

# 3

## Afroeurasia's Moving Frontiers: Farmers, Herders, and Charioteers

**3000-1000 B.C.E.**



The Uluburun vessel rests on the bottom of the Mediterranean near the Turkish coast.

**I**n the summer of 1982 a young man diving for sea sponges off the southwestern coast of Turkey reported seeing oddly shaped metal objects on the Mediterranean floor. A team of underwater archaeologists shortly identified them as part of the wreckage of an ancient ship. Examining fragments of pottery and other datable artifacts, the scientists calculated that the vessel sank sometime around 1306 B.C.E. Excavation at the site 170 feet down yielded thousands of items—commercial goods, pieces of the wooden hull, even personal belongings of crew members.

Because of its rich cargo and great antiquity, the shipwreck of Uluburun, named after a nearby point on the Turkish coast, has become world famous. Scientists have not been able to determine exactly where the ship was going, though some have speculated that it was carrying official gifts from Southwest Asian rulers to the pharaoh of Egypt. Whatever its mission, the vessel's freight came

from many different lands. The metal objects the sponge diver spotted turned out to be copper ingots, probably from the island of Cyprus. The hull also contained cobalt blue glass disks manufactured in Mediterranean coastal towns as well as Greek pottery, swords, daggers, and silver jewelry. Some items came from far beyond the Mediterranean: amber from northern Europe, ebony logs from tropical Africa, and tin from as far east as Afghanistan.

Until the late third millennium B.C.E., dense agrarian societies with cities existed only in the Tigris-Euphrates, Nile, and Indus valleys, and, on a smaller scale, coastal Peru. Everywhere else, people lived in either farm villages or forager-hunter camps. The Uluburun discoveries, and the patterns of trade and urbanization they reveal, are just one illustration of how radically the human community changed in the following one thousand years. Farming and herding practices capable of supporting cities, social hierarchies, numerous occupational specializations, and centralized states spread widely in Afroeurasia (see Map 3.1). Many of the inventions and techniques that made accelerating population growth and social complexity possible diffused from the three ancient river valley civilizations to neighboring regions. But in all of the seven or eight places in the world where farming arose independently, men and women devised new ways of producing greater food surpluses, organizing larger numbers of people, and exchanging goods and ideas with strangers. The first part of this chapter explores the emergence in the second millennium B.C.E. of more complex agrarian societies in new regions of Afroeurasia: the Mediterranean basin, western Europe, Central Asia, and, finally, East Asia, where a fourth great river valley civilization arose in the Yellow and Yangzi River valleys.

In the second part of the chapter, we introduce the new and specialized way of life based on animal herding that emerged gradually in several parts of the Great Arid Zone, the wide zone of dry country that extends across Afroeurasia. Crop growing had been intertwined with domestic animal breeding since the beginnings of agriculture. But the practice of large-scale pastoralism, that is, the raising of hoofed animals as a society's *primary* source of food, developed between the fourth and second millennia B.C.E. This type of pastoralism emerged in connection with three fundamental innovations—the domestication of horses, horseback riding, and wheeled wagon transport. These inventions and discoveries allowed people to graze animals over immense stretches of grassland and brushland where crop raising was severely limited. As pastoral populations grew, they began to play an increasingly important role in world history, intruding, peacefully or not, into agrarian and urbanized regions; spreading their languages; and facilitating long-distance trade across Eurasia. Indeed, in the second millennium B.C.E., all the lands from the Mediterranean basin

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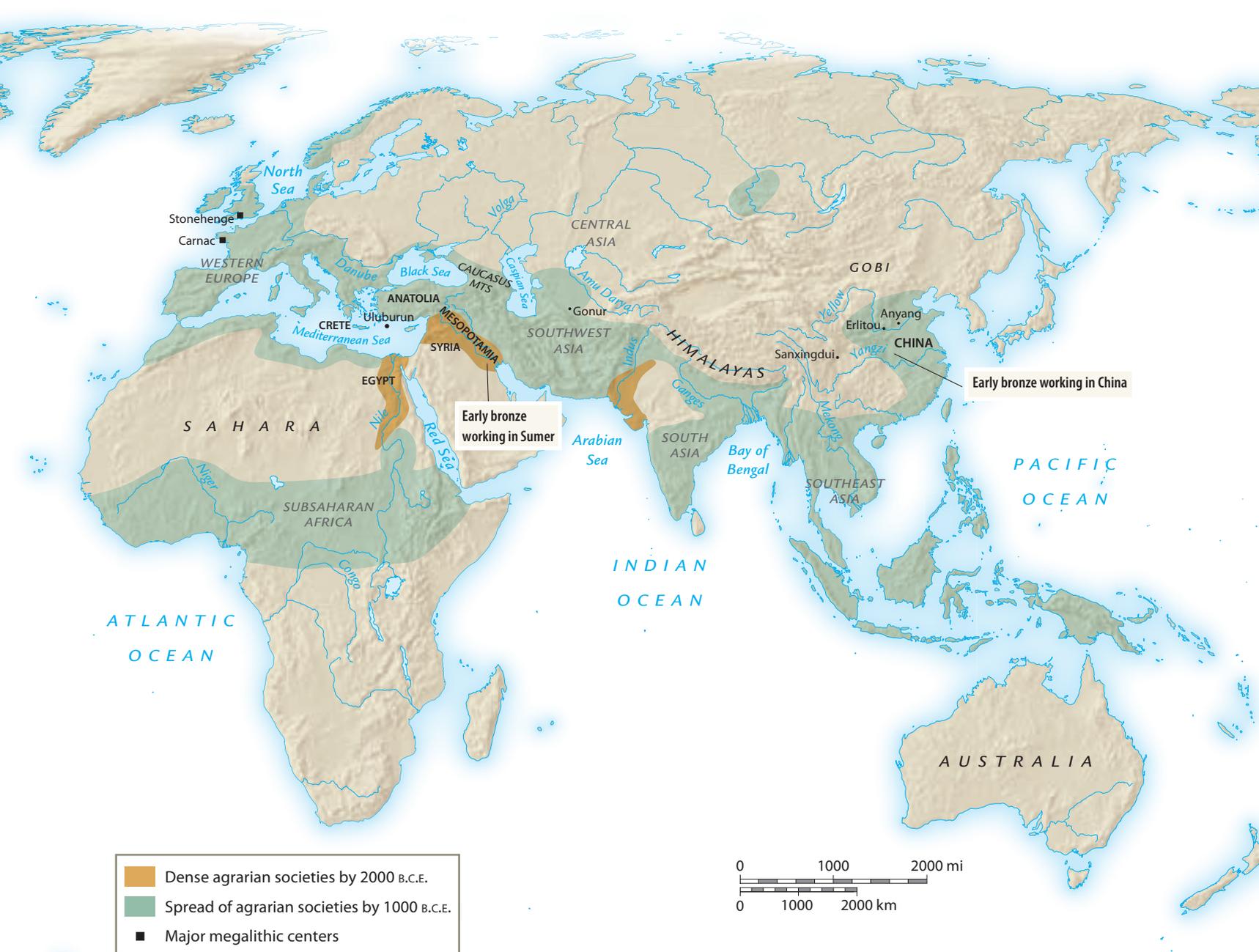
Herders and Farmers South of the  
Sahara Desert  
Austronesian Farmers in Southeast Asia



to China became for the first time incorporated into a single zone of commercial and cultural interchange.

In the third section of the chapter, we shift southward to Afroeurasia's tropical latitudes, where migrations and economic innovations also stimulated population growth and introduced new social and cultural ways, including new languages. In Africa south of the Sahara Desert and in tropical Southeast Asia, peoples with warm-climate crops and in some places cattle herds impinged on lands previously inhabited only by foragers. Sometime in those two thousand years, populations that produced food probably came to

# A Panoramic View



**MAP 3.1 Agrarian societies in Afroeurasia, 3000–2000 B.C.E.**

People in Southwest Asia and China probably invented bronze technology independently of each other. What geographical or climatic factors might help explain the *absence* of farming in extensive areas of Afroeurasia as of 1000 B.C.E.?

outnumber on a hemispheric scale populations that hunted and gathered it in the wild. In other words, human efforts to alter the face of the earth in increasingly ingenious ways

spread far beyond the core lands where food plants and animals were first domesticated to embrace Afroeurasian regions from equatorial rainforests to arid, windswept steppes.



## Across Afroeurasia: More Farmers, More Cities

**FOCUS** What aspects of life during the bronze age in Afroeurasia distinguish it from earlier eras?

Scholars have estimated that the population of the entire world rose from around 6 million in 8000 B.C.E., when the agrarian age was well under way, to about 120 million by 1000 B.C.E.<sup>1</sup> This change in global numbers represents a dramatic upswing in the rate of growth compared to the previous 200,000 years of human history. In the second millennium B.C.E. (1999–1000 B.C.E.), population grew at the fastest rate in Afroeurasia, where farming had the earliest start and continued to expand in every direction. In the Americas, numbers inched upward also, rising fastest in the regions of Mesoamerica and the Andes where crop growing took root. (We examine these developments in Chapter 4.) Nevertheless, the total population of the Americas may have reached no more than about 4.5 million by 1000 B.C.E., less than 4 percent of the numbers in Afroeurasia at that time.<sup>2</sup>

In the world generally, second millennium B.C.E. growth was mostly *extensive*, that is, it took place as small farming and herding communities multiplied across the landscape. By contrast, *intensive* growth took place in areas where technological innovation and surplus farm production allowed a given area of land to support more and more people, in some places in large cities. In this section, we explore four regions that experienced both extensive and intensive growth in the second millennium B.C.E.: the eastern Mediterranean (specifically the shores and islands of the Aegean Sea), western Europe, Central Asia, and East Asia. Keep in mind, however, that as of 1000 B.C.E., city dwellers still accounted for only a small percentage of global numbers.

### The Cavalcade of Inventions

Continuing technical innovation was essential to intensive growth in the three early river valley civilizations that we discussed in Chapter 2. Those societies contributed new ideas and tool kits out of all proportion to their share of global population, for example, the wheel, brick making, the closed pottery kiln, hydraulic irrigation devices, star charts, and complex writing and computation systems. In the second millennium B.C.E., much of this technology advanced into other parts of Afroeurasia, all the time undergoing numerous refinements

and elaborations. New tools and methods contributed immensely to farming productivity, urban manufacturing, and long-distance communication. Many new techniques, such as glass making, stronger ship design, and lighter wheeled vehicles, spread widely as well. Bronze metallurgy and the traction plow, both invented in the third millennium, were among the most socially significant novelties.

**Making bronze.** So many thousands of bronze tools, weapons, containers, chariot fittings, and ornaments have been found in Eurasian and northern African archaeological sites from the third and second millennia B.C.E. that scholars have conventionally labeled that period the **bronze age**. Sometime before 3000 B.C.E., metal-smiths discovered that if they mixed copper with small amounts of arsenic or tin, they could produce a metal alloy far superior to copper alone. These alloys were easier to cast and more durable, and they could hold an edge. Tin bronze gradually became the standard as metallurgists realized that arsenic chronically poisoned anyone who worked with it.

**bronze age** The era centered on the third and second millennia B.C.E. when bronze making was the most advanced metallurgical technology in the world.

In the Sumerian cities of Mesopotamia, artisans made ornamental and ritual objects of bronze, as well as axes, sickles, chisels, and spears. The technology probably radiated from there to the Nile and Indus valleys. Mesopotamia, however, was not the only center of diffusion. Wherever villagers built kilns to fire pottery, the idea of blending metal alloys at a high temperature in the same oven might plausibly have come to mind. In the third millennium B.C.E., innovators in northern China probably inaugurated bronze working independently. Both southeastern Europe and mainland Southeast Asia are possible candidates for independent innovation. Whatever the source, bronze metallurgy promoted farm productivity and more complex social and political organization across Eurasia and North Africa.

Because of the costs of mining, transporting, and forging, most people could not afford bronze objects. Copper ore occurs quite commonly in nature, but tin does not. The main sources of tin for Mesopotamian and Indus valley bronzesmiths may have been mines in Inner Eurasia. Merchants would therefore have shipped tin hundreds of miles, greatly elevating its cost at the point of final sale. Bronze tools, weapons, and craftwork therefore acquired great social value as symbols of high class



**A warrior's bronze helmet.** Made in southwestern Iran in the fourteenth century B.C.E., this bronze headgear displays three golden images: a male god in the center and females on either side of him. A bird spreads its wings over these deities. Why might a soldier, certainly one of high rank, want a helmet decorated with divine images?



status or political authority, especially for men. Expanding production of bronze swords, javelins, arrow points, helmets, and body armor made warfare, as well as the power of rulers, possible on a larger scale than ever before. The booming industry also generated a host of new occupations for laboring folk in mining, furnace making, smithing, boat building, and the master crafts.

**Plowing the land.** A second major innovation of the third millennium B.C.E. was the traction plow, a tilling device pulled by oxen, horses, or mules. To prepare ground for planting, a farmer had to break the soil into particles, aerate it, and kill weeds. Women and men could do this with sticks and hoes, but an animal-powered plow could do it faster with less human energy expended and more arable ground covered. After about 3000 B.C.E., the Sumerians used simple ox-drawn plows to till the light, easily worked soils of the Tigris-Euphrates valley. In the subsequent 1,500 years, farmers gradually applied the new technology to rain-dependent land where soils were sometimes heavier and deeper and therefore resistant to handheld tools.

Farmers who hitched an animal or two to a wooden plow, perhaps one with a bronze tip, often found they could increase grain harvests significantly. This encouraged tillers to drain marshes or clear forests to open more fields and build more villages. Along the belt of territory from India to the Mediterranean, this innovation supported population growth. In some regions, however, plows had little appeal. In the Yellow River valley in northern China, for example, villagers found that their hoes and digging sticks worked well to till the fine, easily aerated soil known as loess. In short, the plow was a useful farm tool only in certain ecological conditions.

