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MASTER HEALERS
OF THE MIDDLE AGES

SPARTA'S
WARRIORS
BRED FOR BATTLE

CORRUPT
BARGAIN
ADAMS VS. JACKSON IN
THE ELECTION OF 1824

PLUS:

A Whale's Revenge:
The Grim Odyssey of the *Essex*

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PYRAMIDS APLENTY

There are more pyramids in modern Sudan than in all of Egypt, thanks to the ancient Kushite rulers who absorbed Egyptian customs and made them all their own.

Features

18 The Pyramids of Meroë

Adorned with tall, slender pyramids, this rich city by the Nile was the seat of power of Kush, an ancient kingdom and rival to Egypt.

28 Sparta's Military Machine

Drilled in the art of war from boyhood, Spartan men embraced the fearsome warrior culture that dominated fifth-century B.C. Greece.

40 Herod the Great

Reviled as a tyrant and a traitor, Herod I also oversaw an unprecedented period of prosperity and monument-building in Judaea.

50 Rome's Aqueducts

Bringing water to a thirsty people, these engineering marvels allowed Rome to grow from republic to empire.

64 Muslim Medicine

The caliphs' championing of science spearheaded medical breakthroughs across the Islamic world in the Middle Ages.

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Hungry for the presidency, John Quincy Adams struck a so-called Corrupt Bargain to defeat Andrew Jackson.

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Rising from concubine to queen, Cixi led China into the modern age, despite cultural prejudice against women.

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Sacred to the Inca, coca leaves were revered for their power to heal ailments, dull hunger, and overcome fatigue.

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A sperm whale sank the *Essex* in 1820,

stranding the surviving crew in the Pacific for months, becoming an inspiration for Melville's *Moby-Dick*.

90 DISCOVERIES

Afghanistan's golden treasures were discovered on the eve of invasion, the first—and not the last—time that war has threatened these precious relics.



Bred for Battle

SPARTA'S MILITARY MACHINE

War: Sparta's entire culture centered on it. A lifelong dedication to military discipline, service, and precision gave this kingdom a strong advantage over other Greek civilizations, allowing Sparta to dominate Greece in the fifth century B.C.

