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Ancient Greece

From Prehistoric to Hellenistic Times

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Backgrounds of Ancient Greek History



"Most things in the history of Greece have become a subject of dispute" is how Pausanias, the second-century A.D. author of a famous guide to sites throughout Greece, summed up the challenge and the fascination of thinking about the significance of ancient Greek history (Guide to Greece 4.2.3). The subject was disputed then because Pausanias, a Greek, lived and wrote under the Roman Empire, when Greeks as subjects of the emperor in Rome no longer enjoyed the independence on which they once had prided themselves and had fought fiercely to protect. One dispute he focused on was why Greeks had lost their liberty and what it meant to live as the descendants of more-glorious ancestors. Today, the study of ancient Greek history still remains filled with disputes over how to evaluate the accomplishments and the failures that its story so dramatically presents. On the one hand, the accomplishments of the Greeks in innovative political organization, including democracy, history writing, literature, drama, philosophy, art, and architecture, deserve the description that the fifth-century B.C. historian Herodotus used to explain why he included the events and people that he did in his groundbreaking work: They were "wonders." On the other hand, the shortcomings of the ancient Greeks, including their perpetuation of slavery, the exclusion of women from politics, and their failure to unite to preserve their independence, seem equally striking and strongly disturbing. For me, after nearly forty years of studying, teaching, and writing about ancient Greece, the

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subject in all its diversity remains fascinating—and often perplexing because it is awe inspiring. *Awe*, a word in English derived from the ancient Greek noun achos, meaning "mental or physical pain," can, of course, have two opposite meanings: "wonder and approval" or "dread and rejection." I have both those reactions when thinking about ancient Greece and the disputes that its history continues to stimulate.

Ancient Greece is a vast subject, and this overview, written to be a concise introduction, necessarily compresses and even omits topics that others would emphasize. Whenever possible it tries to signal to readers when interesting disputes lie behind the presentation and interpretation of events or persons, but it cannot offer anything like a full treatment and still achieve the goal of brevity. My hope is that readers will be inspired, or at least provoked, to investigate the evidence for themselves, starting with the ancient sources. For this reason, those sources will be cited in the text from time to give a glimpse of the knowledge and delight to be gained from studying them. An extensive list of English translations of those sources is provided in the Suggested Readings, along with modern scholarly works that present fuller accounts and sometimes dueling interpretations of important topics, especially those that give rise to dispute.

The narrative of the overview covers the period from prehistory (so called because no written records exist to document those times) to the Hellenistic Age (the modern term for the centuries following the death of Alexander the Great in 323 B.C.). Geographically, it covers, as much as space allows in a book meant to be very brief, the locations in and around the Mediterranean Sea where Greeks lived. The majority of the narrative concerns the Archaic and Classical Ages (the modern terms for the spans of time from 750 to 500 and 500 to 323 B.C., respectively) and the settlements in the territory of mainland Greece, especially Athens. This coverage admittedly reflects a traditional emphasis on what remain the most famous events, personalities, writings, art, and architecture of ancient Greece. It also reflects the inescapable fact that the surviving ancient sources for this four-hundred-year span are more copious and have been studied in greater depth by scholars than the sources for the earlier and later spans of Greek history, although that imbalance is being reduced by discoveries and modern scholarly work. Finally, that this book focuses above all on the Classical Age reflects my interest in the awe-inspiring (in both positive and negative senses) deeds and thoughts of Greeks over those few centuries.

Relatively small in population, endowed with only a limited amount of flat and fertile agricultural land, and never united as a single nation, ancient Greece eagerly adopted and adapted many ideas and technologies

from its more-numerous, prosperous, and less-factional neighbors in the Near East (the southwestern edge of Asia at the eastern end of the Mediterranean Sea). Building on these inspirations from others, Greeks incubated their own ideas and practices, some of which still resonate today, thousands of years later. It is also true that ancient Greeks, like other ancient peoples, believed and did things that many people today would regard as "awesome" in the sense of morally repugnant. In this context, I agree with those who regard the past as a conceptual "foreign country" largely populated by people who can seem strikingly "other" from what most people today believe, or at least proclaim that they believe, about what sort of persons they are and what moral standards they live by. I also think that admirers of modernity sometimes express a supercilious moral superiority in their judgments regarding antiquity, which recent history scarcely merits. In any case, writing history inevitably involves rendering judgments, if only in what the historian chooses to include and exclude, and I hope that my skepticism about the assertion that the present is far "better" than the past will not seem inconsistent or hypocritical when I occasionally offer critical evaluations in this history. These judgments are made with a deep sense of humility and a keen awareness of how they certainly may miss the mark. Those are the sentiments, along with awe, that studying ancient history constantly renews in me.

