrational numbers, definitions (unity, even, odd, prime numbers, etc.), three-dimensional figures and the five regular solids. His impact on the Arabs was profound. They translated, commented on and developed his work, which came to Europe from Arab Spain after 1120 AD. His book was fundamental to the work of Kepler (1571–1630), whom it inspired to work on the paths of the planets, and on Descartes (1596–1650) and Newton (1642–1727). It remained in constant use, “setting a standard for deductive<sup>①</sup> reasoning and geometric instruction that persisted, practically unchanged, for more than 2,000 years.” (17)

**Archimedes** of Syracuse (287–212 BC) was a mathematician, scientist and technologist. He realised how to use multiple pulley systems and calculated the mathematics of how a lever worked, telling the king of Syracuse that if he “was given a lever long enough he could move the world”. His great machines, such as the catapult, were used to defend his city, terrifying the invading Romans. He is said to have set fire to their ships at a great distance by using the power of the sun and mirrors. He invented hydrostatics<sup>②</sup>, creating a screw to lift water as it turns, and discovered specific gravity by observing that he displaced water in his bath. He is then supposed to have run naked through the streets of Syracuse shouting “Eureka!” (I have found it!). In mathematics he calculated the value of Pi. He was killed by a Roman soldier.

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<sup>①</sup> see Appendix 1    <sup>②</sup> the science of fluids when not in motion



**Apollonius** of Perga (c. 262–c. 190 BC) was known as the “Great Geometer”. His books on conic sections are among the greatest scientific works of the ancient world. Seven of his books survive, which were among those that came to Europe from Arab Spain and, again, had a great influence in the West.

### 17.2 Astronomy

In astronomy there were advances, much of which knowledge was later lost for centuries. Achievements included the perception that the earth, Mercury and Venus moved round the sun, and that the earth rotated on its own axis; the diameter of the sun was measured, and the circumference of the earth was calculated to within an astonishing 200 miles; 850 stars were catalogued and the length of the lunar<sup>①</sup> month was calculated to within one second. The timing of eclipses was also calculated.

**Eratosthenes** (c. 276–194 BC) was librarian at the great Mouseion in Alexandria, and a friend of Archimedes. He calculated the correct length of the year and calculated the diameter of the earth to within fifty miles. He also began the science of chronology<sup>②</sup>, calculated the fall of Troy at 1184 (which was very close), the first Olympic Games and the outbreak of the Peloponnesian War. It must be remembered that at that time there were several calendars and ways of reckoning time. **Ptolemy** (c. 100–170 AD), a later Greek scientist, should be mentioned here. He was also active at Alexandria. He wrote a great book on trigonometry<sup>③</sup> and astronomy, in which over one thousand stars are listed and categorised into constellations. He disagreed with Aristarchus about the solar system and placed the earth at the centre, which was accepted until 1543. He also wrote a work on geography.

### 17.3 Medicine

**Hippocrates** of Cos (460–377 BC) laid the foundations of medical method in the fifth century. His oath, to look after patients and put their needs first, is still taken by new doctors. He promoted close observation and careful record keeping. His followers created a considerable body of knowledge and his method anticipates that of Aristotle. In the Hellenistic period more was discovered about the body, some of it in rather a gruesome way. Two prominent physicians, **Herophilus** of Chalcedon (335–c. 280 BC) and **Erasistratus** (c. 250 BC), were given criminals at Alexandria on whom they performed live operations. In this way they discovered that the brain was the centre of the nervous system, the

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① of the moon    ② the study of the proper sequencing of events

③ the branch of mathematics that deals with the relationships between the sides and the angles of triangles



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difference between motor and sensory nerves<sup>①</sup>, and made descriptions of the liver and the eye.

### **Conclusion**

The contribution that Greeks have made to Western culture is astonishing, considering their small population and the short period of time in which their contribution was made—a period of only about three hundred years. There is not really any area, which has not been profoundly influenced by them. Why did they achieve so much? Their wide distribution certainly allowed individual development, accustoming them to variety, and perhaps leading to a freedom to speculate as they wished. Their progress was also probably connected with their tolerance both of religion and of ideas, and secondly with their love of balance and harmony.