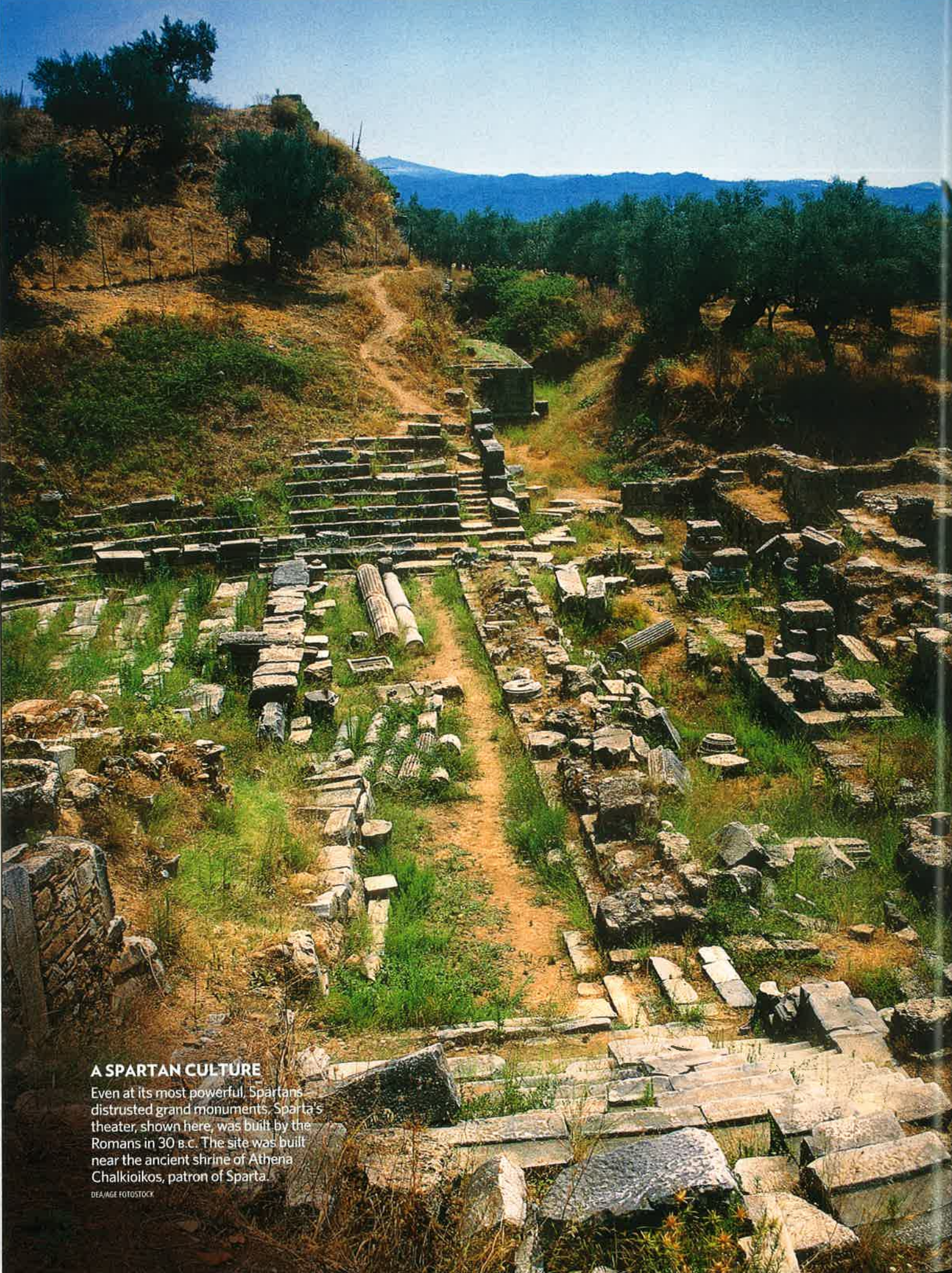
ANTONIO PENADÉS



HEAVY METAL

A Greek helmet from the fifth century B.C. At the peak of their power, the Spartans defeated the Persian army, and then turned their ire on neighboring Athens.

BRIDGEMAN/ACI



A SPARTAN CULTURE

Even at its most powerful, Spartans distrusted grand monuments. Sparta's theater, shown here, was built by the Romans in 30 B.C. The site was built near the ancient shrine of Athena Chalkioikos, patron of Sparta.

DEA/AGE FOTOSTOCK

Sparta's enemies, when facing the intimidating Spartan forces, would see a wall of shields, bristling with lances, inexorably bearing down on them—not to the beat of drums, but as the Greek historian Thucydides explains, “to the music of many flute-players, a standing institution in their army, which has nothing to do with religion, but is meant to make them advance evenly, stepping in time, without breaking their order.”

Little remains of the ancient city of Sparta, capital of the Laconia region, situated on the Peloponnesus peninsula in modern Greece, but the impact of its unique culture is impossible to ignore. Unlike Athens to the north, Sparta was famed for its austerity—its “spartan” character—was, and is, proverbial. A state run by an inflexible military regime, whose people existed almost entirely to serve the army, the Spartans were legendary for their professionalism, intense physical and mental stamina, and absolute dedication to the defense of their land. No great philosophers would ever arise from Spartan culture the way they did from Athens.

Athens and Sparta

Founded around the ninth century B.C., Sparta's kings oversaw a society with little interest in intellectual and artistic pursuits beyond patriotic poetry. Religion did occupy a central role in this warrior society. An efficient military machine in almost every other respect, war was only unthinkable during the festivities dedicated to Apollo Carneus. These were celebrated every summer, sometimes in full campaign season, and it was considered impious to interrupt them.

The Athenian view of Sparta oscillated between admiration and fear, according to whether their warlike neighbors were allies or enemies. Without Spartan participation in the war against Persia at the beginning of the fifth century B.C.—especially their heroic stand at the critical Battle of Thermopylae in 480—the Persians may well have conquered Greece. Later in the same century, however, Athens found itself at war with its ferocious former ally, a venture that greatly sapped its energy and resources. Even as Athens experienced a Golden Age, the conflict with Sparta largely brought about its political decline.

The Peloponnesian War in which Athens fought Sparta began in 431 B.C. At the outset, the Athenian statesman Pericles ordered all inhabitants of the Attica region to take refuge within the capital's strong walls. Despite grumbling from some quarters that this amounted to cowardice, many Athenians understood Pericles' pragmatism. Athens was strong at sea, but the Spartans were invincible on land. Pericles knew that facing the enemy there would mean certain defeat. Sparta's total dedication to military greatness and discipline earned them their fearsome reputation and their enemies' respect.

THE RISE OF A WARRIOR STATE

730-660 B.C.

Sparta dominates the southern Peloponnesus, creating a slave class known as the Helots.

480 B.C.

Outnumbered at the Battle of Thermopylae, 300 Spartans take a stand against the Persian army.

479 B.C.

Some 40,000 Spartan hoplites play a key role in trouncing the Persians at the Battle of Plataea.

418 B.C.

In a major blow to Athenian power, the Spartans rout the Athenians and their allies at Mantinea.

371 B.C.

At the Battle of Leuctra, Thebes finally defeats Sparta, ending their era of military dominance.

THE SPOILS OF WAR

As pious as they were warlike, the Spartans assiduously presented part of their war booty as an offering at the Sanctuary of Apollo in Delphi. The image shows the Tholos in the Sanctuary of Athena at Delphi.

TOM MACKEE/PHOTOTECA/VOX



Boys to Men

From birth, Spartan boys were prepared both physically and mentally for their later, inevitable combat service. Most boys lived with their families until age seven, after which time they were delivered to the *agoge*—part military academy, part boot camp—to be trained as soldiers. Family ties loosened, and young recruits effectively belonged to the state. The first-century Roman historian Plutarch details the regime to which young Spartans were subjected:

[T]heir training was calculated to make them obey commands well, endure hardships, and conquer in battle . . . When they were 12 years old, they no longer had tunics to wear, received one cloak a year, had hard flesh, and knew little of baths. They slept together . . . on pallet-beds which they collected for themselves, breaking off with their hands—no knives allowed—the tops of the rushes which grew along the river Eurotas.