## Complex Society and Commerce in the Mediterranean Basin

Schoolroom geography tells us that the Mediterranean Sea divides the continents of Africa, Asia, and Europe from one another. But it is also useful to think of the Mediterranean as a sea “inside” the supercontinent of Afroeurasia, a passage-way that links peoples all around its rim. Numerous islands and peninsulas within the Mediterranean divide it into several smaller seas that make it relatively easy to navigate. The Aegean Sea in the eastern Mediterranean was especially appealing to ancient mariners. In fact, recent discovery of stone tools on the Aegean island of Crete indicate that foragers crossed water to get there at least 130,000 years ago and perhaps earlier.

After about 3000 B.C.E., farm communities and maritime trade centers multiplied around the eastern Mediterranean rim, notably in the Nile delta and along the seaboard known historically as the Levant, or Levantine coast, today Israel, the Palestinian territories, Lebanon, and western Syria. The same thing happened on the shores and numerous islands of the Aegean Sea. Because that region is mostly mountainous,

farmers had to plant on slopes or small plains. By adopting animal-powered plows, however, they produced bountiful wheat harvests in good years. They also cultivated olive trees and wine grapes, two plants that thrive where terrain is uneven and summers hot and brilliant. Nutritious and calorie rich, olive oil had several uses—for cooking, heating, and lighting, and as an ingredient of fine perfumes. Wine consumption cut down on illnesses from waterborne microorganisms, and no doubt made social life more agreeable. Both commodities, preserved in large earthenware jars and transported readily by ship, became basic staples of Mediterranean trade. As Aegean farmers accumulated surpluses of wheat, oil, and wine (also sheep and goats), inequalities of wealth and social class inevitably appeared. Some individuals were buried with bronze weaponry and other precious grave goods, indicating their special social or political status. Towns began to appear where chiefs or big landowners taxed the local farmers to pay for forts, palatial houses, and artisans’ workshops. One of these centers was Troy, a complex of fortifications and dwellings whose third millennium rulers possessed dazzling wealth in bronze, silver, gold, and gemstones.

**Minoan society on Crete.** A remarkable cluster of small cities also emerged on Crete, the mountainous, 150-mile-long island that marks the southern extremity of the Aegean Sea. Called Minoans after a legendary king named Minos, the islanders started building these centers around 2000 B.C.E. In some of them the main structure was a complex of public or private rooms, spacious courtyards, and storehouses. From these little palaces, an affluent class of aristocrats supervised the village population, which raised olives, grapes, wheat, and sheep. Knossos, the largest center, may have had a second millennium B.C.E. population of about twenty thousand.

Crete’s prosperous society may have arisen where it did partly because the island was only a short sailing distance from the culturally weightier societies of the Nile and Southwest Asia. Aspects of Minoan architecture, wall decoration, and religion appear to have originated in Egypt, including adoption of the bull god as a central figure in the Cretan belief system. Cuneiform archives from Mari on the Euphrates River nine hundred miles to the east reveal that that city had contact with Crete. The Minoans also adopted a writing system, perhaps independently but more likely borrowed from one of its mainland neighbors. It is called Linear A, and the governing elite used it to keep track of goods that flowed in and out of the palaces. This script has not been deciphered, nor is anything known of Minoan speech. However, paintings and decorations on the walls of buildings suggest that the population, or at least the aristocratic class, had a remarkably benign view of social life and nature. The ruins have yielded almost no evidence of inter-city warfare, nor any gargantuan statues of glowering god-kings. Minoan art abounds in images of men and women enjoying games and other public activities side by side,





**A dangerous Minoan sport.** These three figures appear to lack no confidence in challenging this rambunctious bull, a sacred animal in Minoan religion. This reconstructed fresco from the palace of Knossos shows Egyptian influence in the way the faces are drawn and in the rendering of the two female figures on the left and right with lighter skin than the male figure performing the somersault.

suggesting that women had more equality and influence in their communities than was true in the early river valley civilizations. Some historians challenge this interpretation, however, and the physical remains of Minoan culture are too limited to permit firm conclusions.

**The expanding trade zone.** From the late third millennium B.C.E. onward, towns flourished in several localities around the eastern Mediterranean partly because of sea trade, which was typically cheaper and faster than overland hauls using donkeys and ox-drawn wagons. In effect, this trade represented a widening of the ancient route network that connected the Indus valley, Southwest Asia, and Egypt. The palace centers of Crete benefited from their position as gateways to the Aegean. Minoan traders launched fleets of ships, founded commercial colonies on neighboring islands, and exported Crete's high-grade olive oil and woolen cloth far afield. On the Levantine coast, Byblos and Ugarit flourished as commercial ports. Their merchants profited as intermediaries of trade between greater Southwest Asia and the Mediterranean basin. They sold timber from the hills of Lebanon to wood-starved Mesopotamia and Egypt, and they manufactured bronze goods, cosmetics, and textiles, notably cloths of bright purple.

The Mediterranean trade rarely required heroic voyages far from land. Ships like the sunken wreck found near Uluburun typically tramped from island to island and bay

to bay, the crews bartering as they went. When it went down, the Uluburun ship might have been following a counterclockwise circuit of eastern Mediterranean ports. Some daring merchants even set sail for the western horizon, probing their way to Italy or Sicily, where they introduced city wares to rustic farmers. Near the end of the second millennium B.C.E., agrarian societies of the far west, that is, the regions that are today Algeria, Morocco, Spain, and Portugal, joined actively in the trans-Mediterranean commercial system.

The material demands of ruling groups stimulated much trade. To the rising aristocracies of the Aegean region, for example, silver jewelry, fine linens, and bronze ornamental daggers were not simply comforts and amusements. They were also emblems of power and status. They spoke a symbolic language of lavish display that helped validate elite class dominance over humble cultivators. Aristocratic landowners, however, could afford luxury goods only if they collected taxes and **tribute** from ordinary people, persistently rousing them to produce more food, fabric, and handicrafts for export.

**tribute** Wealth in money or material goods paid by one group to another, often a conquered group to its conquerors, as an obligation of submission or allegiance.

The eastern Mediterranean economy therefore continued to grow, even though driven mainly by the power interests of a small minority of the population.



## Developments in Western Europe

In the third and second millennia B.C.E., Europe's climate was probably warmer and wetter than it is now. Dense hardwood forests and dismal marshes covered much of the region, presenting stern challenges to early farmers. Nonetheless, villages multiplied in parts of Europe as cultivators adopted traction plowing and cleared forests for pasture or cropping. When families thought the neighborhood was getting too crowded, they plodded off with their sheep and oxen to found new settlements in the distant reaches of northern and western Europe. The region therefore underwent social and economic changes similar to those that occurred in the Aegean. An upper class of chiefs and property holders appeared, bronze weaponry and handicrafts were traded, and larger population centers sprouted up. These nascent towns usually had walls, ramparts, or ditches, suggesting the need to protect stores of trade goods or artisan workshops. Woodland Europeans also linked themselves into the growing Mediterranean trade net. For example, merchants traded copper mined in central Europe both northward to Scandinavia and southward to the Aegean. The busiest avenue of long-distance trade was probably the Danube River valley, which flowed from the interior of Europe to the Black Sea.

Most of what we know of life in woodland Europe in the third and second millennia B.C.E. comes from scattered finds of pottery, metal ware, earthworks, and other artifacts. The most spectacular material remains are **megaliths**, structures built of massive stone slabs. Concentrated along Europe's Atlantic rim, these constructions took the form of either tombs enclosing multiple burials or circles of huge standing stones that clearly had some ceremonial purpose. Megalithic building began in Europe in the fourth millennium B.C.E. and mostly ended by the second. Stonehenge in southern Britain is the most famous of the megalithic stone circles. Completed between 2400 and 2200 B.C.E., its stones were set up to be astronomical clocks, the slabs arranged to serve as sight lines for charting sun, moon, and stars. We know little about the people who frequented those centers. The erecting of a complex like Stonehenge, however, required so much labor, skill, and organization that an elite class of some sort, perhaps religious specialists, likely directed the work. The recent discovery of the remains of sick and injured individuals buried near Stonehenge in the third millennium B.C.E. suggests that people came to the site in search of supernatural healing.

**megalith** A large stone sometimes roughly carved and used to build a structure often having religious significance.



**Megaliths in France.** This famous megalithic site at Carnac on Brittany's Atlantic coast consists of 3,000 standing stones arranged in multiple parallel rows. Dated 4500–2000 B.C.E., Carnac certainly had ritual purpose, but we know nothing of ceremonies performed there. What might we infer about the organization of society from the erection of these stones?



Megalithic sites from Spain to the Orkney Islands north of Britain share enough similarities in technique and design to suggest lively exchange of goods and knowledge all along Europe's Atlantic coast and back and forth across the English Channel. In any case, such interchange did not lead quickly to high social complexity. Thick forests, swamps, and heavy clay soils continued to put limits on productivity and population in northern Europe until well into the first millennium C.E.

## The Oxus Civilization in Central Asia

From ancient times to the nineteenth century, the sector of the Great Arid Zone that runs between the Caspian Sea on the west and the snow-capped Himalaya ranges on the east was one of the most important commercial and cultural hinges of world history. Central Asia is the term geographers have given to this region of deserts and semiarid highlands interrupted by green river valleys. It corresponds roughly to the territories of four states that used to be part of the Soviet Union (Kazakhstan, Uzbekistan, Tajikistan, and Turkmenistan), plus northern areas of Iran and Afghanistan. Topographically, Central Asia was a natural corridor of relatively unobstructed communication between Inner Eurasia and the densely populated agrarian lands of the region stretching from India to the Mediterranean.

About 2100 B.C.E., people began to build walled cities in Central Asian river valleys, notably along the Amu Darya

River (known to Greek geographers as the Oxus River). Until the 1990s, however, hardly anyone knew about this urban society except for Soviet archaeologists, who published their discoveries only in Russian. Since then, the physical contours and material culture of this "lost civilization" have become better known, and teams of scientists from several countries continue to advance our knowledge. The physical remains of this complex society, known formally as the Bactria-Margiana Archaeological Complex after two ancient regional names, suggest that newcomers, perhaps migrants from drought-stricken hill towns farther south, planned and built several cities quite quickly.

The residents of the Oxus cities, including the carefully excavated site known as Gonur in modern Turkmenistan, erected thick brick walls and high corner towers that commanded the surrounding countryside. In the larger towns, the ruling class, about which we know little, commanded construction of royal bastions and palaces that included temples. At Gonur, canals from a river fed water into the city. In the valley, farmers planted wheat and barley and raised sheep, goats, zebu cattle, and Bactrian (two-humped) camels. The material record of architecture, pottery, clay seals, ivory combs, and bronze work shows clearly that the cities shared a common cultural style and therefore probably intense commercial and social interchange, perhaps including marriage alliances among elite families. Geometric designs on clay seals suggest signs that carried meaning, but there is no evidence of an indigenous writing system.

### Uncovering the Oxus civilization.

Members of an archaeological team dig at Anau, one of several ancient towns in what is now Turkmenistan in Central Asia. In recent decades archaeologists have uncovered a treasury of information about early urbanization along trade routes that connected Persia with Inner Eurasia and China beyond. Gonur, a city east of Anau, had well-designed streets, sewers, residential neighborhoods, and fortifications. It flourished, however, for only about 300 years.



Oxus artisans and merchants almost certainly initiated Central Asia's historic role as commercial turnstile between Inner Eurasia and the agrarian societies to the south and west. Pot shards, soapstone jars, and other objects of Oxus origin have turned up across Iran, in ports along the Persian Gulf, and in the Indus valley. Oxus artisans made beads of shells that came from both the Indian Ocean and the Mediterranean Sea and also imported gemstones, silver, and gold.

Oxus city building lasted only a few centuries. After 1800 B.C.E. the major towns contracted in size and within two hundred years were abandoned. The cause of decline and collapse is unknown. Deteriorating ecological conditions or intercity warfare may be explanations. The decline also coincides with the arrival of horse-riding, chariot-driving peoples from the steppes to the north, though we do not know whether they came as city-wrecking invaders or peaceful migrants.

## Complex Society in East Asia

At the start of the second millennium B.C.E., farming and village life were well established across much of East and Southeast Asia, though foraging communities were still common where food supplies were abundant. In Japan, for example, communities had such plentiful supplies of tubers, nuts, and seafood that they rejected intensive grain farming long after they knew about it, until about 1000 B.C.E. By contrast, complex societies evolved rapidly in the part of northern China extending from the Yellow River valley southward to the Yangzi River, where, as we saw in Chapter 2, people had been cultivating rice and millet since about 7000 B.C.E.

**Early urban centers in China.** About 2600 B.C.E., people in several localities began building settlements surrounded by walls constructed of earth rammed into wooden forms. Material evidence of walls, as well as graves in which special individuals were buried along with precious objects, indicate that elite groups were emerging in northern China to mobilize and direct the work of others, just as had happened in the Tigris-Euphrates, Indus, and Nile valleys some centuries earlier. Privileged families of warriors and ritual leaders probably appropriated the best land and largest stores of grain and began to collect tribute and labor services from everyone else. Beautifully crafted bronze goblets, cauldrons, animal figures, daggers, and spear points, which first appeared in East Asia about 2000 B.C.E., were closely associated with the needs of chiefs, who took charge of both religious rituals at home and hostile raids on neighbors.