The Greek achievements that strike me as the most impressive, and the failures that seem the saddest, took place beginning in the eighth century B.C., when Greece gradually began to recover from its Dark Age-the centuries of economic devastation, population decline, and political vacuum from about 1000 to 750 B.C. Earlier, in the Bronze Age of the second millennium B.C., life had been stable and, relatively speaking, prosperous throughout Greece in tightly organized, independent communities ruled by powerful families through "top-down" political, social, and economic institutions. Spurred by growing trade and cultural interaction with especially the peoples in the lands bordering the eastern end of the Mediterranean Sea, Greeks slowly rebuilt their civilization, but in doing so they diverged both from their previous ways of life and also from those of everyone else in their world: Organizing themselves into city-states, they almost universally rejected the rule of royalty as the "default value" for structuring human society and politics. For them, the new normal became widespread participation in decision making by male citizens who earned that privilege by helping to defend the community. Most astonishing of all, some Greeks implemented this principle by establishing democracies, the first the world had ever seen (some scholars see roots of democracy in earlier communities in the eastern Mediterranean, but the evidence is un4

convincing because, for one thing, it shows no concept of citizenship). At Athens, the guiding principle of democratic government became "equality before the law" and "equality of speech," regardless of a male citizen's wealth, birth, or social status. These concepts of equality represented a radical departure from the usual expectations and norms of politics in the ancient world.

It is necessary to emphasize that Greeks stopped short of fully putting the principle of participation into practice: They did not extend it to female citizens or slaves. As their literature dramatically reveals, they were clearly aware of logical arguments refuting the assertions that women and the enslaved of both genders were by nature characterized by cognitive inferiority and ethical deficiencies, rendering them incapable of participating in the community alongside men. This failure to accept and live by the full implications of their reasoning about politics and law seems to me an inescapable demerit to ancient Greek society. As the nineteenth-century English historian known as Lord Acton remarked in commenting on the ruthless actions of popes and kings, "Power tends to corrupt, and absolute power corrupts absolutely" (Historical Essays and Studies, p. 504). Men held the majority of power in ancient Greece, and it corrupted them, as it eventually does everyone in every era who exercises it.

That ancient Greeks recognized the existence of ideas contradicting their practices is not as surprising as it might seem, because their philosophers, scientists, and literary authors displayed relentless insight in conducting what we might call "thought experiments" on the nature of the world and of human beings. The Greeks' expressions of their ideas in poetry, prose, and drama are deservedly famous for their brilliance-and their sometimes troubling implications. Other ancient civilizations, from the Near East to India to China, also developed impressively insightful scientific and philosophic theories, and the Greeks certainly belong to the first rank of this distinguished company. The same evaluation is justified for Greek literature, drama, history writing, art, and architecture. It is more difficult to evaluate ancient Greek values and practices concerning those two most controversial areas of human experience and belief-religion and sex. As will become clear from the discussions of those topics later in this book, significant differences exist between ancient Greek religious and sexual traditions and what the majority of people today believe and do.

For all these reasons, and more that form part of the narrative to follow, the history of ancient Greece offers fascinating insights into the possibilities and limitations of human existence and presents numerous opportunities for discovery and reflection about the past and the present; not only is it intrinsically interesting (it seems to me), it is also good to think with, as the renowned French anthropologist Claude Lévi-Strauss said in interpreting why human beings have identified animal species as totems, meaning legendary ancestors whose characteristics their descendants were thought to have inherited and needed to keep in mind in defining their lives (Totemism, p. 89).

SOURCES AND EVIDENCE

The best way to learn about ancient Greek history and form one's own judgments is to study the ancient evidence first and then follow up on particular topics by consulting specialized works of modern scholarship. It is conventional to refer to ancient literature, inscriptions, documents written on papyrus, coins, and archaeological remains as "primary" sources, even when they were not contemporary with the history to which they refer. In fact, sources that scholars treat as primary can be considerably later in date than the events or persons for which they provide evidence, such as the inscription from Cyrene cited in the discussion of the founding of colonies in chapter 4. Other primary sources, such as fifth-century B.C. inscriptions about the finances of the so-called Athenian Empire (fig. 1.1), provide direct evidence about history at the time when they were produced. In any case, the surviving ancient sources are the first place to which we should turn to try to understand the past, and in that sense they are always primary. They can be hard to understand. Ancient documents were written for people who knew the full context to which they applied, not for us, who do not. Authors of literary works, including historians, were not aiming to present neutral, objective accounts of events and persons. Rather, they wanted to support a particular view of things and persuade their audiences to accept their interpretations of events and people's motives. Of course, modern writers often take this same approach, too, but those of us studying ancient Greece today must always stay on the lookout not only for what the ancient source was saying but why it was saying that.

The works of modern scholars are usually referred to as "secondary" sources, even when they prove essential in understanding, or even in correcting, the evidence derived from the primary sources. To try to help readers in consulting ancient sources, the citations to them in this overview will use, whenever possible, the internal reference systems that allow a passage to be located regardless of the translation being used (if that translation includes the reference system, which not all do, unfortunately). So, for example, a citation of Herodotus, The Histories 7.205, cited as evidence for the three hundred Spartans at the battle of Thermopylae in 480 B.C., means the passage is in book 7, section 205. (For poems, citations