When war loomed, the Gerousia, the council of elders, decided when to draw from this silo of young fighters. Their proposal then had to be approved by the Spartan assembly. Spartan men aged between 20 and 60 would then be called up, starting with the most experienced. Each year the ephors, or magistrates, chose the 300 best hoplites in Sparta to become the *hippeis*—elite soldiers who formed the king's private guard.

March to War

There were many reasons for launching a military campaign. For example, Sparta might face an existential threat, prompting its participation in the Battle of Plataea in 479 B.C., which effectively ended all Persian attempts to invade the Greek lands. At other times, Sparta engaged in disputes with its rival Greek city-states, especially Athens and Thebes. Slave rebellions had to be nipped in the bud—the Helots, conquered peoples enslaved by the Spartans, had to be routinely subdued.

When facing a foreign foe, the Spartan king would first offer a sacrifice to Zeus Agetor, in order to know whether the gods approved of the campaign. If it was discerned that they did, the

A BRONZE WALL: POWER OF SPARTAN SHIELDS

KNOWN AS a *hoplon*—from which is derived the name of its bearer, the hoplite—the shield was, together with the spear, the most important weapon of the Spartan warrior. Each shield was circular and convex, weighed more than 15 pounds, and measured three feet in diameter. Shields were specially made out of layers of wood that had been rounded off and glued together. The exterior was covered with a fine layer of bronze, whose surface, glinting in the sun and replicated across the formation, would present a daunting spectacle to an enemy. The Spartan hoplites organized themselves into a tight-packed phalanx that then relentlessly pushed forward behind this wall of bronze.



official fire bearer, the *pyrphorus*, would take up the sacred fire from the altar and carry it with him throughout the march in order to ensure divine protection. As a bonus, it also provided the expedition with a constant source of fire. The meat of the goats and sheep sacrificed to Zeus was then used as food for the soldiers.

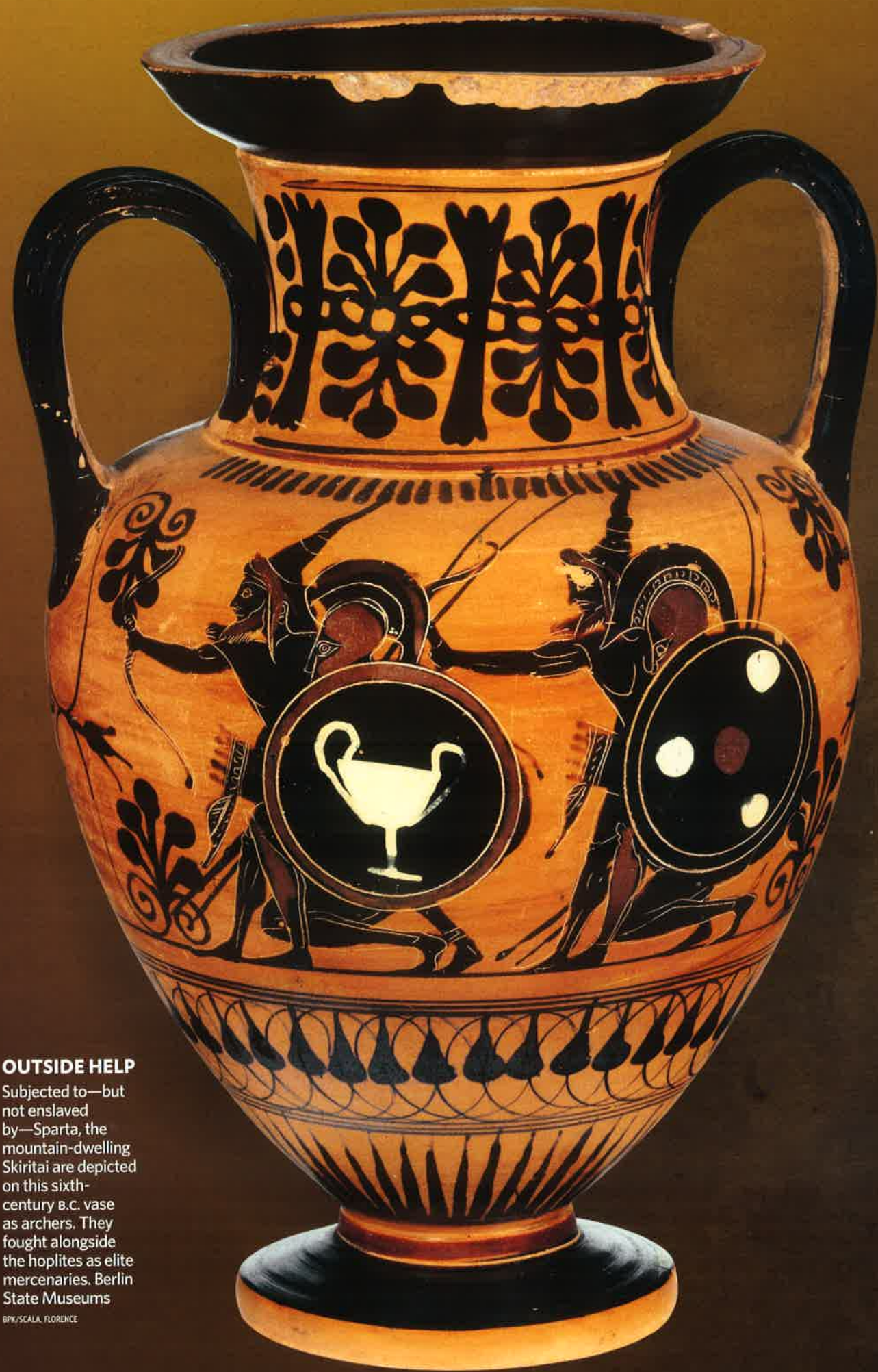
During the march, the Skiritai, the mountain-dwelling mercenaries to the north of Sparta, and calvary were placed at the front. They carried light weapons and formed a daunting defensive and scouting force at the front of the convoy. Next came the hoplites in two long lines, flanking the cargo mules; the Helot slave porters; and the noncombatants—physicians, artisans, blacksmiths, carpenters, and tanners, bearing all the objects that the company might need.