Archaeological evidence shows that, in the Yellow-Yangzi region, fundamental characteristics

of complex society appeared not in just one place but in several starting in the late third millennium B.C.E., significantly later than in the three great river valleys to the west. One important site is at Erlitou (er-lee-toh), a village on the plain just south of where the middle Yellow River flows today. Flourishing between about 1900 and 1500 B.C.E., the Erlitou site reveals evidence of a complex of compounds that archaeologists identify as a palace and therefore perhaps the capital of an early Chinese state. It is not clear whether Erlitou was a bustling town or mainly a ritual and political center, but it had large platforms of pounded earth, bronze foundries, paved roads, and richly equipped graves.

About four hundred miles to the southwest of Erlitou in China's Sichuan (seh-chwan) province, archaeological work since 1986 has uncovered a walled town known as Sanxingdui (sahn-shing-dway). It also flourished in the second millennium B.C.E., but its cultural style was dramatically different from that of Erlitou. Two excavated pits containing sacrificed animals also contained a treasure of bronze, gold, stone, and jade objects, including fifty-seven bronze heads, some with gold masks. Styles of pottery and other objects make clear that large centers in the region projected their cultural and probably political influences outward to smaller settlements. They also developed contacts with one another through trade, gift exchange among rulers, migration, or diffusion of techniques and styles from one center to the next. For example, rulers or merchants organized transport of copper, tin, gold, and jade to workshops sometimes hundreds of miles from where these materials were extracted. In short, the Yellow and Yangzi valleys comprised a single zone of human interconnection well before the first large state arose in East Asia.

**The Shang state.** Historians identify that first large state with the Shang, a dynasty of kings that exercised power for more than half a millennium, from about 1750 to 1045 B.C.E. Shang rulers supported by an elite warrior class likely started out as one local military state among many in northern China. Over centuries, these kings asserted growing power over their neighbors. Anyang, the largest Shang ritual and royal tomb center so far discovered, sprawled for miles across the Huan River, a tributary of the lower Yellow. The Shang state encompassed only a small part of the territory of modern China, but physical remains, ancient inscriptions, and



**Bronze statue from Sanxingdui.** Among numerous bronze heads and masks, archaeologists discovered this imposing six-foot-tall figure in a burial pit dating to 1300–1100 B.C.E. The figure has enormous hands that probably once gripped an object, perhaps an ivory tusk. What details of dress and adornment do you notice? Do they suggest anything about the figure's status in society?



chronicles written in later centuries qualify it as the earliest East Asian empire. At the height of their power between the thirteenth and eleventh centuries B.C.E., Shang kings resident in Anyang occupied mansions atop great platforms of compacted earth. The monarch and his officers likely wielded direct authority over a core area, dominated allied monarchs and chiefs in a wider circle, and conducted periodic war campaigns in even more distant regions. The kings organized the state along military lines and required villagers and war prisoners to build tombs, palaces, and perhaps several royal capitals. The Shang therefore initiated a pattern of centralized imperial government that characterized Chinese history down to the early twentieth century.

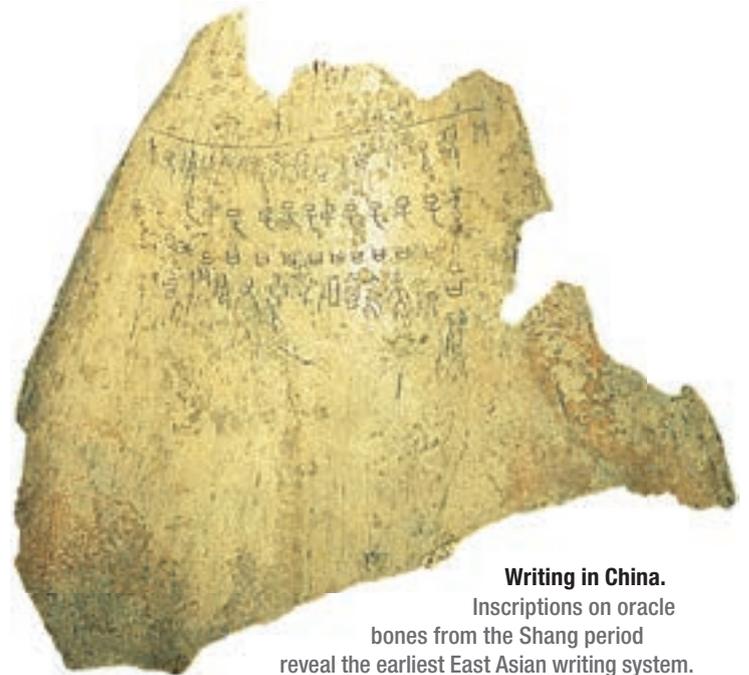
The kings became patrons of a bronze-centered artistic culture whose influence radiated out across much of northern China. In contrast to Mesopotamia or Egypt, they did not erect giant monuments, so far as we know, but the walls around major towns sheltered extraordinary artisanal skill, notably master work in bronze. At Anyang, archaeologists have unearthed royal tombs containing costly objects, notably from the burial site of Lady Hao, who was likely one of the wives of the Emperor Wu Ding (reigned 1250–1192 B.C.E.) and a military commander in her own right. Her tomb, the only elite Shang grave at Anyang never to have been looted, has yielded hundreds of bronze vessels, bells, and weapons, and numerous items of jade, ivory, bone, and stone. The presence of sixteen corpses in the tomb adds to the ample evidence that the state practiced human sacrifice on a significant scale. According to Shang belief, a deceased king would reside in his tomb and therefore needed to take along with him a select group of nobles, slaves, attendants, and mistresses, as well as horses and other animals. Sacrificial victims usually included even larger numbers of war prisoners, perhaps hundreds of them.

Beginning no later than the reign of Wu Ding, Shang scribes wrote inscriptions on thousands of animal bone fragments known as “oracle bones.” The East Asian practice of venerating ancestors originated in neolithic times, as men and women offered grave goods and sacrifices to the spirits of the dead in hopes of receiving protection and favor in return. Shang kings who exercised both political and priestly power ritually communicated with the ancestors of their own royal lineage. These spirits were thought to have sufficient influence to pass on the king’s appeals for rain, good harvests, military victories, the birth of healthy sons, and other blessings to Di, the supreme supernatural entity, who might have been associated with the dynasty’s ancestor-founder. Monarchs typically made public decisions only after performing ceremonies to reveal the gods’ intentions and fore-

**shaman** A man or woman who the community believes has access to supernatural forces or beings and who can appeal to the spirit world to discern the future, bring good fortune, or perform physical healing.

tell the future. In one type of divination the king, assisted by **shamans**, asked questions of either ancestors or nature spirits by heating a tortoise shell or cow’s shoulder blade bone

	Turtle	Horse
Oracle-bone script of the Shang dynasty (16th century–11th century B.C.E.)		
Zhou dynasty script (11th century–3rd century B.C.E.)		
Qin dynasty script (221–207 B.C.E.)		
Han dynasty script (207 B.C.E.–220 C.E.)		
Modern script (3rd century C.E.–the present)		
Contemporary script, People’s Republic of China (1950–the present)		



**Writing in China.** Inscriptions on oracle bones from the Shang period reveal the earliest East Asian writing system. How do the two words represented on the chart show evolution away from pictographic forms?



in a particular way until it cracked. Then the diviners “read” the cracks to discover the response.

These oracle bones are the earliest written “documents” of Chinese history. After diviners analyzed the cracks in the heated bone or shell, scribes wrote questions, interpretations, or commentaries on them using signs that conveyed a combination of meanings and sounds. These characters, as modern scholars figured out early in the twentieth century, were the forerunners of modern Chinese script. By deciphering many oracle-bone inscriptions, linguists have learned not only the names of Shang rulers and towns but also details of such matters as religious practice, warfare, farming lore, and climate.

The northern Chinese very likely invented their own writing system independently of any influence from the civilizations to the west. But this raises a larger question: What role did communication between northern China and westerly lands in the third and second millennia B.C.E. play in the rise of complex society in East Asia? East-west contacts would most likely have occurred by way of Inner Eurasia. Trade goods, technical innovations, and the seeds of wheat or food plants may well have been relayed from one community to another. On the other hand, East Asian farmers probably domesticated pigs, chickens, and two types of millet entirely on their own. Bronze metallurgy very likely arose there independently. One advance of undoubted Chinese origin was the technology of fabricating silk from the cocoons of caterpillars that ate white mulberry leaves. Silk threads discovered on an Egyptian mummy suggest that merchants passed Chinese silk fabric as far west as the Nile as early as 1000 B.C.E.

Within East Asia, economic and cultural interchange advanced rapidly in the second millennium B.C.E. Shang political influence in the Yangzi valley was sporadic, but that region’s agrarian population rose steadily owing to cultivation of tropical rice, a cereal probably first domesticated somewhere in southern China. Wheat and millet were well suited to the cool, dry north, rice to the warm, wet south. Already in Shang times traders carried sacks of these cereals between the two regions, laying the foundations for the future economic integration of north and south. Bronzes and other luxury goods of distinctive Shang design have been found all over northern China and in the Yangzi valley. The Shang state was therefore the center of an expanding zone of interaction that in time produced a characteristically Chinese style of culture.

## Pastoral Peoples Ride into History

**FOCUS** Why did pastoral nomadism as a specialized way of life permit accelerating population growth in the steppes of Inner Eurasia between the fourth and second millennia B.C.E.?

Even before complex agrarian society first appeared in Mesopotamia and Egypt, a different way of life began to take form in some parts of the Great Arid Zone where rainfall was too low to sustain farming far from irrigation sources but high enough to support large herds of sheep, goats, cattle, camels, and horses. **Pastoral nomadism**, a highly specialized way of life in which communities subsisted primarily if not exclusively on animal products, allowed humans to reproduce in far greater numbers in arid lands than foraging bands could possibly have sustained (see Table 3.1). Starting around 2000 B.C.E., pastoral peoples of Inner Eurasia precipitated a series of complex migratory and military movements that profoundly altered cultural and political maps, both within the steppe region and eventually in the agrarian lands to the south, west, and east.

**pastoral nomadism** A type of economic and social organization in which livestock raising is the principal means of subsistence. Pastoral nomadic communities typically migrate seasonally in search of pasture and water.

## Horses, Riders, and Wagons

Many scholars agree that an important movement of pastoral peoples from Inner Eurasia to more densely populated agrarian regions originated between the late fourth and third millennia B.C.E. in the grasslands north of the Black and Caspian Seas. Known historically as the Pontic-Caspian steppe (Pontic relates to the Greek name for the Black Sea), this region of temperate to semiarid climate encompasses a large part of what are today southern Russia, Ukraine, and Kazakhstan. Sometime after about 5200 B.C.E., sheep and cattle herding people, probably originating in Southeastern Europe, began to drift around the northwestern curve of the Black Sea and into the Pontic-Caspian grasslands. This long-term event occurred just at the high point of a climatic warming cycle in the region, which encouraged grassy pasture to expand and flourish, supporting the pastoral way of life. Animal herders, who usually also grew some crops, gradually displaced hunting and foraging communities, which either adapted to the new economy or retreated into colder forests to the north. From the fifth millennium B.C.E., pastoral communities gradually populated the Pontic-Caspian region and began spreading farther eastward across the plains in the direction of China.

Three developments particularly favored human adaptation to the steppes. The first was domestication of wild horses, which probably first occurred in the Pontic-Caspian lands around 4800 B.C.E. These animals may have looked something like the small, shaggy Przewalski’s horse, the only wild breed that survives in Inner Eurasia today. Horses turned out to be good candidates for an interdependent relationship with humans. Mares, that is, female horses, instinctively bunch together and form a pecking order of leaders and followers, something cats, we can be sure, will never do. A dominant mare, along with a spirited, aggressive stallion,



always led the herd, but humans learned that they could also guide and manage docile mares. They also figured out at some point how to identify relatively meek and pliable stallions, then bred mares and stallions that had similarly submissive characteristics. Domesticated horses could outrun most predators, and they acquired heavy coats as protection against frigid steppe winters. Among domesticates, horses also had instincts for finding winter pasture. Cattle and sheep use their noses to move snow out of the way to uncover grass but only if the snow yields easily. Horses, by contrast, use their hooves to plow away crusty snow and to break ice to get at water.<sup>3</sup>

Steppe dwellers probably first exploited horses as meat. In time, they discovered the value of what one scholar of the neolithic era famously labeled “secondary products.”<sup>4</sup> These included mare’s milk, blood, hair, hides, and bone, as well as horse power for transport and plowing. This “secondary products revolution” allowed communities to depend more on horses and other domesticated animals than on crops if ecological conditions required it.<sup>5</sup> Between the fifth and second millennia B.C.E., domesticated horses multiplied on the Pontic-Caspian steppes by the millions, and in this environment human societies built their mobile way of life around their animals.

A second fundamental ingredient of the pastoral nomadic way of life was mastery of riding. Probably somewhere in the Pontic-Caspian grasslands as early as 4200 B.C.E., a courageous herder climbed on the back of a horse and managed to stay there. Early riders had no saddles or stirrups but learned to control their mounts using their legs and either a nose ring or a bit and reins. From horseback, a single rider could manage a large number of docile domesticated animals. By one estimate, a shepherd on foot, plus a reliable dog, could handle about two hundred sheep. A mounted herder and a dog could control five hundred.<sup>6</sup> Pastoralists on horses could also accumulate larger herds because they could drive animals farther away from water sources and camps and return much faster than if they had to walk. Eventually, horseback riding spread beyond the steppes, for example, across Iran to Mesopotamia, where the earliest images of people sitting on horses appear in the later third millennium B.C.E.