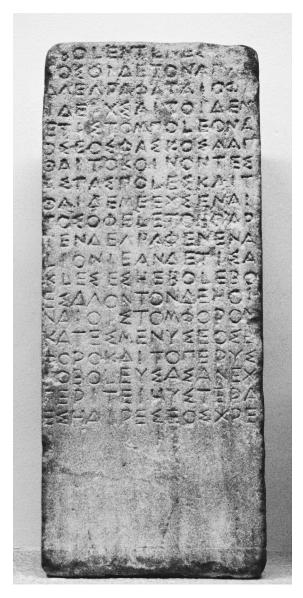


Fig. 1.1: Inscriptions on stone, like this one from the fifth century B.C., which concerns the finances of the naval alliance led by Athens, are "primary sources" for our reconstruction of ancient Greek history. In this period, Greeks wrote such documents with all capital letters and no separation between words. Marie-Lan Nguyen / Wikimedia Commons.

are to line numbers, preceded, if needed, by book number.) For secondary sources, the citations are to page numbers or catalogue item numbers.

The majority of the literary and documentary texts from Greek antiquity have not survived, but those that have are significant and provocative. The epics of Homer, The Iliad and The Odyssey, represent the most primary of the surviving primary sources from literature for the history of ancient Greece, for the Greeks then and for us today. Scholars debate how these long poems reached the form in which they have survived to this day. Some argue that they emerged from centuries and centuries of fluid and flexible oral performances by many bards, finally put down in a written version in the Archaic Age. Others believe that a single poet created the poems using the technology of writing in the eighth century B.C. However they came into existence, the stories in The Iliad and The Odyssey looked back to the Bronze Age while also reflecting the history of the Dark Age. Every ancient Greek valued these works for their artistic beauty and their life lessons. Above all, the Homeric epics encoded enduring values and traditions about the nature of the gods and human courage, self-control, loyalty, love, and sorrow. A thousand years later, people were still memorizing Homeric poetry. The (much-shorter) epic poems of Hesiod, The Theogony (Birth of the Gods) and Works and Days, composed arguably in the eighth century B.C., were meant to teach lessons about the role of the gods in human life, the nature of justice, and the problems created by the inequalities of power that arose as the Greeks slowly developed new forms of political and social life in their city-states. Seventh-century lyric and elegiac poets, such as Alcaeus, Alcman, Archilochus, Sappho, and Tyrtaeus, composed shorter works for choruses and for single voices that introduced communal and individual themes relevant to an era of social and political change. Bacchylides, Pindar, and Simonides in the late sixth century and the fifth century became famous for their elaborately artful poems intertwining mythology with current events, often composed in praise of victors in athletic competitions or battles and powerful rulers. The so-called "first philosophers"—who could just as well be called "scientific thinkers"—in the sixth century also wrote poems describing the underlying and invisible nature of reality as they reasoned it must be.

Soon after, Greeks began to write in prose, focusing on ethnography, geography, and myth (a Greek word, mythos, that means stories about the distant past that offered competing versions of the consequences of the often-difficult relationship between gods and human beings). The earliest of these works have not survived except in quotations and paraphrases by later authors. From the later fifth century B.C., however, we do have The Histories of Herodotus. Telling the complex story of the background and

events of the extended war between a coalition of Greek city-states and the powerful Persian Empire in the opening decades of the fifth century, Herodotus's unprecedented history generates a sense of wonder through its enormous length (50 percent longer than The Iliad), diverse reporting on a dizzying array of Greeks and non-Greeks alike, and its thematic complexity on human motivation. Thucydides' The Peloponnesian War, composed (though not finished) during that long conflict (431–404 B.C.), created the genre of contemporary history written by an eyewitness participant. His biting observations about the human desire for power and the unintended consequences of the violence of war also point to the beginnings of what today is called political science. In the next generation, Xenophon continued Thucydides' history by narrating events in Greece but also made a reputation by producing works about his exciting service as a mercenary soldier in a Persian civil war, the unique characteristics of society at Sparta, the idiosyncratic ideas and behavior of the famous philosopher Socrates (469–399 B.C.), and many other topics.

The fifth century also saw the creation of the primary sources that are perhaps best known today: the plays of the Athenian dramatists Aeschylus, Sophocles, and Euripides. These tragedies sometimes dealt with recent history, but mostly they based their plots on imaginative retellings of myths whose themes connected to life in contemporary Greek society. The characters and emotional conflicts portrayed in these dramas have a universality that keeps them fresh even for performance today. The comic plays of Aristophanes provide another fascinating, if sometimes perplexing, primary source for fifth-century B.C. Athenian society. Skewering his contemporaries with fantastic plots, merciless mockery, and vivid profanity, Aristophanes offers a revealing glimpse of what Greeks said about one another when they were unconcerned with being polite.