Each soldier would carry 20 days worth of provisions with him. This consisted of rye bread, cheese, and salted meat, which in the spirit of

VITAL PROTECTION

Some hoplite shields, like the one above, were designed with openings through which spears could be thrust. Oliveriano Archaeological Museum, Pesaro, Italy

SCALA, FLORENCE



OUTSIDE HELP

Subjected to—but not enslaved by—Sparta, the mountain-dwelling Skiritai are depicted on this sixth-century B.C. vase as archers. They fought alongside the hoplites as elite mercenaries. Berlin State Museums

BPK/SCALA, FLORENCE

*“[The Spartans] were the **only men in the world** for whom **war brought a respite** in the training for war.”* —Plutarch, Roman historian

Spartan egalitarianism was distributed among soldiers and officers alike. Most campaigns took place in the late spring, when water was scarce, so drinking water also had to be hauled.

Every Spartan soldier carried his own weapons, while a Helot slave took charge of his other belongings. At night the soldiers had no more than capes to protect them from the cold. They did not sleep in tents but lay on the ground or under simple shelters.

Eve of Battle

After the army arrived at the border of the Spartan region, the king made a new sacrifice, this time dedicated to Zeus and Athena. Upon reaching the battlefield, the Spartans set up camp in the most appropriate place—close to a water source when possible. The camp itself was laid out in the form of a square, with the animals, supplies, and slaves placed in the middle. The elite Skiritai and cavalry made constant patrols of the high ground to keep watch. Sometimes the guard was more concerned about the Helot slaves trying to flee the camp than about an attack from the rival army.

The Spartan soldiers kept to a strict schedule when on campaign. Having offered the appropriate morning sacrifice, the king gave the day's orders to his officers. There would be physical exercise before breakfast, an inspection, a changeover of those on guard duty and then military instruction. The historian Plutarch notes that, paradoxically, war for Spartans was seen almost as a holiday: “Their **bodily exercises**, too, were less **rigorous** during their campaigns, and [they] were allowed a regimen less rigid. They were the **only men in the world** for whom war brought a respite in the training for war.”

In the afternoon the soldiers would compete in athletic exercises in which a polemarch (high-ranking military commander) acted as judge and gave a prize to the winner, this usually being meat for dinner. At the end of the day the soldiers would sing hymns and poems by the seventh-century B.C. poet Tyrtaeus, whose work exalted Spartan patriotism.

At daybreak on the morning of the battle, sometimes within sight of the enemy, the Spartan hoplites would polish their bronze-coated

shields, prepare their weapons, and carefully arrange their long hair, as part of a symbolically charged ritual. When the battle was imminent, a young goat would be sacrificed to Artemis Agrotera, goddess of the hunt. The sages examined the entrails under the watchful eye of the king, who would only give the order to attack if he could count on divine approval.

When the trumpet sounded, all the Spartan hoplites would chant a paean or war song called the “Song of Castor,” named in honor of a venerated Spartan hero. The singing was accompanied by the flautists who played from their positions within the ranks. The Spartan phalanx, a tight military formation usually eight men deep, would then begin its advance, lances raised, in time with the music. One measure of the Spartan reputation for courage and nerve was the pace with which it proceeded: Its army would draw close to enemy lines more slowly than their rivals, always following the steady rhythm set by the flutes.

Rise to Combat

Sparta's battle methods were similar to those employed elsewhere in the Greek-speaking world. Hoplite warriors formed phalanxes, which advanced in lockstep. The front row presented a barrier of shields locked together, from which a long line of spears protruded.