A third tool of the steppe economy was the two- or four-wheeled cart pulled by cattle, oxen, horses, mules, or, eventually, camels. Wagon technology probably reached the Pontic-Caspian steppes sometime between 3500 and 3300 B.C.E., spreading there from Southwest Asia by way of either southeastern Europe or the Caucasus Mountains. Lumbering along on solid wooden wheels, wagons extended the potential range of herders even farther than horse riding allowed. Now, pastoral groups could remain more or less



**An uneasy rider.** This ceramic mold from Mesopotamia offers evidence of the spread of horseback riding from Inner Eurasia to Southwest Asia, probably through Persia, by the early second millennium B.C.E. The figure on this mold is no horse soldier. He is sitting too far back on the horse’s rump to control the animal very well. What technical improvements can you think of that would have contributed to the later development of cavalry warfare?

permanently on the move, transporting food and tools, as well as families with nursing infants, small children, and elderly folk. Wagons equipped with frames and hide or felt covers served as reasonably comfortable mobile homes. Pastoral nomads sometimes left members of the group in camps to grow small amounts of grain; they also ate wild seeds, greens, and a version of the honey-based fermented beverage known as mead. But their main diet remained meat and dairy products.

## Pastoral Nomadic Society

Ancient communities of pastoral nomads were almost certainly organized on foundations of **kinship**, the idea that people belonged together, not because they occupied a fixed territory or obeyed a particular ruler, but because they shared descent from a common ancestor. Strangers might also be assimilated into a group by customs of fictional kinship: over time the group deliberately “forgot” that the erstwhile newcomers had not always been part of the extended family. A herding community likely constituted a lineage group, a few generations of people who regarded themselves as blood relatives.

**kinship** The quality or state of being related by shared genealogical descent or by marriage. Kinship may also be claimed among a group of people for social or cultural reasons even though no biological relationship exists.

Evidence from graves shows that some individuals and lineages became richer than others and, therefore, achieved



**TABLE 3.1** Types of Societies Compared

Feature Category	Pastoral Nomadic Societies	Complex Agrarian and Urban Societies
<b>Economy</b>	Production primarily of domesticated animals, sometimes at surplus levels; secondarily of crops	Production primarily of crops and secondarily of domesticated animals at surplus levels, as well as urban and village manufactures
<b>Settlement</b>	Mobile camps and sometimes permanent structures used part of the year	Cities, towns, and villages
<b>Occupations</b>	The great majority engages in herding; a small minority in specialized occupations such as blacksmithing or textile production	The great majority engages in farming; minorities in full-time specialized occupations or in urban labor
<b>Social structure</b>	Social class divisions informal and fluid; minority of individuals and families with special status as political and religious leaders; social relations based on kinship	Permanent hierarchy of social classes: (a) rulers and aristocrats, (b) skilled artisans, technicians, and professionals, (c) rural farmers and urban workers, (d) in many societies, slaves; social relations based on kinship at local levels and on common obedience to the ruler at the level of the state
<b>Gender relations</b>	Society generally patriarchal but women and men share economic tasks, especially animal management	Patriarchal society; most women restricted to the domestic sphere
<b>Political organization</b>	Hierarchy of kinship groups from levels of local lineages to large, and usually temporary, confederations of kin groups; leadership exercised informally by individuals, elders, or families with elite status	States characterized by central governments, authoritarian rule, hierarchies of officials, and systematic taxation
<b>Law</b>	Customary, usually unwritten laws enforced by the consensus of the community or by military leaders	Complex civil and penal laws, enforced by the state and often organized in written codes
<b>Technological change</b>	Generally slow pace of technological innovation; periodic advances, especially in the military sphere	Continuous, though often uneven, technological and scientific innovation in a wide range of human activities
<b>Built environment</b>	Temporary, mobile structures; sometimes fortified camps or towns under pastoral nomad control	Dense urban dwelling construction; monumental building of walls, temples, palaces, tombs, and public plazas
<b>Communication</b>	Most members of society nonliterate; elite use of writing systems	Writing systems and complex symbolic expression; literacy of particular elite groups
<b>Religion</b>	Beliefs and practices associated with local deities and other spiritual forces; local religious specialists who communicate with the supernatural realm; from the first millennium B.C.E., adherence of some pastoral nomad societies to major belief systems	Complex systems of belief and practice often associated with central political authority, a class of religious specialists, and written scriptures; centers of development of major belief systems such as Confucianism, Buddhism, or Christianity

social prestige and political influence. Many of these sites have revealed sacrifice and careful burial of horses, as well as cattle and sheep, signs that the deceased had special social or political status. Horseback riding and wagon technology together allowed especially clever, industrious, or lucky families to acquire enormous herds. The most successful owners could amass more power than ordinary people because they had more animals for exchanging gifts with other leaders, making loans to poorer herders, and hosting funeral sacrifices and public feasts, acts that produced allies and loyal followers. Rich individuals could also marry their daughters into other wealthy families by paying more in bride-wealth, that is, animals presented to the family of the bride in exchange for the loss of her labor when she went to live with her new husband.

**The pastoral division of labor.** The emergence of elite families, however, did not mean that distinctions between upper and lower social classes became formal and rigid, as they did in dense agrarian societies. Rather, the pastoral economy required the intense and willing cooperation

of everyone in the herding community—men, women, and children. Our knowledge of pastoral societies from later eras shows that fairly egalitarian relations prevailed among adults. The community had to value the skills of women not only as domestic and child-raising experts but also as managers of livestock.

Even so, as pastoral nomadism expanded and herding groups competed more fiercely for choice pasture and water sources, adult men came to revel in a “horse culture” that prized male military skill and bravado. The Pontic-Caspian steppes are the likely birthplace of the mounted warrior and cattle rustler. Burial sites signify that the great majority of elite fighters were men, though in some places archaeologists have also found the remains of women in full military dress. This finding suggests that women sometimes led raids and distinguished themselves on the field of battle.

The horse culture of the steppes was also the likely source of the chariot, a small, two-wheeled vehicle drawn by one or more horses and designed for speed. In the steppes northeast of the Caspian Sea, an ancient site known as Sintashta has revealed graves containing the material vestiges



**A Chinese chariot.** Shang dynasty burials at Anyang include the remains of horses and chariots. Knowledge of chariot technology spread from Inner Eurasia to northern China by about 1200 B.C.E. Why do you think the graves of Shang rulers included these items?



of chariots and the horses that pulled them. Dated to about 2100 B.C.E., these artifacts mark the start of a period of about a thousand years during which chariotry had great importance in both warfare and political ritual across large parts of Afroeurasia.

The defining characteristics of a chariot are two spoked wheels, rather than heavy solid ones; a small enclosed platform where the driver and perhaps one or two other warriors stand; and harness gear for horses. The chariot was designed for war, intimidation, and the display of power. In combat one fighter usually controlled the animals, while a second threw bronze-tipped projectiles or fired arrows. Sometimes a third warrior held a shield to protect the other two. Well-built defensive walls and towers at Sintashta and neighboring settlements suggest that regional warfare was common, perhaps in response to growing competition for grazing land. Warrior bands may also have competed violently for control of export trade in copper and tin to the Indus and Mesopotamia. Chariots were expensive machines, requiring skilled bending and joining of wood, manufacturing bronze and leather horse gear, and training of horses, drivers, and fighters who could launch spears or arrows from the chariot platform with reasonable accuracy. Consequently, only leaders who could command substantial resources, make alliances, and amass supporters with generous gifts could afford to deploy them. In short,

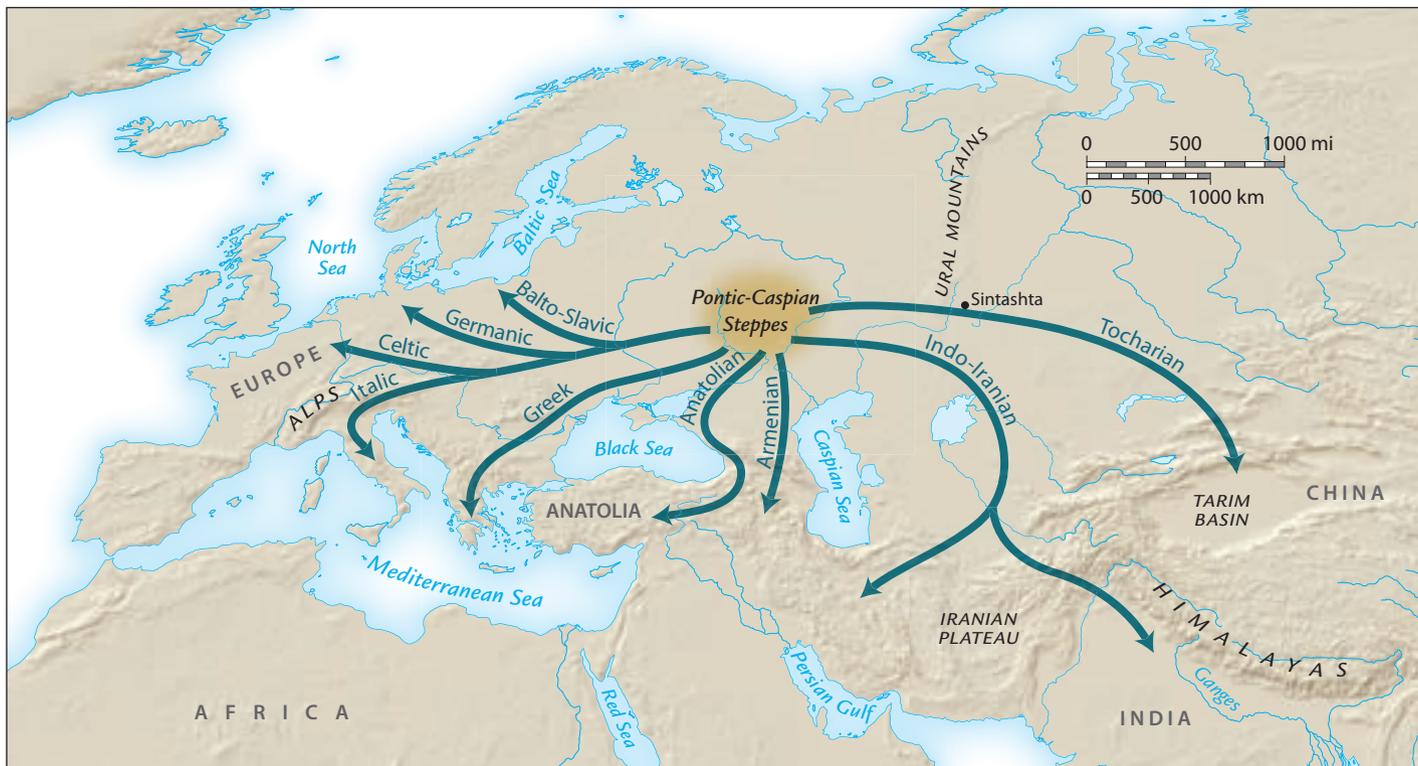
chariots became weapons of choice of aristocratic warrior groups, not ordinary soldiers. Nevertheless, chariot teams could operate over relatively long distances, permitting more extended military campaigns and encouraging state building on a larger scale than had previously been possible in the steppes.

## Encounters Between Agrarian Societies and Migrating Peoples

**FOCUS** How did the movements of peoples speaking Indo-European languages contribute to political, social, and cultural changes in several parts of Afroeurasia in the second millennium B.C.E.?

Sometime around 3300 B.C.E., pastoral bands began moving beyond the Pontic-Caspian steppes to neighboring regions of Afroeurasia. One explanation for these movements is the occurrence of a cycle of regional climatic drying at the same time that pastoral populations were getting larger and improving their ability to travel long distances. If population exceeded locally available resources, migration offered a potential alternative to chronic dearth or warfare. Whatever the primary triggering factor, the scale of these movements



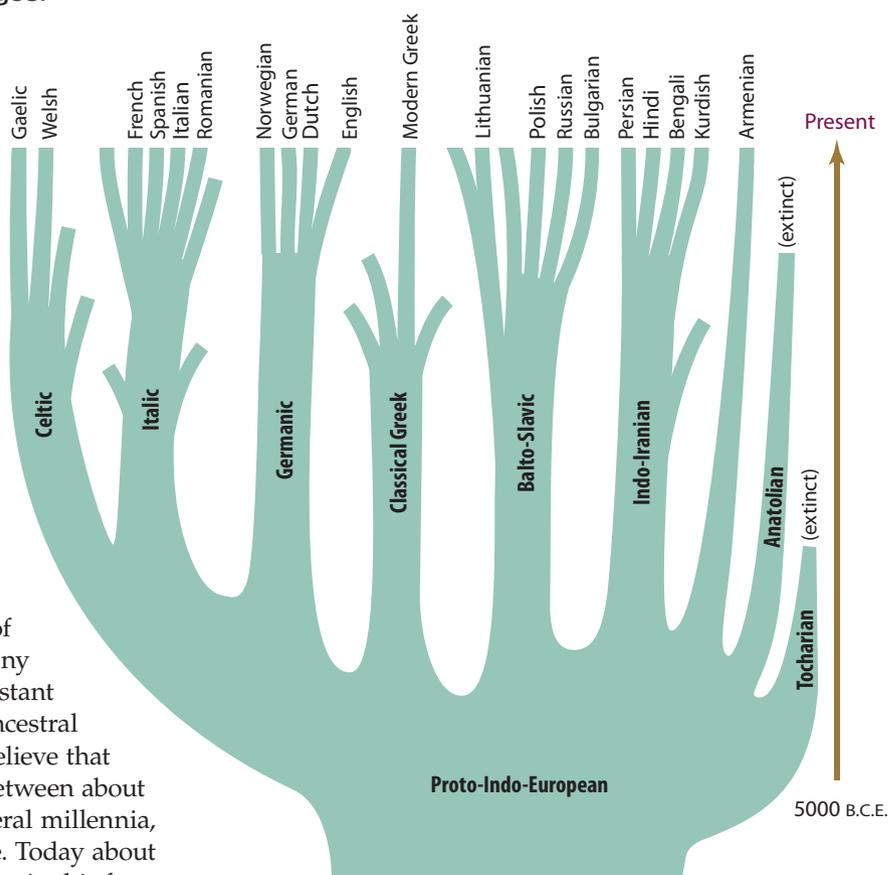


**MAP 3.2** Spread of Indo-European languages.

If Indo-European languages or language families spread in particular directions, can we assume that people speaking those languages migrated in those directions as well?

increased in the third and second millennia B.C.E.—southward around the Black Sea to Southwest Asia, westward into Europe, southeastward to Iran and India, and eastward into steppes that today lie within the borders of China. We can only guess at the numbers of people involved, though the process took centuries, and it was spasmodic and fragmented. There was no sudden flood of peoples or a single conquering horde.