From the fourth century come the famous works of the philosophers Plato and Aristotle. Plato's philosophic dialogues, written as the scripts of imaginary conversations between Socrates and his contemporaries, have inspired and provoked thinkers ever since with their implications that the truth of reality is hidden, that the soul is the only worthwhile part of a human being, and that justice requires people to be stratified socially in layers of differing responsibilities and privileges. Aristotle, a student of Plato who argued for a more-practical approach to knowledge and conduct than his teacher did, astounded the world, then and later, with his encyclopedic interests and writings covering more topics in natural science, politics, and ethics than can be easily summarized. From this same century we have numerous surviving speeches from Athens concerning law cases and political crises, works that reveal many details of private and

public life. The orations of Demosthenes are especially vivid in portraying the military danger to Athens posed by the growing power of the kingdom of Macedonia under Philip II (382–336 B.C.) and his son Alexander the Great (356–323 B.C.), and the political split among Athens's citizens concerning whether to collaborate or to go to war to defend their political independence. The surviving primary sources for the world-changing career of Alexander as he fought his way to India and back are not contemporary, but their Roman-era authors (Diodorus, Curtius, Plutarch, Arrian, Justin) preserve vivid portrayals and interpretations of this conflict-filled era when monarchy began to return as the dominant political system of control in the Greek world. Plutarch's biographies of ancient Greeks are, for us, crucially important historical sources, even though he explicitly wrote them to explore individual character by pairing them with lives of Romans. He explicitly said that he was not writing history, but we have to use his biographies in that context to try to fill in the gaps left by our surviving primary sources. Reading Plutarch, therefore, is one of the most interesting challenges in constructing and interpreting ancient Greek history. The same is true of the amazing number of quotations from Greek sources of the Classical Age that are preserved in the long and discursive work called The Learned Banqueters (Deipnosophistae), composed by Athenaeus in the second century A.D.; the variety of topics ranges widely, from food to sex to jokes. Equally challenging to interpret and place in the right historical context are the quotations found in later sources from the writings, which have not survived on their own, of the early historians who wrote about Athens (the so-called Atthidographers).

The comedies of Menander of Athens reveal that, in the new world that was emerging at the time of Alexander in which the city-states of Greece were losing their political independence, audiences preferred soap-opera situation comedies about mistaken identities and romance in place of the biting political satire that had characterized comic plays in the earlier days of Greece's freedom from foreign domination. In studying the centuries following Alexander's death (the Hellenistic Age), it is difficult to reconstruct the story of Greek history with chronological precision because very few narrative sources have survived. The evidence of inscriptions, coins, and archaeological remains is of course crucially important in every period, but for the centuries of Greek history after Alexander these sorts of sources provide the overwhelming majority of what we know. Physical objects, like ancient texts, can of course be challenging to understand and interpret, especially when they were not created with the goal of directly communicating with people who would know nothing about them. Still, they help us puzzle out the significance of the changes in politics, soci-

ety, art, philosophy, and religion that took place in Greek culture as, first, Macedonian rulers constructed kingdoms in Greece, Egypt, and the Near East and, then, the Romans conquered these monarchies to become the dominant power in the Mediterranean world. Greek history and the Greek language lived on even after Rome had absorbed Greeks into its territorial empire, of course, but for the purposes of this book the story will end with a brief overview of Hellenistic Greek history.

THE PHYSICAL ENVIRONMENT OF GREECE

The deepest background of the history of ancient Greece lies in the physical environment and its effects on the opportunities and the constraints of life in this part of the Mediterranean region. The homeland of the ancient Greeks was located in the southern portion of the mountainous Balkan Peninsula (today the territory of the modern nation of Greece) and the hundreds and hundreds of islands in the Aegean Sea to the east and the Ionian Sea to the west. The islands in these sections of the Mediterranean Sea varied in size from large territories, such as Lesbos (630 square miles in area) and Corcyra (227 square miles), to small ones, such as Delos (1.3 square miles). Greeks also lived up and down the western coast of Anatolia (modern Turkey), far to the south on the very large island of Crete (3,219 square miles), on even larger Cyprus (3,572 square miles) far to the east, on the coast of North Africa, and in southern Italy and on Sicily (an area referred to by the Latin name "Magna Graecia"). Almost all the places where Greeks lived were subject to devastating earthquakes.

Chains of rugged mountains dominate the landscape of mainland Greece, fencing off plains and valleys in which communities could keep themselves politically separate from one another while still maintaining contacts for trade and diplomacy. These mountains mainly run from northwest to southeast along the Balkan Peninsula, with narrow passes connecting Greek territory to Macedonia in the north. The highest was Mount Olympus, at almost 10,000 feet high (fig. 1.2). The terrain of the many islands of the Aegean was also craggy. Only about 20 to 30 percent of the mainland was arable, but some islands, western Anatolia, Magna Graecia, and a few fortunate mainland regions, especially Thessaly in the northeast and Messenia in the southwest, included plains spacious enough to support bounteous crops and large grazing animals. The scarcity of level terrain ruled out the raising of cattle and horses on any large scale in many areas. When Greeks first domesticated animals in the late Stone Age, pigs, sheep, and goats became the most common livestock. By the seventh cen-