Unity within the phalanx was crucial, and Spartan phalanxes had a fearsome reputation for holding their formation. During the Peloponnesian War, both the Spartan and Athenian sides made use of an additional class of soldier, the peltasts. This division of light infantry supplemented the heavily armed—and often unwieldy—hoplites. But the phalanx remained the Spartans' primary strength. Enemy commanders justly feared the colossal damage this disciplined mass could inflict.



ARMED AND PROTECTED

Packed into the phalanx, the hoplite used his shield to protect his left side, as seen on this sixth-century B.C. bronze figure. Berlin State Museums
BPK/SCALA, FLORENCE

OLD SOLDIER

Leaving neither monuments nor epics, Sparta's enduring legacy is a military ideal, embodied in Leonidas, hero of Thermopylae, commemorated here in a statue in the modern city of Sparta in Greece.

ZOHARU/N. SOROKIN/AGE FOTOSTOCK



When the first lines clashed, all the soldiers would push forward with their shields. Every hoplite pressed hard against the back of the man in front, while those in the first three or four lines hurled their lances.

The purpose of the phalanx was to smash the enemy line. Until a breach was made, there were few casualties within the tightly packed Spartan lines, and the soldiers behind could immediately cover the gaps left by any men who did fall. If a phalanx did ever fall apart, the soldiers were left vulnerable, tempted to abandon their shields in order to flee. For the Spartans, such an outcome was almost too shameful to contemplate. *Rhispaspia*, “the throwing away of one’s shield in battle,” effectively meant desertion.

Victory to Sparta

Despite their frightening reputation, the Spartan army was very restrained when it defeated a foe. According to Thucydides, the Spartans “fought long and stubbornly until the rout of their enemy, but that achieved, pursuing them only for a short time, and not far.”

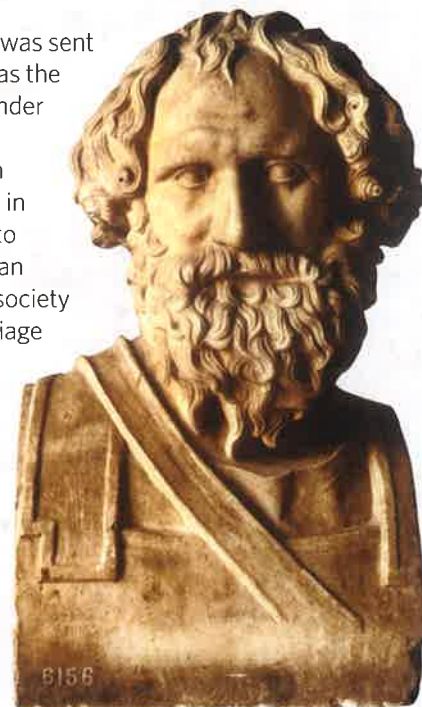
This practice was, at heart, pragmatic. Having secured the military objective, there was little sense in unnecessarily exposing Spartan forces to further danger, especially if the enemy had men mounted on horseback. Instead, the king would order the trumpeters to sound the retreat, and the army would start to retrieve the dead. When vanquished enemies wanted to retrieve the bodies of their fallen, they would send a representative to negotiate the handover with the king of Sparta.

The bodies of the fallen Spartans were carried on their own shields to a site near the battlefield for burial. They would be honored with a memorial engraved with an epitaph, such as that composed for the Spartans who died defending the Thermopylae pass against the Persians: “O Stranger, tell the Spartans that here we remain, obedient to their orders.”

In a time-honored Spartan tradition, other markers were often erected on the site of the battle. One of the most common was a tree trunk dressed in the helmet, armor, and weapons of the defeated. If the battle was particularly significant, a stone monument might be constructed,

GROWING UP SPARTAN

FROM AGE SEVEN, a Spartan boy was sent to the military academy known as the *agoge*, where he would be put under the supervision of a teacher and instructor, the *paidonomos*. From there, he would then be enlisted in the Spartan army. From age 20 to 29, he was part of the *hebontes*, an age group regarded by Spartan society as not yet fully adult, since marriage was only encouraged after age 30. In theory, all Spartan males were bound to military service until achieving the status of elder, or *geron*, at age 60, but many continued to serve on the battlefield. One of Sparta’s later kings, Archidamus III (right) fell in battle in 338 B.C. when he was thought to be around 62 years old.



such as the statue of the lion in honor of the Spartan leader Leonidas, which was placed on the battlefield of Thermopylae.

When the rituals were over, the army began their triumphal return to Sparta. For those who did not come back, their family’s grief at their loss was salved by the tributes of a society who exalted the fallen as heroes. The worst fate for any Spartan was cowardice on the battlefield.

Throughout history, mothers have wept in seeing their sons set out for war; Spartan women, however, developed another ritual, aimed at preventing the ignominy that would befall them if their son wavered in the line of duty. Plutarch records Spartan mothers handing the shield to their sons, with the exhortation: *Either with this or upon this*—either return with the shield, victorious; or return lying on it, dead. ■

A KING IN AN AGE OF DECLINE

The forces of King Archidamus III were defeated by those of Thebes at Leuctra in 371 B.C. From that point on, Sparta’s reputation of invincibility crumbled.