The science of historical linguistics has shown us that most of these migrants spoke languages sharing fundamental grammatical elements and word forms. We call this family of related languages Indo-European. All of the many tongues in this family are descended from a distant parent language. Scholars have named this ancestral tongue Proto-Indo-European. Many of them believe that people spoke it in the Pontic-Caspian region between about 4500 and 2500 B.C.E. During the following several millennia, Indo-European languages spread far and wide. Today about three billion people in the world speak languages in this family, which includes English, Spanish, German, Greek, Russian, Persian, Kurdish, Hindi, and many more.



**Indo-European languages tree.** What are some major languages that do not appear anywhere on this tree?

All languages change over time, and when a population speaking a single language separates into groups that lose regular contact with one another, the speech of those groups invariably diverges. As Proto-Indo-European speakers spread in various directions, the parent language eventually sprouted numerous linguistic branches and twigs, that is, new subfamilies and individual tongues. Groups that spoke Indo-European languages did not *necessarily* share other basic cultural forms, such as way of life or religion, or any sense of common identity. On the other hand, by comparing modern Indo-European languages, scholars have reconstructed a basic vocabulary of ancient Proto-Indo-European. This vocabulary shows that its speakers lived in a temperate climate because the list includes words for beaver, bear, and birch tree. It also includes words for horse, sheep, wheeled vehicle, and plow, suggesting that Proto-Indo-Europeans practiced combinations of stock breeding and farming.

The movement of Indo-European pastoral groups from Inner Eurasia, together with the diffusion of chariot warfare, represented dynamic new elements in the histories of several agrarian lands from western Europe and the Mediterranean basin to South Asia and even China. Relations between densely populated agrarian and pastoral societies played themselves out in a number of different ways: Settled and pastoral groups might engage in mutually beneficial trade and cultural exchange; pastoral bands might advance gradually into agrarian regions, sometimes maintaining their herding way of life, sometimes eventually turning to

farming; mounted nomad forces might intrude aggressively into settled and urbanized lands, and sometimes the rulers of agrarian states pushed them back into the steppe or desert; and from time to time pastoral cavalry invaded and overran centralized kingdoms, imposing themselves as a new ruling class.

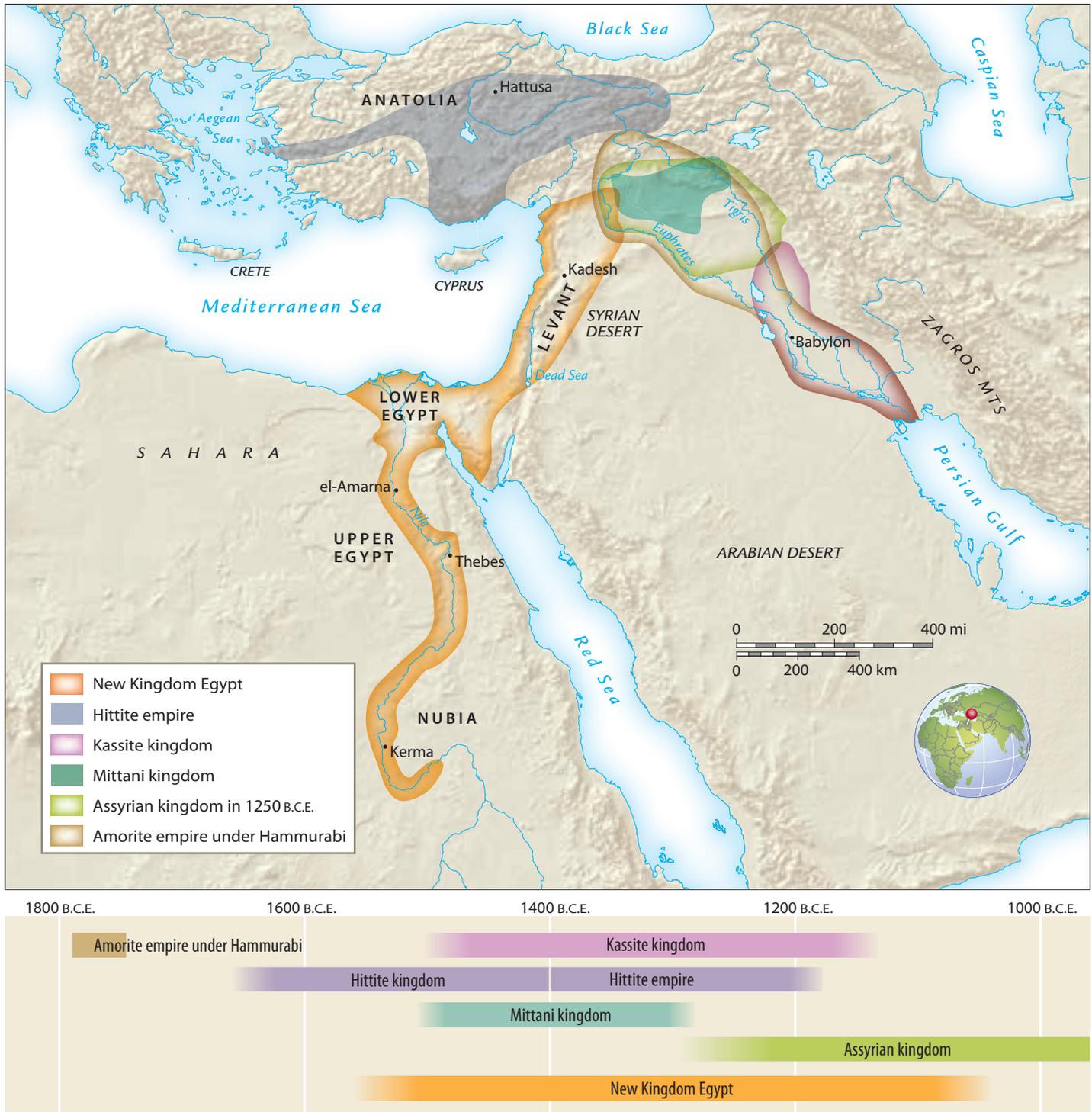
## Indo-European Speakers in Southwest Asia: The Hittite Empire

Migrants from the Inner Eurasian steppes reached Anatolia (modern Turkey) in the third millennium B.C.E. They probably arrived already possessing intimate knowledge of horses and a political culture that stressed alliance building and personal bonds between chiefs and followers. They bred horses and other animals in the grassy highlands of eastern Anatolia, intermingling with existing farming populations. In the sixteenth century B.C.E., the Anatolian group that became known as the Hittites—a word that refers to both the Indo-European language they spoke and the elite warrior culture they practiced—seized control of central Anatolia. There they founded the kingdom of Hatti. Over six centuries the Hittite aristocracy created a well-ordered empire whose monarchs established the rule of law and largely honored the local customs of diverse subject populations.

Archaeologists have excavated the remains of Hattusa, Hatti's impressive capital in north central Anatolia. The city featured a grand palace complex, numerous temples

**The Lion Gate at Hattusa.** These two fierce beasts, symbolic sentries guarding the Hittite capital, stand seven feet tall at the entrance to the citadel. The lion as defender of royal power was a common motif in ancient Southwest Asia. The face of the lion on the left has recently been reconstructed.





**MAP 3.3** Major states of the eastern Mediterranean in the second millennium B.C.E.

What factors might explain why New Kingdom Egypt expanded in a generally north–south direction?

dedicated to the Hittite pantheon of gods and goddesses, imposing fortifications, and an entry gate guarded by two enormous stone lions. Hittite scribes produced thousands of official documents on clay tablets using the Babylonian cuneiform script that originated in Mesopotamia. Surviving tablet fragments dating to about 1900 B.C.E. provide

the earliest evidence of inscriptions written in an Indo-European language.

The Hittite kings, like earlier Southwest Asian monarchs, represented themselves as agents of the gods, on whose authority they kept order and defended the land. A class of priests took charge of worship and ritual sacrifice, but the

king was the chief priest of the storm-god, the principal deity. According to one cuneiform inscription, “Heaven, earth, and the people belong to the storm-god alone. He has made the . . . king his administrator and given him the entire Land of Hatti. . . . May the storm-god destroy whoever should approach the person of the . . . king, and the borders of (Hatti)!”<sup>7</sup> The monarch typically had several wives, but the Great Queen, or ranking wife, often exerted great influence over the state’s internal affairs.

The Hittite economy rested on farmers and stock breeders, the majority of them descended from populations who spoke ancient languages other than Indo-European. Subjects of the king paid a portion of their production to the state to support the administration, army, and royal household. As the kingdom expanded, it also gained control of immensely important Anatolian sources of copper, silver, and tin. The markets for these items in the cities of Mesopotamia, Syria, and Egypt were practically limitless, and those regions reciprocated with linen and woolen textiles and manufactures of silver, lead, and bronze.

After 1400 B.C.E., Hittite armies, perhaps seeking control over a wider circle of commercial routes and cities, overran most of Anatolia and penetrated southward into Syria and the Levantine coast of the Mediterranean. The core of the army was infantry, but chariot squadrons served well to terrorize and scatter enemy forces. Horses put into chariot service required lengthy, expensive training. In the fourteenth century B.C.E., a trainer named Kikkuli dictated a detailed handbook on the proper conditioning of chariot horses. Written on clay tablets in both Hittite and Akkadian, the manual instructs the handler:

When he lets the horses onto the meadow in the autumn, he harnesses them. He lets them trot 3 miles, but he lets them gallop over 7 fields. But on the way back he has them gallop over 10 fields. Then he unharnesses them, provides for them, and they are watered. . . . Then he gives them mixed together 1 handful of wheat, 2 handfuls of barley, and one handful of hay. They eat this up.<sup>8</sup>

## States of Mesopotamia and Syria

In Southwest Asia, the city dwellers of the Tigris-Euphrates River valley had ambivalent relationships, ranging from peaceful commerce to violent conflict, with pastoral communities of neighboring hill country and steppes. In 2191 B.C.E., Akkad,

the world’s earliest known agrarian empire (see Chapter 2), collapsed in connection with hostile incursions of people from the Zagros Mountains to the east. Early in the second millennium B.C.E., a much larger-scale pastoral movement emanated from west of Mesopotamia, perhaps from the Syrian-Arabian Desert (see Map 3.3). These steppe herders, known from ancient cuneiform tablets as Amorites, spoke Semitic languages, which were not Indo-European but belong to the large Afroasiatic family that included languages ancestral to modern Arabic and Hebrew. They raised sheep, goats, and cattle but also farmed part of the time. Perhaps because of a long-term drought cycle in Southwest Asia, which started about 2200 B.C.E., Amorite

bands intruded bit-by-bit into the irrigated floodplain, competing with villagers for choice land, hiring out to city-states as mercenaries, and, when they felt strong enough, attacking towns. Over the following two centuries, some Amorite leaders gave up their old pastoral ways to become rich landlords and patrons of city culture.

In the eighteenth century B.C.E., Hammurabi (r. 1792–1750 B.C.E.), king of the Mesopotamian city-state of Babylon and descendant of an Amorite herdsman, revived the idea Sargon of Akkad had conceived five hundred years earlier to unite Mesopotamia under one authority. During forty-two years of military campaigning, Hammurabi extended Babylonian rule from the Persian Gulf to the upper Euphrates. Like Sargon before him, he aimed to tax the region’s huge agricultural and manufacturing output and make sure that vital raw materials such as timber, copper, tin, and silver flowed into Mesopotamia from neighboring lands. To do this, he created a tightly centralized system of command, personally directing its business and deploying a host of officials up and down the valley to carry out his will. Also, social class distinctions appear to have sharpened because Sargon’s regime encouraged private property holding and



**Stele of Hammurabi.** “If a man has struck a free woman with child, and has caused her to miscarry, he shall pay ten shekels for her miscarriage.” This decree is just one of the 282 Mesopotamian legal traditions engraved on a black diorite slab at the orders of King Hammurabi. At the top of the stele, the seated figure of the sun god Shamash offers divine blessing on Hammurabi and his legal code. Why would Hammurabi want these legal precedents carved on a rock stele rather than simply on clay tablets?



commercial enterprise that gave large wealth-gathering opportunities to relatively few.

Cuneiform writing became more important than ever as a tool of state. About 150 of Hammurabi's official letters, written on clay tablets in Akkadian Semitic, have come down to us. The most famous document is Hammurabi's Code, a collection of 282 legal precedents preserved as engraved inscriptions on an eight-foot-high stele, or stone slab. These precedents, which range over such subjects as burglary, property disputes, irrigation management, marriage, trade practices, and personal injury, express the ruler's insistence on orderly government and fairness in dispensing justice. Babylonian judges were expected to be honest in court procedures, which involved hearing witness testimony, weighing evidence, examining contracts, and rendering verdicts.

The strong-willed Hammurabi died in 1750 B.C.E., and the Amorite empire disintegrated shortly thereafter. The various Mesopotamian city-states went their own ways for about a century and a half, though the city-state of Babylon remained the premier custodian of Sumerian and Semitic cultural traditions.