In religion they did not have mind-controlling institutions, and this clearly encouraged open speculation and the communication of ideas free from censorship. Open discussion was encouraged. Self-regulation, harmony and balance were ideals that the Athenians particularly strove for. Self-regulation was shown in their democracies; balance is seen in their education, in their drama and in their art. The Greeks were always conscious of the gods. This reminded people of their fragility, of the need not to go to excess and to keep harmony and balance in their lives.

The Greeks felt that perfection should have balance; excellence within normality was what was prized. Extremism was shunned. And normality, we must remember, included all the unconscious Dionysian and sexual forces and ambitious drives of humankind. These were not hidden away, but integrated and made use of in art, drama, religion and daily life. This acknowledgement of the unconscious gives power and understanding to Greek activity.

One of their great gifts to posterity was their rationalism<sup>②</sup>. Neither Aristotle nor the majority of his predecessors had time for magic explanations of phenomena<sup>③</sup>, and they clearly divided the rational from the non-rational. Connected with this is the Western way of analysis. In his method of looking for individual, unique and separate properties of things Aristotle took Western scientific thinking along the path of analysis and isolation of phenomena. This contrasts with the Eastern view where relationships or connections provide the explanation of the nature of phenomena. In this view unconnected things have no

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① nerves for movement and nerves for feeling    ② see Appendix 1

③ natural things, anything that can be known by the senses



## CHAPTER 1

### *Ancient Greece and the Hellenistic Age*

point of reference and therefore lack meaning. This notion of “isolation from” (as opposed to “inter-relationship / connection with”) has marked the West.

The Greeks certainly pioneered freedom, both practically and as a concept, and it has remained a strong concept in the West. The concept probably arose in Greece because of slavery, which gives rise to the concepts of a free person and an enslaved person. It is actually the case that in ancient non-slave owning societies, the concept of freedom was less highly valued than where there were slaves. (19) Athenian freedom is a freedom from interference by others, a freedom of action within the laws of the *polis* and a freedom to use others as one wished (i.e. slaves). This last kind of freedom was only limited in the West in the nineteenth century and its limits are still debated. The freeing of women from specifically male control has also been a long, slow and incomplete process.

Perhaps Herodotus was right when he gave democracy the credit for the achievement of the Greeks in triumphing over the Persians. There seems no reason why his argument for excellence cannot be extended to other fields than war. He says. “It is clear... in every way that equal right of speech is of enormous importance, since the Athenians under the tyranny were superior to none of their neighbours in war, but when they got rid of the tyrants, were by far the best. This shows that when oppressed, they were deliberately slack, since they were toiling for a master, but when they were set free, each one of them was eager to achieve for himself.” (20)

Hellenism opened the world and made new pathways for knowledge, exploration and experience. It opened the inner, psychological world too. The great centres of learning, Alexandria and Pergamum, had a profound effect on the spread of knowledge. Knowledge began to be more easily compared and contrasted by scholars and also archived in the libraries, though these themselves were to disappear—destroyed by accident of war by the Romans, and deliberately destroyed by the early Christians. The libraries allowed works to be copied and transmitted to the Persians and Arabs, where much was preserved for later European culture.

### **Questions for revision**

1. What contributions did the Mycenaean culture make to ancient Greek culture?
2. Give reasons for the variety in ancient Greek culture.
3. When, where and why did Greek culture first spread throughout the Mediterranean?
4. Outline the main elements and differences in the constitutions of Sparta and Athens.



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5. How did the roles of men and women differ in Athenian society?
6. When was the *Iliad* written and what and who is it about?
7. Explain, with examples, the form of Greek tragedy and how it developed in the Greek classical age.
8. What advances did pre-Socratic philosophers make?
9. Explain the main elements of Plato's thinking.
10. What were Aristotle's contributions to learning? How did he differ from Plato?

### **Questions for discussion**

11. What influence do you think the Greeks have had or have now on your culture?
12. Do you think that Athenian society could have taken the form it did without slavery? Why or why not?
13. Do you think we understand what goodness is in the way that Plato suggests?
14. Do you agree with Plato that we have innate ideas?
15. Do you think we understand mathematics in the way Plato suggests or does understanding come through our senses?