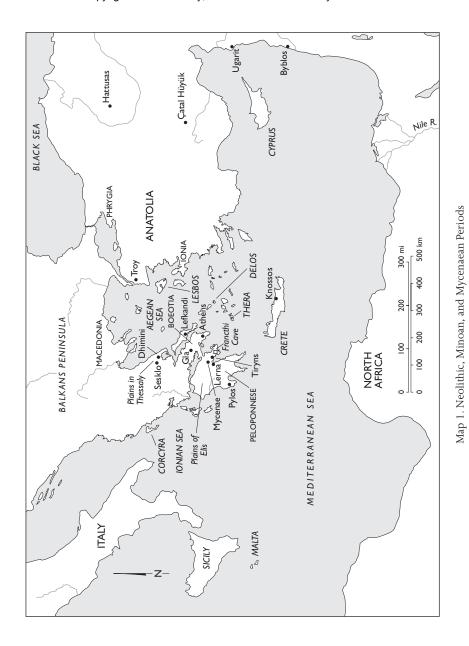




Fig. 1.2: This view through a gorge looks toward Mount Olympus, the highest mountain in Greece at nearly 10,000 feet / 3000 meters high. Greeks believed the gods made their home atop its peak. Mountainous terrain occupied much of the landscape of Greece. Wikimedia Commons.

tury B.C. the domestic chicken had been introduced into Greece from the Near East.

Once Greeks learned to farm, they grew mostly barley, which formed the staple of the Greek diet. The generally poor land supported crops of this grain far better than of wheat, which made tastier food but needed richer land to flourish. Root vegetables and some varieties of cereal grains could be grown even during the cooler winter months. Other major crops were wine grapes and olives. Wine diluted with water was the favorite beverage drunk by Greeks, while olive oil provided a principal source of dietary fat and also served, among many other uses, as a cleaning agent for bathing and a base for perfumes. Meat, which was expensive, appeared more rarely in Greek meals than in those of modern Western cultures. Fish was a popular food but could also be scarce.

So jagged was the Greek coastline that most settlements lay within forty miles of the sea, providing easy access for fishermen and seagoing merchants, though harbors large enough to protect ships during storms, such as the port of Piraeus at Athens, were rare. The ports of Egypt and

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the eastern Mediterranean coast were favorite destinations. Going to sea with the limited marine technology of the time made bad weather a serious threat to life and limb, and prevailing winds and fierce gales greatly limited sailing during winter. Even in calm conditions sailors hugged the coast whenever possible and aimed to land every night for safety. Pirates were a menace, too. Nevertheless, driven by the desire for the profits to be made from international trade, Greek entrepreneurs risked the dangers of the sea to sail all over the Mediterranean. Summing up the situation, Hesiod remarked that merchants took to the sea "because an income means life to wretched mortals, but it is a terrible fate to die among the waves" (Works and Days, lines 686–687).

Most Greeks, even if they lived near the sea, never traveled very far from home. Commercial sea travel, however, played a central role in the development of Greek culture because traders and entrepreneurs voyaging between the Near East, Egypt, and Greece put Greeks into contact with the older civilizations of the eastern Mediterranean region, from which they learned new technologies; ideas about religion, philosophy, and science; and styles in art. Transporting people and goods overland instead of by sea was slow and expensive because rudimentary dirt paths were Greece's only roads. The rivers were practically useless for trade and communication because most of them, though perhaps not as many as today, slowed to a trickle during the many months each year when little or no rain fell. Timber for building houses and ships was the most plentiful natural resource of the mountainous terrain of the mainland, but deforestation had probably already affected many regions by the fifth century B.C. By that time mainland Greeks were importing lumber from northward regions and paying stiff prices for it. Some deposits of metal ore, especially iron, were scattered throughout Greek territory, as were clays useful for making pots and other containers. Quarries of fine stone, such as marble, furnished material for expensive buildings and sculpture. The irregular distribution of these resources made some areas considerably wealthier than others. The silver mines in Athenian territory, for example, provided an income that supported the exceptional prosperity of Athens's so-called Golden Age in the fifth century.

Modern meteorologists refer to the climate of Greece as Mediterranean, meaning winters drenched with intermittent heavy rain and summers baking with hot, dry weather. Rainfall varied significantly, with the heaviest (around 50 inches annually on average today) along the western side of the Balkan Peninsula, while the eastern region, where Athens is located, receives much less precipitation (16 inches per year). Greek farmers endured a precarious cycle of boom and bust, fearing both drought

and floods. Nevertheless, the Greeks believed their climate to be the best anywhere. Aristotle, who saw climate as determining political destiny, believed that "Greeks occupy a middle position [between hot and cold climates] and correspondingly enjoy both energy and intelligence. For this reason they retain their freedom and have the best of political institutions. In fact, if they could forge political unity among themselves, they could control the rest of the world" (Politics 7.7, 1327b29–33).

As Aristotle implied, throughout their history the ancient Greeks never constituted a nation in the modern sense because their various independent states never united politically. In fact, they often fought wars with one another. On the other hand, Greeks saw themselves as sharing a cultural identity because they spoke dialects of the same language, had similar customs, worshipped the same gods (with local variations in cults), and came together at international religious festivals, such as the celebration of the mysteries of the goddess Demeter at Athens or the athletic games at Olympia in the Peloponnese. Ancient Greece was thus a set of shared ideas and practices rather than a sharply demarcated territorial or national entity. How this sense of Greek cultural identity came to be and how it was maintained over the centuries are difficult questions that must be kept constantly in mind. That its mountainous topography contributed to the political fragmentation of Greece seems clear.