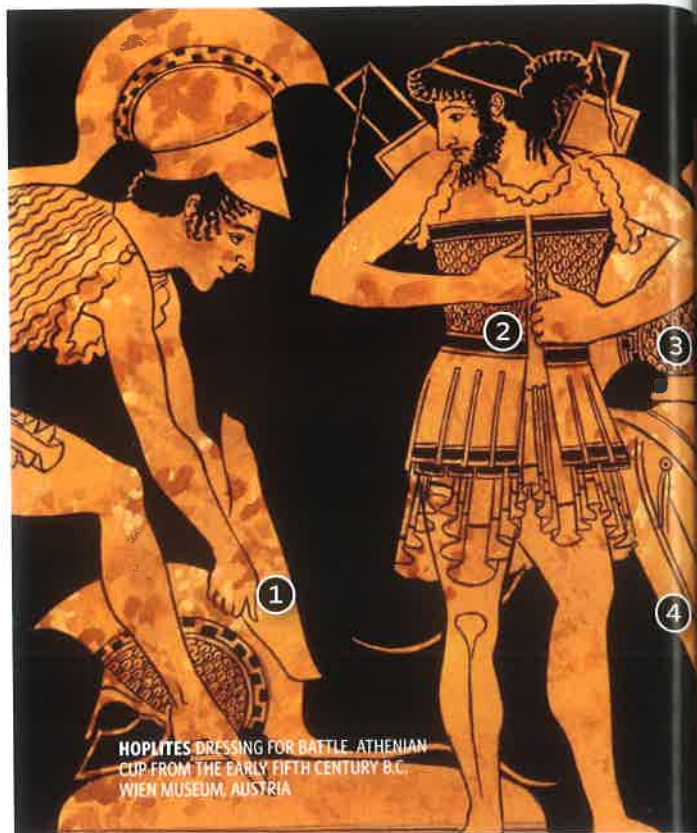
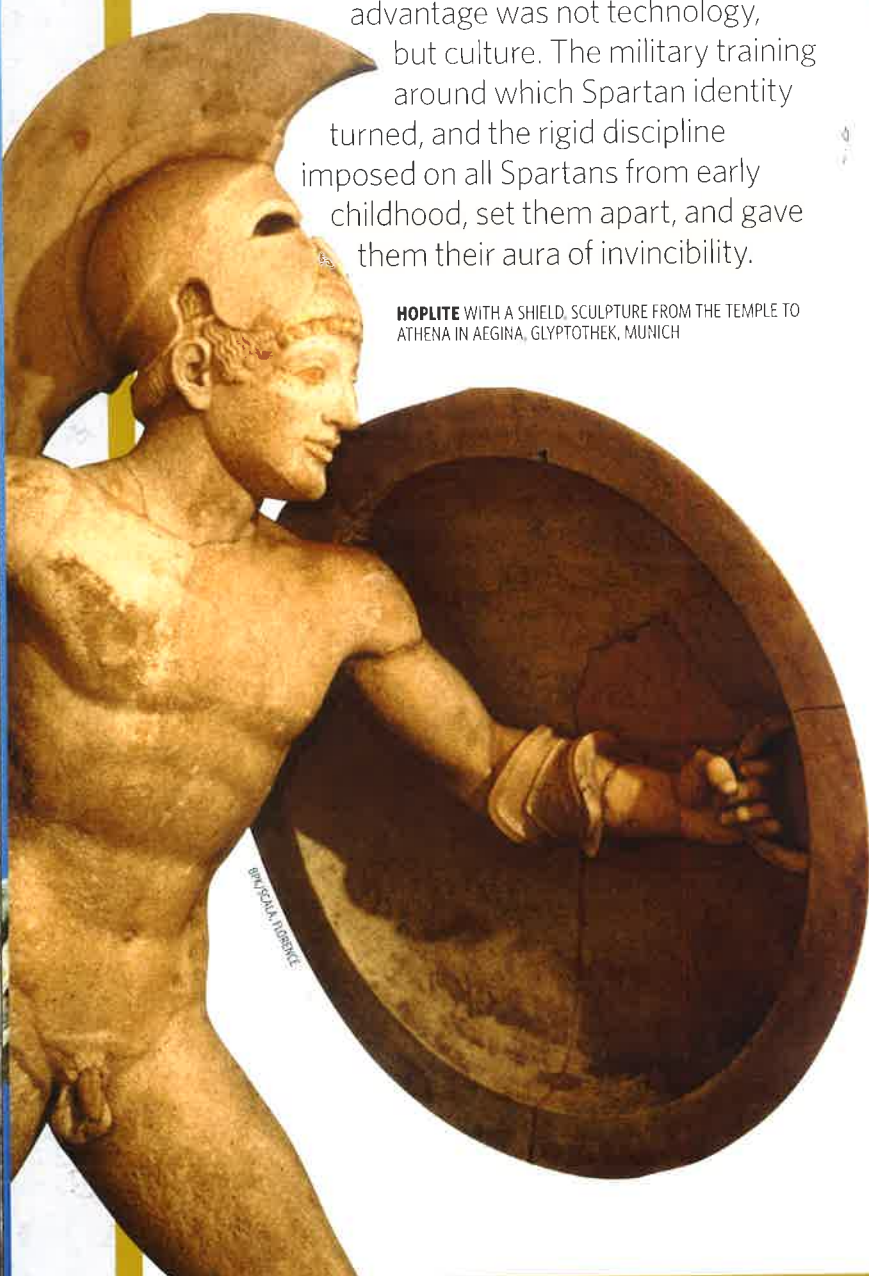
BPK/SCALA FLORENCE

A PROLIFIC WRITER ON SPARTA AND ATHENS, ANTONIO PENADÉS TEACHES GREEK HISTORY AT THE L'IBER MUSEUM IN VALENCIA, SPAIN.