Two other important states arose in Southwest Asia in the mid-second millennium B.C.E. One was a revived Babylonia under the rule of the Kassites, another band of migrant warriors, possibly mountain people from east of the Tigris-Euphrates valley. The Kassites, who probably spoke

a Semitic language, took eagerly to chariot warfare. Shortly after 1500 B.C.E., they united southern Mesopotamia, ruling from Babylon on the Euphrates.

The second state was Mittani, founded about that same time in the fertile upper Euphrates valley, territory that is today mainly in Syria. The Mittani military elite, who may have founded the kingdom as chariot-riding invaders, appear to have used an Indo-European language but soon adopted local tongues. For more than two centuries this kingdom dominated the northern Euphrates region and its corridor of trade.

## From Middle Kingdom to New Kingdom in the Nile Valley

Off to the southwest, the Old Kingdom of Egypt, which endured more than nine hundred years, ended about 2160 B.C.E. when the central rule of the pharaohs disintegrated (see Chapter 2). Civil strife, known to scholars as the First Intermediate Period, lasted more than a century. About 2040 B.C.E., however, one political faction assembled sufficient military power to reunite Upper Egypt with the bountiful delta (Lower Egypt), ushering in the Middle Kingdom of the eleventh and twelfth dynasties of pharaohs (2040–1786 B.C.E.). These monarchs revived and expanded Egypt's impressive bureaucracy, and irrigation engineers

added thousands of acres of cultivable land to the realm. The pharaoh's armies advanced far upriver into Nubia (today southern Egypt and the northern Sudan), pushing the kingdom's power deeper into Africa than at any earlier time. And as the eastern Mediterranean commercial system matured, the kings promoted closer seaborne ties with the Aegean basin, Minoan Crete, and the Levant.

Despite this renewed unity and prosperity, the shadow of armed violence lengthened. In the mid seventeenth century B.C.E., intruders whom the Egyptians called Hyksos, meaning "foreign chiefs," migrated into the delta and then conquered it and part of Upper Egypt. The Hyksos were probably a mix of migrating herders and chariot fighters from Syria and Anatolia, some of them Semitic speakers, others Indo-European. They also appear to have incorporated bands of military mercenaries and outlaws, a type of freelance warrior quite common in Southwest Asia in that era. The Hyksos succeeded in seizing Egypt partly because the Middle Kingdom had already corroded politically and partly because they fielded chariots and bronze weaponry more expertly than the Egyptians did. For two centuries beginning about 1648 B.C.E., Hyksos kings ruled the lower Nile valley, striving to make themselves into legitimate pharaohs and



**Akhenaten and his family.** The New Kingdom pharaoh Akhenaten is best known for radically departing from traditional Egyptian religion by elevating the god Aten—and Akhenaten himself as Aten's divine servant—above all other deities. The priesthood, and probably most Egyptians, despised him for it, and the new teaching died with the pharaoh. In this limestone relief we see a contented Akhenaten at home with his wife Nefertiti and three of their children. Aten, represented by the sun disk, shines down upon them. What elements do you see in this scene that give it a humane and domestic flavor?

champions of Egyptian culture, neither with very convincing results.

Further upriver in Nubia, a kingdom based at Kerma between the Third and Fourth Cataracts (river rapids) took advantage of the Hyksos invasion to shed Egyptian domination and assert itself as a regional African power. The earliest Nubian state dates to about 2400 B.C.E., and over the centuries it tended to move through successive cycles of expanding and contracting Egyptian political and cultural influence. During the Hyksos period, Kerma flourished on farming and stock raising and on the trade in gold, ivory, ebony, cattle, timber, and slaves that flowed northward toward the Mediterranean.

Then, early in the sixteenth century B.C.E., Egyptian nobles rallied an army that evicted the Hyksos from the valley. This event ushered in the New Kingdom (1540–1070 B.C.E.), an era when Egypt's sphere of power expanded beyond all earlier borders. Pharaohs of the New Kingdom's eighteenth dynasty reasserted their authority far upriver, reducing Nubian rulers to Egyptian dependency once again. To

the northeast, they not only chased the Hyksos back into Southwest Asia but also conquered the Levant up to the frontier of Anatolia. Taking lessons from the Hyksos, Egyptian commanders made numerous improvements in chariot technology and tactics.

Notably under the leadership of Thutmose I, Thutmose III, Hatshepsut (coruler with Thutmose and the only female New Kingdom pharaoh), and Akhenaten (inclusive dates 1493–1335 B.C.E.), the empire remained stable and prosperous. Picking up where their Middle Kingdom forebears had left off, these rulers made Egyptian bureaucratic government more efficient than ever. Reigning as divine beings from a splendid complex of palaces and temples at Thebes, they managed the state and closely regulated the economic life of Egyptian peasants with the help of thousands of officials and a professional standing army. They also monopolized foreign trade. As the empire grew, merchants from both the Mediterranean lands and Nubia converged on Egypt, though they had to conduct all their business through the pharaoh's commercial agents. Even so, vast amounts of



**Opening of the Mouth Ceremony.** This painting on papyrus from the *Book of the Dead*, a collection of spells to help the departed move safely to the next world, depicts a ritual performed for a deceased scribe named Honefer. The mummy's mouth is ritually opened to restore the dead man's senses and faculties. The white stele on the right is engraved with hieroglyphics and at the top is an image of Honefer standing before a seated god. Compare this image to the one on the stele of Hammurabi on page 95. In both, if the deity were to stand up, he would be much taller than the mortal he is facing.



## “Here Is the Situation”: The King of Alashiya Writes to the Pharaoh of Egypt

More than 380 clay tablets have preserved correspondence among rulers of Southwest Asia and the eastern Mediterranean in the fourteenth century B.C.E. Scholars first discovered these letters in the late nineteenth century at el-Amarna, an archaeological site in Upper Egypt that was the short-lived capital of the New Kingdom pharaoh Akhenaten (r. 1353–1335 B.C.E.). Now scattered among the collections of several of the world’s major museums, the letters brightly illuminate ancient diplomatic, political, and commercial exchange.

The majority of the letters are correspondence sent to Egyptian kings over a span of about thirty years. They are written in Akkadian cuneiform, the language of international diplomacy. Authors of the texts include Southwest Asian rulers, as well as leaders of small states in Syria and the Levant. The letters’ concerns range from negotiating marriages to trade relations to political alliances. The international correspondence is generally framed in the language of “brotherhood,” signifying that all rulers had equal social status and that in fact royal families commonly intermarried as a way of cementing ties of mutual obligation. Monarchs and princes exchanged gifts but also demanded support from one another in times of need.

This document is part of a letter from the king of Alashiya, a state located on the island of Cyprus in the eastern Mediterranean. This monarchy carried on extensive trade with Egypt, notably copper exports. Referring to the presence of Nergal, a Mesopotamian god associated with disease, destruction, and death, in his realm, the king informs the Egyptian pharaoh of the current situation in Alashiya and seeks to resolve diplomatic and economic issues between the two states.

Say to the king of Egypt, my brother: Message of the king of Alashiya, your brother. For me all goes well. For my household, my wives, my sons, my magnates, my horses, my chariots, and in my country, all goes very well. For my brother may all go well. For your household, your wives, your sons, your magnates, your horses, your chariots, and in your country, may all go very well. My brother, I herewith send my messenger with your messenger to Egypt.

I herewith send to you 500 (*talents*) of copper. As my brother’s greeting gift I send it to you. My brother, do not be concerned that the amount of copper is small. Behold, the hand of Nergal is now in my country; he has slain all the men of my country, and there is not a (single) copper-worker. So, my brother, do not be concerned.

Send your messenger with my messenger immediately, and I will send you whatever copper you, my brother, request.

You are my brother. May he send me silver in very great quantities. My brother, give me the *very best* silver, and then I will send you, my brother, whatever you, my brother, request. . . .

Moreover, my brother, men of my country keep speaking with me about my timber that the king of Egypt receives from me. My brother, give me the payment due.

Moreover, here is the situation: a man from Alashiya has died in Egypt, and his things are in your country, though his

son and wife are with me. So, my brother, look to the things of the Alashiya people and hand them over, my brother, to the charge of my messenger.

My brother, do not be concerned that your messenger has stayed 3 years in my country, for the hand of Nergal is in my country and in my own house. There was a young wife of mine that now, my brother, is dead. . . .

Moreover, may my brother send to me in very great quantities the silver that I have asked you for. Send, my brother, the things that I asked you for. My brother should do quite everything, and then whatever things you say I will do.

You have not been put (on the same level) with the king of Hatti [the Hittite kingdom] or the king of Sanhar [possibly Babylonia]. Whatever greeting-gift he (my brother) sends me, I for my part send you back double.

May your messenger come to me as of old, and may my messenger go to you as of old.

Source: *Letters from Mesopotamia*, trans. A. Leo Oppenheim, pp. 122ff. Copyright © 1967 by The University of Chicago. Reprinted by permission of The University of Chicago Press. Diacritical marks have been removed from words in this selection.

### Thinking Critically

What particular diplomatic and economic issues does the king of Alashiya want to take up with the ruler of Egypt? From the king’s references to the presence of “the hand of Nergal” in his country, what sort of crisis might have been happening in Alashiya? What particular products figure in exchange between the two states? Do you think exchange of gifts between these two rulers might have been important to diplomatic and commercial relations? Why do you think the king of Alashiya mentions the kings of Hatti and Sanhar? What point might he be trying to make by telling the Egyptian king that those rulers are not “on the same level” as him?



wealth poured into the valley in the form of royal trade, tribute from conquered princes, and war booty. The plunder included large numbers of enslaved prisoners from both Nubia and Southwest Asia, who were set to work building colossal temples, among other tasks.

## Rivalry and Diplomacy among Militarized Kingdoms

Despite its imperial adventure, New Kingdom Egypt was by no means the only great power in the region. The political arena also included Hatti, the Kassite kingdom of Babylonia, Mittani, and, by the fourteenth century B.C.E., Assyria, a monarchy on the northern Tigris River plain. The spectacle of five large, militarized kingdoms competing with one another for territory, trade, and political advantage was unprecedented in world history. Such grand rivalries were possible, and indeed tempting, because of the rising wealth of Southwest Asia and Egypt, the new war-making technology, and the immense value of interurban trade.

Despite their fierce competition with one another, these large states may have endured as long as they did partly because their aristocratic classes developed methods of diplomacy in order to defuse potential conflicts over territory and trade. Monarchs exchanged ambassadors, lavish gifts, and numerous letters written on clay tablets; they also negotiated treaties and married into one another's families. In 1350 B.C.E., for example, Tadu-Heba, daughter of Tushratta, the king of Mittani, traveled more than six hundred miles from the Euphrates to the Nile to marry Pharaoh Amenhotep III, thereby strengthening cordial relations. In 1284 B.C.E., Egypt signed a formal peace treaty with the Hittites, and shortly after that Ramses II (r. 1279–1213 B.C.E.) married a Hittite princess. Akkadian, the Semitic language written in cuneiform and

**lingua franca** A spoken or written language that facilitates commercial or diplomatic communication across cultural frontiers.

spoken principally in Babylonia, became a diplomatic **lingua franca** (LING-gwuh FRANG-kuh), a common language that emissaries and officials used to inform

and negotiate with one another. Over time, the conventions and protocols governing international relations—for example, rules for the safety of messengers or for proper use of language in letters from one monarch to another—became quite complex. In short, the ruling groups of the whole region from the eastern Mediterranean to Mesopotamia gradually created an international system for engaging in regular political dialogue that encouraged trade and in some measure restrained warfare.

The major states of Southwest Asia and the eastern Mediterranean not only exchanged gifts and messengers. They also periodically made war on one another. Most battles took place in Syria or the Levant because that is where frontiers of the Hittite kingdom, Mittani, and Egypt abutted one another. For example, Egypt under Ramses II and the Hittites under Mutawallis II (r. 1295–1272 B.C.E.) clashed at Kadesh in northern Syria in 1275 B.C.E. There, festering

disputes over frontier territory escalated into a fight between thousands of archers firing from chariots. Both sides sustained severe losses, but neither army carried the day. The border remained largely as it was, and fifteen years later Egypt and the Hittites signed a peace treaty.

By the late thirteenth century B.C.E., however, the political geography of the region was changing radically. Both Mitanni and the Kassites were finally obliterated by their enemies, and Egypt gave up most of its Syrian territories following the reign of Ramses II. The Hittite empire fragmented amid popular revolts, civil struggles among claimants to the throne, and an extended crisis of drought and famine. In the succeeding century, Assyria became the rising star in Southwest Asia, as we see in Chapter 5.

## Early Greeks

Impressive centers of power and wealth also appeared on mainland Greece from about 1700 B.C.E. The most striking material evidence are the well-stocked burial chambers, or shaft graves, that have been excavated at Mycenae in the Peloponnesus, the peninsula that forms the southern part of Greece (see Map 3.4). Carved deep into rock, these tombs contained priceless hoards of gold, silver, and bronze that only an aristocratic class could possibly have accumulated. Citadels protected by thick defensive walls also arose at several locations in the Peloponnesus. Like the Minoan palaces on Crete in an earlier period, these bastions evolved into regional centers of agrarian production and artisanry.

Historians associate the rise of the Mycenaeans (meyerseh-NEE-uhns), as this Aegean aristocracy is known, with the appearance of bands of warriors who spoke an archaic form of Greek, an Indo-European language. Most likely, the earliest Greeks, like the Hittites and Hyksos, started out as loosely organized migrant groups who raised cattle, sheep, and horses supplemented by farming. The *Iliad*, the legendary epic poem recounting a siege of the city of Troy, portrays the Mycenaeans simultaneously as god-like heroes and swaggering pillagers who prized horses, chariots, and stockpiles of bronze weapons. Most historians think that the earliest Greek-speaking people reached the Balkan Peninsula from the north, entering the Aegean Sea region around 2000 B.C.E. By no later than 1450 B.C.E., the Greek language is evident on both Crete and the Peloponnesus in the form of a written script called Linear B.