PREHISTORY BEFORE AGRICULTURE

The prehistoric background of Greek history belongs to the Stone Age, so named because the people of the time had mainly stone, in addition to bone and wood, from which to fashion tools and weapons; they had not yet developed the technology to make implements from metals. Most important, at this point human beings did not yet know how to cultivate crops. When people finally began to develop agricultural technology, they experienced tremendous changes in their lives and began to affect the natural environment in unprecedented ways.

The Stone Age is conventionally subdivided into the Paleolithic (Greek for "Old Stone") and Neolithic ("New Stone") Ages. During the hundreds of thousands of years of the Paleolithic period, human beings roamed throughout their lives, searching for food in the wild by hunting game, fishing, collecting shellfish, and gathering plants, fruits, and nuts. Living as hunter-gatherers, these early human beings sometimes migrated great distances, presumably following large game animals or searching for more abundant sources of nutritious wild plants. The first human beings in Greece probably migrated there long ago from the African continent via c. 45,000–40,000 years ago: Homo sapiens sapiens first moves out of Africa into southwestern Asia and Europe.

c. 20,000 years ago: Human habitation begins in the Francthi Cave in southeastern Greece.

c. 10,000–8000 B.C.: Transition from Paleolithic to Neolithic Age marks the beginning of agriculture and permanent settlements.

c. 7000–6000 B.c.: Agriculture and domestication of animals under way in southern and eastern Europe, including Greece.

c. 7000–5000 B.C.: Settlements of permanent houses being built in fertile plains in Greece.

c. 4000–3000 B.c.: Copper metallurgy under way in Balkan region.

the eastern Mediterranean and Anatolia. A skull found at Petralona Cave in Greece has been dated to at least two hundred thousand years before the present. At least as early as fifty thousand years ago the type of Paleolithic human beings known as Neanderthals (from the finds of their remains in Germany's Neander Valley) spread over Macedonia and then into Greece as far south as the plain at Elis in the Peloponnese peninsula. People of modern type (Homo sapiens sapiens) began to migrate from Africa into Europe during the last part of the Paleolithic period. This new population eventually replaced completely the earlier populations, such as the Neanderthals; how this happened remains unknown. Perhaps the newcomers were better able to cope with natural disasters, such as the tremendous floods that covered the plains in Thessaly for many years beginning about thirty thousand years before the present.

Ancient hunter-gatherers probably lacked laws, judges, and political organization in the modern sense, which is not to say that they lacked forms of social organization, regulation, and control. Some Paleolithic graves containing weapons, tools, animal figurines, ivory beads, and bracelets suggest that hunter-gatherers recognized social differences among individuals and that an individual's special social status could by marked by the possession of more-expensive or elaborate goods. Just as the possession of a quantity of such goods in life had shown that individuals enjoyed superior wealth, power, or status in their groups, so too the burial of the goods with the corpse indicated the individual's prestige. Accordingly, it appears that some Paleolithic groups organized themselves not along egalitarian lines but rather in hierarchies, social systems that ranked certain people as more important and more dominant than others. Thus, already in this early period we find traces of social differentiation (the marking of

certain people as wealthier, more respected, or more powerful than others in their group), the feature of human life that characterized later Greek society, as it has every society in historical times.

TRANSFORMATION OF DAILY LIFE IN THE NEOLITHIC AGE

Daily life as the ancient Greeks knew it depended on agriculture and the domestication of animals, innovations that gradually took root starting some ten to twelve thousand years ago at the opening of the Neolithic Age. The process of gaining this knowledge, which was to change human life radically, extended over several thousand years. Excavations at the site of the Francthi Cave in Greece have revealed the gradual process of adapting to natural changes that prehistoric populations underwent as they learned to farm. Hunter-gatherers first showed up in this area near the southeastern Greek seacoast about twenty thousand years before the present. At that time the cave, used for shelter, lay some three to four miles from the coast and overlooked a plain verdant with vegetation. Wild horses and cattle grazed there, providing easy hunting. Over about the next twelve thousand years, the sea level gradually rose, perhaps as a result of climatic changes, until only a narrow ribbon of marsh and beach about one kilometer wide separated the cave from the shoreline. With large game animals no longer available nearby, the residents of the Francthi Cave now based their diet on seafood and especially wild plants, such as lentils, oats, barley, bitter vetch, and pear, gathered from nearby valleys and hillsides.

As hunter-gatherer populations came to depend increasingly on plants for their survival, the problem became to develop a reliable supply. The answer, which took thousands of years of repeated trial and error to learn, was to plant part of the seeds from one crop to produce another crop. Knowledge of this revolutionary technology—agriculture—first emerged not in Greece but in the Near East and slowly spread outward. Evidence from the Francthi Cave and the plains in Thessaly shows the new technology had reached Greece by around 7000 B.C. How it made its way there is an intriguing puzzle still to be solved. One of perhaps many contributing factors may have been the contact between different regions that resulted from the travels of merchants and entrepreneurs, who sailed throughout the Mediterranean in search of materials and markets by which to make a profit.