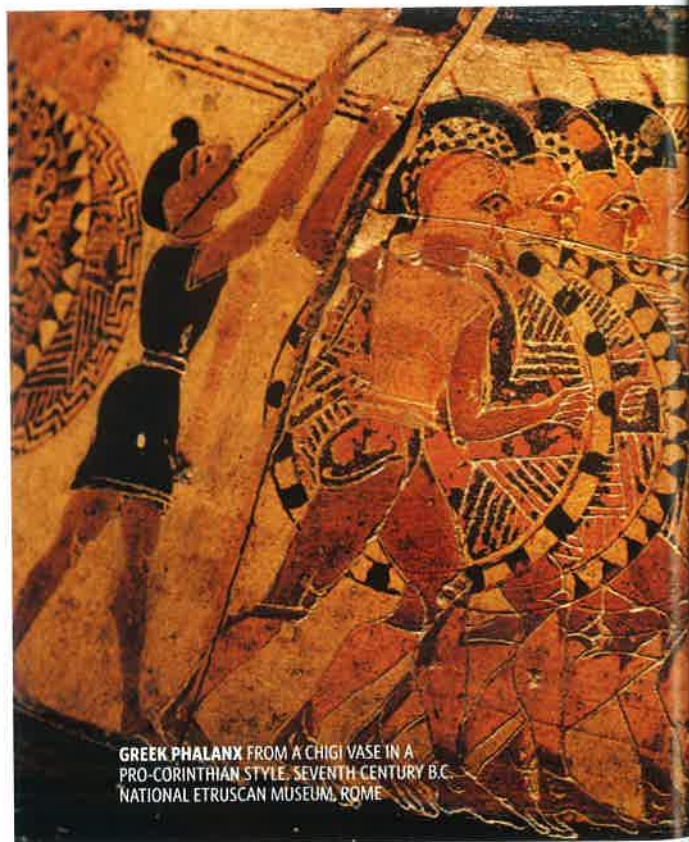
THE SPARTANS: READY FOR BATTLE

Given the shared linguistic and historical traits that marked the Hellenic world, it is not surprising that the arms and tactics employed by the Spartans were similar to those of other Greek forces. What gave the Spartans their military advantage was not technology, but culture. The military training around which Spartan identity turned, and the rigid discipline imposed on all Spartans from early childhood, set them apart, and gave them their aura of invincibility.

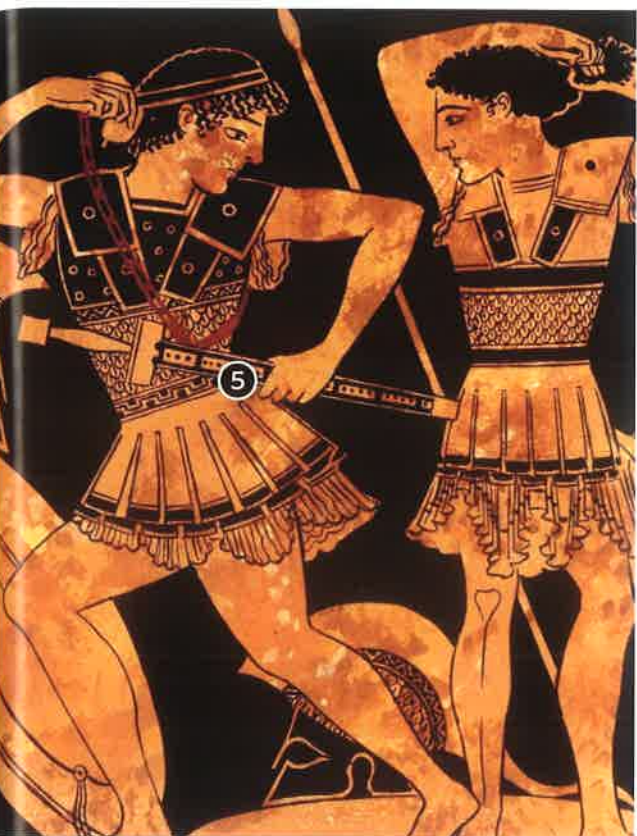
HOPLITE WITH A SHIELD, SCULPTURE FROM THE TEMPLE TO ATHENA IN AEGINA, GLYPTOTHEK, MUNICH