Around 1500 B.C.E., Mycenaean Greek warriors seized Crete, and Minoan civilization collapsed. Nature may have hastened that development. Sometime in the later seventeenth century B.C.E., a volcano erupted on the little island of Thera (Santorini), which lies about sixty-eight miles north of Crete. The explosion blew apart Thera and very likely caused a tsunami and massive clouds of dust and ash. Some volcanologists, scholars who study eruptions past and present, have hypothesized that the Minoans suffered not only catastrophic destruction but also long-term disruption of agriculture and sea trade.





**MAP 3.4** Mycenaean centers, second millennium B.C.E.

Mycenaean society included many small settlements in addition to the main palace centers indicated here. Connect this close-up on early Greek movement into the Aegean region with the wider perspective on the spread of Indo-European languages shown in Map 3.2.

The Mycenaean warrior aristocracy that held power between about 1500 and 1200 B.C.E. participated in the larger culture and economy of the eastern Mediterranean. Palace centers around the Aegean came to share a common culture in such areas as pottery design and burial practice. The Mycenaean also looked to Egypt, the Levant, and Crete for cultural goods and information to help transform themselves from rough-and-ready soldiers into self-assured city elites. In fact, their shaft graves present a microcosm of long-distance commercial connections. Archaeologists excavating these chambers have found ivory from Syria, ostrich eggs from Nubia, lapis lazuli from east of Mesopotamia, and amber from the Baltic Sea. The Mycenaean exchanged olive oil, wine, and ceramics for these luxuries. Shards of characteristically Mycenaean pottery have been found in Sicily and Italy, a sign that Aegean merchants were

venturing far to the west to found settlements. In short, the rise of Mycenaean power represented an extension of complex urban life along the northern Mediterranean rim.

### Indo-Europeans in Iran and South Asia

As Indo-European-speaking groups advanced west through Southwest Asia and the Aegean region, other bands migrated east of the Caspian Sea into the semiarid plains and highlands of what are today Turkmenistan, Uzbekistan, and northern Iran. Gradually, these groups diverged from one another in both space and time. So did their speech. Some migrants moved onto the Iranian Plateau, the region of uplands and mountains that encompasses most of modern Iran and parts of Afghanistan and Pakistan. The newcomers there emerged in the first millennium B.C.E. as speakers





**Mycenaean dagger.** Excavation of a Mycenaean shaft grave revealed this ceremonial bronze dagger with gold work depicting a lion hunt. The decoration has several elements that indicate the artistic influence of Minoan Crete on Mycenaean society. Compare the leaping lion on the dagger with the bull in the Minoan fresco on page 83.

of an ancestral version of Persian (Farsi), as well as several other languages including Kurdish and Pashto. Other groups drifted across Afghanistan into South Asia (the Indian subcontinent). The languages of those herders are classified today as Indic (or Indo-Aryan), an Indo-European subfamily that includes modern Hindi, Urdu, Bengali, and several other tongues.

When Indo-European speakers penetrated the Indus valley, probably beginning about 1700 B.C.E., they almost certainly found the once-great cities of the Harappan civilization in full decline (see Chapter 2). It is likely that a succession of Indic groups filtered through and around the already dilapidated Indus towns over a period of centuries. We have no evidence that they entered the subcontinent in massive numbers. By the later second millennium B.C.E., nevertheless, bands of Indic speakers were advancing eastward along a corridor of grassy plains just south of the Himalayan foothills. Opening before them was the Ganges (GAN-jeez) River, which flowed more than one thousand miles to the Bay of Bengal. In that era the indigenous populations of the valley were either foragers or farmers growing wheat, millet, and, later, rice. They spoke languages of the ancient Dravidian family, perhaps as the Harappan city dwellers had.

The principal source of information on the early period of interaction between Indic speakers and preexisting populations has been the Vedas (VAY-duhs). These are compilations of hymns and prayers that Indic priests presumably recited and passed orally from one generation to the next. From these texts, notably the classic work of Indian literature known as the *Rig Veda*, we may distill a portrait of Indic immigrants as proud militarists who quarreled constantly among themselves and who violently subdued the local population of

**clan** A type of social organization in which a group of people claim shared identity as descendants of a single, usually distant ancestor. Clan organization is common among pastoral nomadic societies.

“dark” demon people. The characters in the *Rig Veda* organized themselves in **clans** led by warrior heroes, and their society was divided into four main social classes: warrior-aristocrats,

priests, common people, and the inferior Dasas, or despised victims of conquest. Historians see in this system the remote origins of the more formal hierarchy of social classes, or castes, that emerged in later centuries. The Indic newcomers also possessed horses, cattle, sheep, bows, metal weapons, and chariots. They worshiped gods of heaven, earth, sun, and fire, notably Indra, ferocious god of war, who rode a celestial chariot and hurled thunderbolts at his enemies.

The *Rig Veda*’s representation of late second millennium B.C.E. India is dramatic, but it is also an idealized origins myth later incorporated into Hindu cultural and religious tradition. The Vedas did not appear in written form until about 400 B.C.E., and other types of historical evidence force us to modify their testimony. For example, the Indic languages absorbed numerous words from the older Dravidian tongue, which might suggest intermarriage and social exchange between Indic speakers and local populations, not just violent domination. The newcomers, moreover, may have had a military culture based on chariots, horses, and bronze weapons, but extremely little material evidence of these things has ever been found on the subcontinent. On the other hand, the Indic languages gradually advanced across the northern and central subcontinent, and Dravidian-speaking populations there virtually disappeared. Today, Indic languages in the Indo-European family are spoken by more than 800 million people.

## Indo-Europeans and Chariots from the Far West to the Far East

Indo-European languages also spread to Europe in the second and first millennia B.C.E. in connection with migrations of groups coming from either the Pontic-Caspian steppes or southeastern Europe. With them emerged mixed economies of **pastoralism** and farming, along with horses, wheeled carts, and chariots (which served mainly as symbols of political prestige rather

**pastoralism** A type of economic and social organization involving the breeding and raising of domesticated hoofed animals, or livestock.



### The Beauty of Xiaohe: A Woman of the Steppes



A close look at the “Beauty of Xiaohe” mummy reveals her eyelashes intact.

It must have been cold at the eastern edge of the Taklamakan when the woman died. Those who buried her dressed her for warmth. A fur-lined hat sat atop her long auburn hair, matching the fur-trimmed boots on her feet. She wore a string skirt, and her body was wrapped in a large woolen blanket. Scientists have named her the Beauty of Xiaohe (sh-ih-ow-h-uh) after the cemetery site where she and other human remains were excavated in 2003. She lay in her tomb for nearly four thousand years, reposing beneath a boat of wood and cowhide turned upside down.

In the twentieth century, archaeologists have discovered more than two hundred of these bodies, along with the clothing

they wore when they died, in different parts of the Tarim Basin, today China’s far western Xinjiang (shin-jyahng) region. Scholars commonly refer to the corpses as “mummies,” though their community did not deliberately preserve them with special techniques comparable to ancient Egyptian mummification. Rather, extreme aridity and frigid winters preserved the bodies naturally. Recent DNA testing of human remains, some of which date to about 2000 B.C.E., indicates that these individuals descended from people who migrated into the region from the west and married into local populations. Their forebears may therefore have been speakers of an early Indo-European language who lived in the Pontic-Caspian steppes. If that is the case, the Beauty of Xiaohe probably spoke a Tocharian tongue, though all the languages in this family are now extinct. Many of the mummies exhibit features not typically East Asian, for example high-bridged noses, deep-set eyes, and light-colored hair. Their brightly hued clothing provides another link with peoples to the west. Some of the later mummies wear plaid twills resembling textiles woven by ancestral speakers of the Celtic branch of Indo-European languages who once lived in central Europe.

By four thousand years ago, the lands that fringed the Taklamakan had already become meeting places for people of diverse origins. In her lifetime the Beauty of Xiaohe may have seen caravans of traders moving from one oasis to another, tracing out the “silk roads” that would eventually run along the northern and southern fringes of the great desert, connecting China with Iran and the Mediterranean beyond.

#### Thinking Critically

Why do you think political controversy over the origins of the Beauty of Xiaohe and other mummies found in the Tarim Basin has arisen in China in recent years?

than as war machines). By around 1500 B.C.E., all building of megalithic tombs and ritual centers along Europe’s Atlantic rim had come to an end. This suggests the rising cultural dominance of newcomers, though there is no sign that Indo-European movements produced a sudden or violent break in Europe’s history. Rather, general trends continued: the population grew, large fortified settlements appeared, chiefly families accumulated great wealth in bronze and gold, and long-distance trade flourished from the Baltic Sea to the Mediterranean and along the Danube River. Gradually, branches and twigs of the Indo-European language trunk appeared all across Europe, including ancestral forms of Latin and Celtic, Slavic, and Germanic languages, including English.

On the eastern side of Inner Eurasia, inhabitants of what are today Mongolia and northwestern China took up pastoral nomadism and a full-fledged “horse culture.” Groups speaking Indo-European languages associated with a linguistic branch known as Tocharian moved eastward after about 3500 B.C.E. to occupy the slopes of the Altai and Tien Shan Mountains and eventually the Tarim Basin, location of the enormous Taklamakan Desert.

It seems certain that peoples of the Inner Eurasian steppes came into contact with the Shang dynasty of northern China. Like the older complex societies to the west, the Shang army fielded squadrons of two-horse chariots from around 1200 B.C.E. Chariot technology very likely diffused from Inner Eurasia. The spoked wheels were similar in

design to those used in Southwest Asia. Chinese chariotry also carried great aristocratic prestige. Physical remains of vehicles have been found in several Shang tombs along with ritually sacrificed horses.

The chariot was indeed an early example of a single development that affected peoples across Eurasia and northern Africa within the space of a few hundred years. More broadly, by the start of the second millennium B.C.E., if not earlier, the combination of horseback riding, wagon travel, chariotry, and customs and techniques to promote trade permitted the formation of a single network of commercial and cultural exchange that extended from China to Europe and the Mediterranean basin.

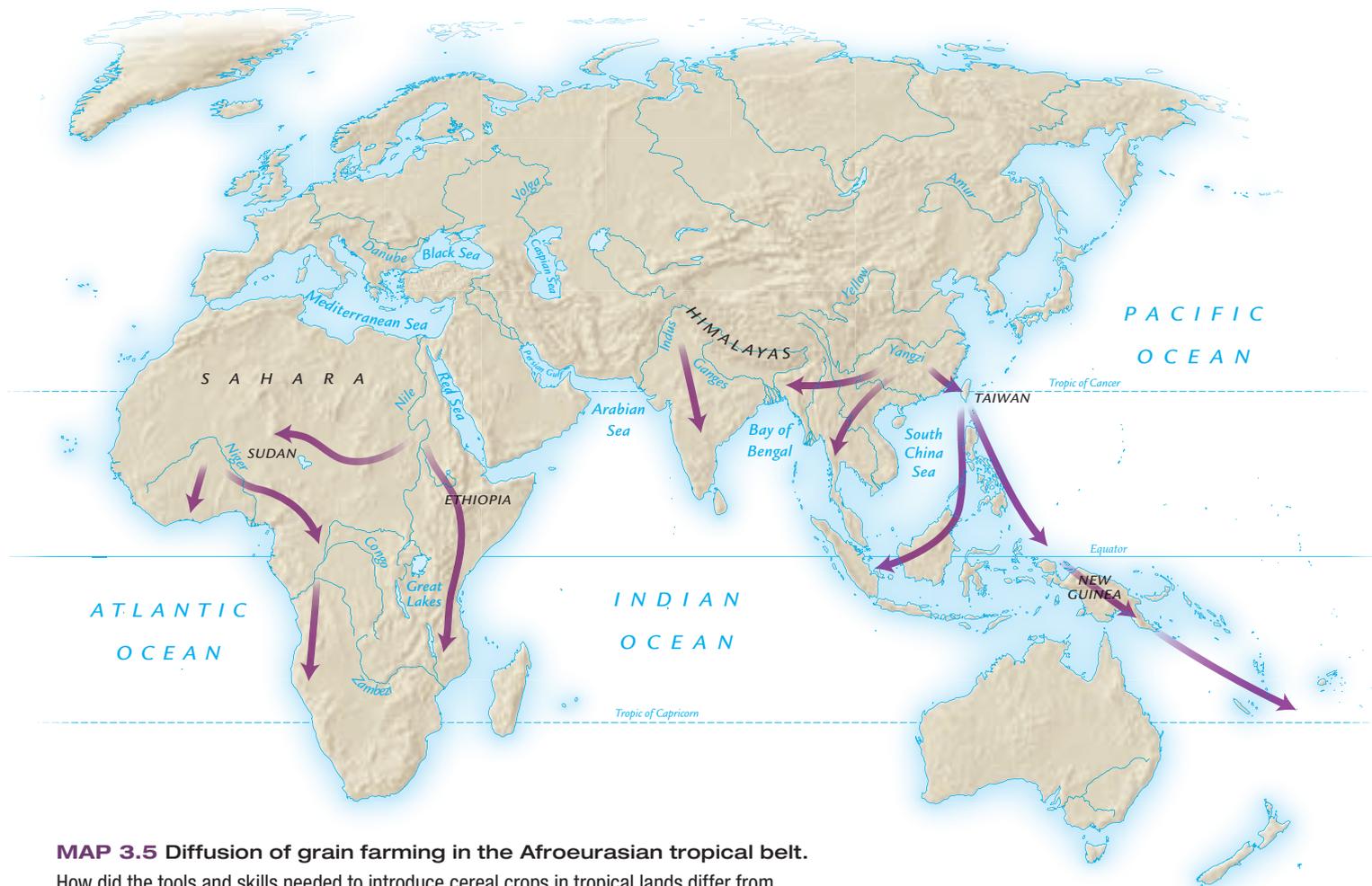
Looking across the entire region where militarized, chariot-riding elites took power, historians have also noticed that the mother goddesses and other female deities prevalent in the late paleolithic and neolithic eras gave way in religious worship to ascendant male gods of war and thunder. Evidence from languages, graves, and official documents supports the hypothesis that patriarchal institutions became more entrenched in the second millennium B.C.E. and that the legal and social status of women declined in

general. Such correlations suggest at the very least that the migrations and state-building enterprises of male chariot-riders wielding bows and bronze swords had profound social and cultural effects on a large part of Afroeurasia.