Whatever the ways through which knowledge of agriculture spread, Neolithic women had probably played the major role in inventing the technology and the tools needed to practice it, such as digging sticks and grinding stones. After all, women in hunter-gatherer society had devel-

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oped the greatest knowledge of plants because they were the principal gatherers of this food. In the earliest history of farming, women did most of the agricultural labor, while men continued to hunt, although women hunted smaller game, too, using nets. During this same transitional period, people also learned to breed and herd animals for food, thus helping replace the meat formerly supplied by the hunting of large mammals, many of which had become extinct. The first animal to be domesticated as a source of meat was the sheep, from about 8500 B.C. in the Near East. (Dogs had been domesticated much earlier but were not commonly eaten.) Domesticated sheep and goats had become widespread throughout the Near East and southern Europe, including Greece, by about 7000. In this early stage of domestication, small herds kept close to home were the rule. They could therefore be tended by men, women, and children alike.

The production, instead of just the gathering, of food laid the foundation for other changes that we take for granted today. For example, to farm successfully, people had to live in settled locations, and farming villages formed in the Near East as early as 10,000 B.C. Permanent communities of farmers, comprising a built environment with a densely settled population, constituted a new stage in human history. Neolithic villages sprang up in Macedonia and further south in Greece in Thessaly and Boeotia during the period 7000–5000, concentrating in plains suitable for agriculture. The houses of these early settlements were mostly one-room, freestanding dwellings in a rectangular shape up to about forty feet long. At Sesklo in Thessaly, some Neolithic houses had basements and a second story. Greek houses in this period were usually built with a wood frame covered with clay, but some had stone foundations supporting mud bricks (a common building material in the Near East). The inhabitants entered through a single door and baked food in a clay oven. Settlements like those at Sesklo or Dhimini in Thessaly housed populations of perhaps several hundred. At Dhimini a series of low walls encircled the settlement. By the third millennium, large dwellings were being built in Greece, as at Lerna in the Argolid region, where the so-called House of Tiles had a roof of baked tiles covering a multistory building. There are no documents to tell us about the beliefs of the people who lived in these communities: The technology of writing was not yet known in Greece. Sculptures such as a male statue with exposed genitals (fig. 1.3) suggest that rituals meant to ensure human reproduction were important to the villagers, whose existence literally depended on having a high birthrate to replace the many people who died as babies or while still young. Expanding its population was the way for the community to become stronger.



Fig. 1.3: Greeks in the Neolithic ("New Stone") Age created art including statues such as this seated male figure. That this statue had its genitals exposed, with an erect penis (now broken off), leads some scholars to speculate that it concerned reproduction and human fertility, which were sources of anxiety in a world in which many people died young. Wikimedia Commons.

The remarkable changes of the late Neolithic period took place as innovative human adaptations to what in anthropological terms would be called the feedback between environmental change and population growth. That is, as agriculture developed (perhaps in a period when the climate became wetter), populations increased, thus further raising the need for production of food, thus leading to further population growth, and so on. The process that led to the innovation of humans producing their food through agriculture instead of simply finding it in the wild clearly underlines the importance of demography—the study of the size, growth, density, distribution, and vital statistics of the human population—in understanding historical change.

Physical evidence for the new patterns of life emerging in the Neolithic

Age is still emerging at a site in Anatolia (modern Turkey) being explored by an international team of archaeologists; it is known to us only by its modern name, Çatal Hüyük (pronounced "Chatal Hooyook," meaning "Fork Mound"). Large for its time (housing perhaps six thousand people by around 6000 B.C.) but otherwise comparable to Greek Neolithic communities, Çatal Hüyük subsisted by raising grains and vegetables in irrigated fields and domesticating animals, along with hunting some game.

Since the community could produce enough food without everyone having to work in the fields or herd cattle, some workers could become crafts specialists, producing goods for those producing the food. These artisans not only fashioned tools, containers, and ornaments from the traditional materials of wood, bone, hide, and stone but also developed new technological skills by experimenting with the material of the future: metal. Metalworkers at Catal Hüyük certainly knew how to fashion lead into pendants and to hammer naturally occurring lumps of copper into beads and tubes to make jewelry, but traces of slag (the residue from the process of smelting mineral ores) found on the site further suggest that they were beginning to learn the technique of extracting metal from the rock with which it is usually mixed in its natural state. The tricky process of smelting—the basis of true metallurgy and the foundation of much modern technology-required temperatures of 700 degrees centigrade. Melting copper took temperatures almost twice that high. Achieving this extraordinary heat required building clay furnaces fired by charcoal and stoked by blowing air into them with bellows, perhaps through tubes punched through the furnace walls. This was exhausting, sometimes dangerous work that required great skill and care. Other workers at Çatal Hüyük specialized in weaving textiles, and the scraps of cloth discovered there are the oldest examples of this craft ever found. Like other early technological innovations, metallurgy and the production of cloth apparently also developed independently in other places where agriculture and settled communities provided a context for such creative divisions of labor.