HOPLITES DRESSING FOR BATTLE, ATHENIAN CLIP FROM THE EARLY FIFTH CENTURY B.C. WIEN MUSEUM, AUSTRIA



GREEK PHALANX FROM A CHIGI VASE IN A PRO-CORINTHIAN STYLE, SEVENTH CENTURY B.C. NATIONAL ETRUSCAN MUSEUM, ROME



PETER CONNOLLY/ALBION

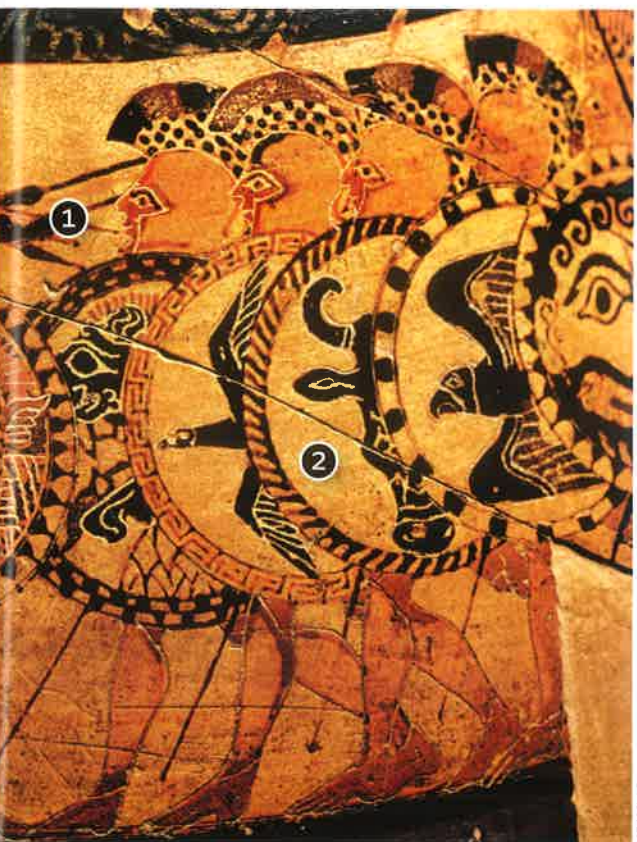
THE HOPLITE

DRESSED FOR BATTLE, Spartans and Athenians looked alike. This painted Athenian cup (left) shows the traits that would have been displayed by all such groups across the Greek-speaking world in the 400s b.c. In previous centuries Greek warriors had worn very thick, heavy armor, much of which, by the classical period, had been largely dispensed with. For those fighting on either side in the Peloponnesian War, the armor would have been made up of: ❶ greaves over the legs; ❷ a breastplate; and ❸ a helmet. By this period, the solid bronze armor plates had been replaced with pieces made from layers of linen stuck together, stiffened by immersion in vinegar and salt, and reinforced with layers of bronze. As well as for defense, ❹ the shield was used to batter and barge. Each soldier bore a long lance and ❺ a short iron sword. Despite the uniformity in hoplite dress, the Spartan warrior wore a distinctive scarlet cape to protect him from the cold, although it was always removed before combat.



BRIDGEMAN/ACI

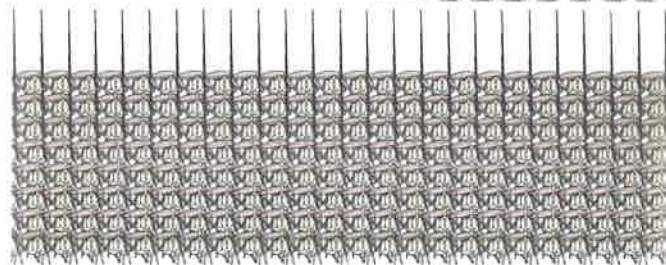
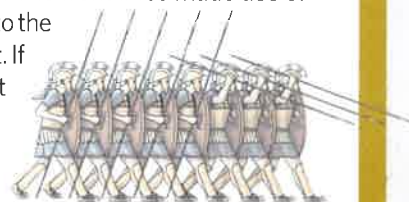
RIGHT: SPARTAN WEARING A CORINTHIAN HELMET AND WRAPPED IN A CAPE. WADSWORTH ATHENEUM MUSEUM OF ART, HARTFORD, CONNECTICUT



ART ARCHIVE

THE PHALANX

THE PHALANX was formed of compact columns of hoplites who maintained the formation at the exact width and depth required. Wielding a greater and more powerful block of fighters than the enemy was one of the keys to victory. The Spartan formation was typically a minimum of eight lines deep. Each soldier had his own ❶ spear, which he held in front of him, parallel to that of his fellow warriors. The aim for those in the front row was to injure the arms, throat, or eyes of their opponents. The front lines made use of their ❷ shields to thrust forward into the enemy line and attempt to breach it. If a breakthrough happened, it almost always spelled the beginning of the end for the Spartans' enemies.



DK IMAGES

ABOVE: RECONSTRUCTION OF THE BATTLE FORMATION OF THE GREEK EIGHT-LINE PHALANX CHARACTERISTIC OF THE FIFTH CENTURY B.C.