## Developments in the Tropical Belt

**FOCUS** In what circumstances did agrarian societies become more widely established in both Southeast Asia and central and southern Africa between the fourth and second millennia B.C.E.?

Large-scale migrations of a different origin reshaped human landscapes in Afroeurasia's tropical belt in the third and second millennia B.C.E. For the first time, large areas of both Sub-Saharan Africa and island Southeast Asia became inhabited by people who grew crops and herded animals (see Map 3.5). The fundamental consequence was a more or less steady increase of population and the complexity of society in latitudes near the equator.



**MAP 3.5** Diffusion of grain farming in the Afroeurasian tropical belt.

How did the tools and skills needed to introduce cereal crops in tropical lands differ from those required in temperate or arid river valley climates?



## Herders and Farmers South of the Sahara Desert

In tropical Africa, climatic fluctuation was an engine of migration. Six to seven thousand years ago the region that is today the Sahara Desert passed through a long cycle of higher rainfall. Hunters, fishers, and cattle herders flourished on lakeshores, riverbanks, and marshland. By about 2500 B.C.E., however, the wet phase ended. The Sahara, together with the adjacent Arabian Desert east of the Red Sea, moved toward the extreme levels of aridity that characterize these regions today. As that happened, humans progressively retreated from the central Sahara. Some migrated either north toward the Mediterranean or south into the semiarid and grassland zone known historically as the Sudan. Others drifted eastward to the Nile valley to participate in the young civilization blossoming there.

South of the desert, the open or wooded savannas of the Sudan stretched from the Atlantic coast to the mountains of Ethiopia. Saharan cattle-keeping peoples moved into this belt, most of them probably speaking languages belonging to a linguistic family known as Nilo-Saharan. These herding folk shared the region with farming populations already established. Perhaps in response to climatic pressures, farmers of the Sudan domesticated a particularly wide range of

nutritious grains, including sorghum, pearl millet, African rice, and, in Ethiopia, the tiny grain called teff.

**Migrations into East Africa.** Herders who populated the savanna belt could advance only so far southward before reaching tropical forests where their cattle, as well as horses, became susceptible to trypanosomiasis, a lethal disease for most bovine species. This malady, the animal form of sleeping sickness carried by tsetse flies, flourished only where certain kinds of bushes offered cover. On the eastern side of Africa, however, people who practiced a combination of cattle herding and farming were able to move southward along a corridor of highlands inhospitable to tsetse flies. By the third millennium B.C.E., cattle breeders, who used stone tools and made pottery, were advancing toward East Africa's Great Lakes, an upland region of moderate climate and fertile soil. There, and farther south, they gradually assimilated or displaced forager populations, or pushed them deeper into the tropical forests. These older populations spoke languages belonging to the ancient Khoisan (Koisahn) family, whose origins may go back to the early days of *Homo sapiens*. The incoming herders and farmers, whose numerous languages belonged to either the Nilo-Saharan or the Afroasiatic families, adopted a variety of Khoisan words. But over the long run, Khoisan languages nearly



**Cattle economies in tropical Africa.** Long-horned Ankole cattle and related breeds have sustained numerous peoples in East and southern Africa for several millennia.

disappeared in East Africa as agrarian groups spread further and grew larger.

**Bantu-speaking farmers.** In another theater of migration, farmers who lived in western and central Africa just south of the Sahara also began to advance southward toward the wet forests. Climatic drying was almost certainly a factor

**shifting agriculture** A method of crop production in which a farmer clears and cultivates a plot of land until the soil loses its nutrient value, and then moves on to clear and plant a new field, allowing the first one to lie fallow and recover.

in this movement. A second factor was that tropical farmers practiced one form or other of **shifting agriculture**. The nutrient-rich layer, or humus, in tropical soils tended to be thin and to leach away easily under pounding rain.

The women and adolescent girls who did most of the cultivating therefore had to use hoes and digging sticks, not animal-powered plows. Even if delicately worked, however, humus tended to diminish within two or three years, so fields had to be left to recover over several seasons. The farm family had to move to a new spot to clear and plant again. Consequently, shifting agriculture (sometimes called swidden agriculture) often resulted in slow migratory drift of local populations.

Farmers whose major crop was the yam, a highly nutritious root plant first domesticated in West Africa perhaps about 8000 B.C.E., advanced slowly south and east from a core area of woodland centered on what is today southern Cameroon. The surviving archaeological record shows that they manufactured durable pottery and used both fire and stone axes to clear away forests, opening land to sunlight and yam plots. They also hunted, fished, and produced oil from palm trees.

Scholars have combined archaeology with comparative analysis of languages spoken in Africa today to learn much about the long-distance movements of cultivators into equatorial and southern Africa. They spoke languages classified within the Niger-Congo family and more specifically a subfamily of very closely related tongues called Bantu (BAHN-too). Just as scholars have compared basic vocabularies of living Indo-European languages to reconstruct Proto-Indo-European, linguists have analyzed numerous Bantu languages to recover Proto-Bantu. They hypothesize that it originated sometime after 4000 B.C.E. in Cameroon. The word *Bantu* comes from the root word *ntu*, which means “person,” and the plural-forming prefix *ba-*. Linguistic clues tells us that early Bantu speakers built rectangular houses with palm thatch roofs; navigated rivers in boats; made sculptures of wood; and venerated both a supreme creator god, who did not intervene regularly in human affairs, and a range of more accessible deities and ancestral spirits.

In the third and second millennia B.C.E., Bantu-speaking farmers advanced along two major routes. One was southward into the equatorial forests, then upstream along the Congo River (the world’s seventh longest) and its numerous

tributaries. Some groups settled along the way, others kept moving through the forest belt, emerging eventually into the savannas of the Southern Hemisphere. As centuries passed, paths of migration lengthened, and pioneer farmers colonized a variety of ecological niches. Gradually, therefore, Bantu languages multiplied, and local religious and social practices became more diverse. Foragers who occupied the Congo valley forests before Bantu speakers arrived very likely traded, intermarried, and shared skills with the newcomers. Many must have taken up farming, though some, including ancestors of the Batwa (people known conventionally as Pygmies), remained in the forests to collect and hunt.

Bantu speakers also migrated across the northern savanna zone, then southward into lands around East Africa’s Great Lakes. There, they planted cereal crops, notably sorghum and millet. Where the local ecosystem permitted, they also took up herding, which they learned from cattle-keeping people already there. After 1200 B.C.E. the Great Lakes area became one of the most densely populated places in the world’s tropical latitudes. In the following millennia, Bantu-speaking farmers and herders occupied nearly the entire southern third of Africa. We come back to this epic story in later chapters.

## Austronesian Farmers in Southeast Asia

Paralleling these developments in Africa, farming peoples also moved throughout the tropical lands of maritime Southeast Asia. In terms of sheer geographical scope, this migration was one of the greatest in world history, ultimately extending from Madagascar in the western Indian Ocean to Oceania (the Island Pacific). Both linguistic and archaeological evidence shows that, by the fifth millennium B.C.E., agrarian communities that produced rice, millet, pigs, and chickens were multiplying in the well-watered valleys and coastal plains of both southern China and mainland Southeast Asia, the region that today includes Vietnam, Thailand, and Malaysia. Around 4000 B.C.E., some adventurous farm families crossed the Formosa Strait, which separates mainland China from the large island of Taiwan. These migrants spoke ancient languages of the Austronesian family.

Subsequently, Taiwan became the major dispersal point for further movements of rice-growing farmers southward into the wet tropical islands of the Philippines and Indonesia, as well as to many of the islands that rimmed the western Pacific. (We return to the peopling of Oceania in Chapter 4.) At some point, Austronesian voyagers moving south from Taiwan invented the outrigger canoe. This type of craft has a lateral support float attached to the hull, sometimes one on each side, to add stability to the vessel. A double-outrigger could stay upright in the heaviest of seas. As colonizers sailed from one Southeast Asian island to another, they brought with them an ecological “suitcase” of rice, pigs, chickens, durable pottery, and finely ground stone tools. One factor in their demographic success was the position of maritime Southeast Asia on the “ring of fire,” the



zone of volcanic activity that arcs around the rim of the Pacific, encompassing both eastern Asia and the western edge of the Americas. Volcanic eruptions in Southeast Asia did (and still do) kill people, but they also deposit layers of fertile volcanic soil, which almost certainly encouraged Austronesian groups to continue to explore and colonize new territory. For example, rice-growing populations became notably dense and productive on Java, an Indonesian island well-endowed with volcanic earth.

Across much of maritime Southeast Asia, Austronesian farming communities replaced forager economies and older

languages. This did not, however, happen everywhere. On the great forested island of New Guinea, the much older Papuan-speaking population held its own in the interior regions against Austronesian intruders. The main reason may be that several millennia earlier the Papuans had domesticated varieties of yam, taro, banana, and perhaps sugar cane entirely on their own. Therefore, when Austronesian explorers appeared on New Guinea's shores, they confronted not a scattering of food collectors but relatively dense agrarian societies that were not about to budge.



## Conclusion

Compared to the eight thousand years of the neolithic era, the second millennium B.C.E. was a revolutionary period of population growth, agrarian expansion, and city building across the more northerly latitudes of Afroeurasia. During that millennium, two contrasting trends developed simultaneously. On one hand, as more people adopted either farming or herding (or a combination of the two) and carried those ways of life into regions where they had previously been unknown, languages and numerous other elements of culture proliferated. Also, human adaptation to new ecological conditions, from tropical rainforests to arid grasslands, required continuous cultural innovation and adjustment. In other words, the Afroeurasian map of languages and cultural beliefs and practices became much more complex. Migratory movements, sometimes involving conquest, caused long-enduring communities to split apart, producing new linguistic and cultural offshoots. Indo-European languages multiplied across a territory extending from Europe to India. Austronesian speech became dominant in Southeast Asia from the Indian Ocean to the western Pacific. In Africa, ultimately hundreds of languages in three major linguistic families spread into and beyond the tropical forest zone.

On the other hand, in the same millennium that Afroeurasia was becoming more culturally diverse, intercommunication among communities became more intense and extended over longer distances in connection with migration, trade,

conquest, and state building. With the exception of Shang China, no new centers of complex society arose that had quite the cultural weight and density of Mesopotamia, Egypt, or the Indus. However, new kingdoms and ruling groups such as the Hittites, the Mycenaeans, and the builders of the Oxus cities did much to advance regional productivity and interregional commerce for several centuries running. Also, the more that agrarian towns and oases sprang up on the landscape, the faster information tended to circulate from one to the other. Relative to the pace of communication in paleolithic times, the most attractive ideas and inventions spread like wildfire. For example, societies across the breadth of Eurasia and northern Africa adopted the complicated technology of bronze metallurgy within less than a thousand years. Knowledge of chariotry galloped from society to society even faster. By the thirteenth century B.C.E., chariots of a fairly uniform design were in use in places as far from one another as western Europe, Nubian Africa, and China.

This dual process, in which human society became simultaneously more culturally diverse and more firmly interconnected, was not a development unique to Afroeurasia. It also happened, though on a much smaller scale in terms of the number of people involved, in the Americas, Australia, and the Pacific basin. In Chapter 4, we visit these regions, which together encompassed more than half the globe.



## Key Terms

Bantu migrations 105	megalith 84	pastoralism 101
bronze age 81	Minoan civilization 82	shaman 87
clan 101	Mycenaean society 99	Shang dynasty 86
Hittite kingdom 93	New Kingdom 96	shifting agriculture 105
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## Change over Time

<b>4200 B.C.E.</b>	People take up horseback riding in the Pontic-Caspian steppes.
<b>4000 B.C.E.</b>	Austronesian-speaking farmers migrate from China to Taiwan, a dispersal point for further migrations into tropical Southeast Asia.
<b>3300 B.C.E.</b>	Indo-European herders begin migrating west, south, and east from Pontic-Caspian steppes.
<b>2400 B.C.E.</b>	Builders in Britain begin constructing Stonehenge, one of many megalithic sites along Europe's Atlantic rim.
<b>2100–1600 B.C.E.</b>	Walled cities emerge in the Oxus civilization in Central Asia.
<b>2000 B.C.E.</b>	Chariots become important vehicles in warfare and political ritual.
<b>2000–1450 B.C.E.</b>	Minoan civilization develops on Crete.
<b>Third and second millennia B.C.E.</b>	Bronze metallurgy spreads across Eurasia and northern Africa (bronze age).
<b>Third and second millennia B.C.E.</b>	Bantu farmers establish agrarian societies in equatorial Africa.
<b>1792–1750 B.C.E.</b>	King Hammurabi expands Babylonian rule in Southwest Asia.
<b>1750–1045 B.C.E.</b>	The Shang dynasty rules over China's first large state.
<b>1700 B.C.E.</b>	Indo-European-speaking herders enter South Asia, a period later mythologized in the <i>Rig Veda</i> .
<b>1650–1180 B.C.E.</b>	The Hittite kingdom (Hatti) thrives in Anatolia and Syria.

Please see end of book reference section for additional reading suggestions related to this chapter.