The increasing specialization of labor characteristic of Neolithic settlements such as Çatal Hüyük promoted the development of social and political hierarchies. The need to plan and regulate irrigation, trade, and the exchange of food and goods between farmers and crafts specialists in turn created a need for leaders with greater authority than had been required to maintain peace and order in hunter-gatherer bands. In addition, households that found success in farming, herding, crafts production, or trade made themselves wealthier and thus different from less successful villagers. The greater social equality between men and women that prob-

ably characterized hunter-gatherer society also grew weaker by the late Neolithic period. Gradual changes in agriculture and herding over many centuries perhaps contributed to a shift in the relative power of women and men. Sometime after about 4000 B.C. farmers began to employ plows dragged by animals to cultivate land that was more difficult to sow than the areas cultivated in the earliest period of agriculture. Men apparently operated this new technology because plowing required greater physical strength than digging with sticks and hoes, and men were generally stronger than women. Men also took over the tending of the larger herds that had now become more common, with cattle being kept for milk and sheep for wool. Large herds tended to be grazed at a distance from the village because new grasslands had to be found continually. Men, free from the responsibility of nursing babies, were able to stay away from home to tend to the herds. Women, by contrast, became tied down in the central settlement because they had to raise more children to support agriculture, which was becoming more intensive and therefore required more laborers than had foraging for food or carrying out the earliest forms of farming. Women also had to shoulder the responsibility for new labor-intensive tasks, processing the secondary products of larger herds. For example, they now processed milk into cheese and yogurt and produced cloth by spinning and weaving wool. It seems possible that men's tasks in this new specialization of labor were assigned greater prestige and thus contributed to the growth of inequality between genders. This form of social differentiation, which became a fundamental ingredient in later Greek culture, thus apparently emerged as a contingency of the fundamental changes in human life taking place in the late Neolithic Age.

EXPLAINING TECHNOLOGICAL CHANGE

The issue of how the prehistoric inhabitants of Greece learned to use the transformative technologies of the late Stone Age has become more complex as modern scientific technology has provided new information on the chronology of the changes in different areas. In the broadest form, the question is to what extent the prehistoric inhabitants of Europe derived their knowledge of the new technologies from the populations of Mesopotamia and Egypt, who clearly came first in inventing writing, building cities, and forming complex civilizations. For a long time scholars regarded European developments as, for all practical purposes, wholly derived from the Near East through a process of diffusion. That is, traders, farmers, herders, metalworkers, and architects were theorized to have slowly made their ways to Europe from the Near East, either peacefully or as violent invaders. They brought with them, on this model, technologies hitherto unknown in the lands they entered, such as agriculture, monumental stone construction, and copper metallurgy. In this way, technological knowledge was gradually diffused from the Near East over Europe.

This explanation of technological change in prehistoric Europe has had to be revised, however, in the light of scientific analytic techniques refined only as recently as the late 1960s. Radiocarbon dating forced the revision by permitting scientists to give close estimates of the age of prehistoric organic materials from archaeological excavations. Laboratory analysis of the amount of radioactive carbon-14 remaining in materials such as bones, seeds, hides, and wood can now determine with an acceptable margin of error the length of time since the death of the material submitted for testing. Dendrochronology, the chronological evidence obtained from counting the internal rings of long-lived trees, has helped refine the accuracy of radiocarbon dating. These techniques applied to archaeological material from Neolithic Europe have suggested a more complex process of change than previously imagined. It now seems established that farming communities had already developed in Greece and the Balkan Mountains immediately to the north as early as the seventh millennium B.C. On this chronology, it is still possible to believe that traders and migrating farmers from the Near East introduced domesticated cereal grains into Greece, but it is also not ruled out that Greek agriculture developed as the result of independent innovation. As for the domestication of cattle, the evidence suggests that this important development in how human beings acquired meat to eat took place in this region of Europe at least as early as in the Near East. In this case, a European population apparently introduced change on its own, by independent local innovation rather than through diffusion.

Radiocarbon dates further suggest that European metalworkers developed copper metallurgy independently from Near Eastern metalsmiths because they show this technology developing in various European locations around the same time as in the Near East. By the fourth millennium, for instance, smiths in the Balkans were casting copper ax heads with the hole for the ax handle in the correct position. The smiths of southeastern Europe started alloying bronze in the same period in the third millennium as their Near Eastern counterparts, learning to add 10 percent of tin to the copper that they were firing. The European Bronze Age (to use the terminology in which periods of history are labeled according to the metal most in use) therefore commenced at approximately the same date as the Near Eastern Bronze Age. This chronology suggests contemporary but independent local innovation, because otherwise we would expect to find

evidence that metallurgy had begun much earlier in the Near East than in Europe, to allow the necessary time for the diffusion of the technology all the way from the Near East to Europe.

Thus, the explanation of important changes in prehistoric European history has become more complicated than it was when diffusion alone seemed sufficient to explain these developments. It no longer seems possible to think that the Neolithic population of Greece was wholly dependent on Near Easterners for knowledge of innovative technologies such as megalithic architecture and metallurgy, even if they did learn agriculture from them. Like their neighbors in Europe, the inhabitants of prehistoric Greece participated in the complex process of diffusion and in independent invention, which brought such remarkable technological and social changes in this period through the interacting effects of contact with others, sometimes very distant others, and local innovation.