CHAPTER 1

The Origins of Chinese Civilization:

Neolithic Period to the Western Zhou Dynasty (to 771 BCE)

From early times, Chinese myths about their origins focused not on gods but on a series of extraordinarily brilliant human beings who invented writing, agriculture, states, and the other key elements of their culture and society. Modern scholars, drawing on knowledge of geology, palaeoanthropology, and archaeology, not surprisingly construct very different stories of the origins of Chinese civilization. Their accounts do not slight agriculture, writing, bronze technology, and state formation, but usually differ from the traditional story in giving more weight to the role of ritual and religion in shaping the significant characteristics of Chinese culture and more attention to the physical environment. Equally important, they do not see Chinese history as a single-stranded story, centred on a royal line, but as a many-stranded one in which a great many distinguishable cultures interacted, some perhaps colonies of the more central state, others probably enemies. As more archaeological sites are excavated, the distortions of the single-stranded story become more apparent. Archaeology has also added greatly to our understanding of the early states in central China and what gave them advantages.

KEY DATES

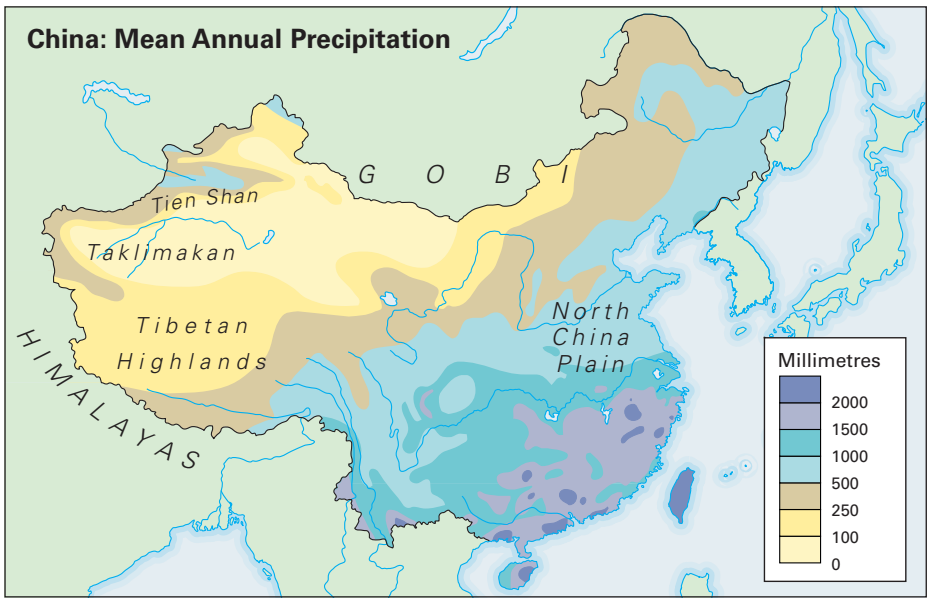
100,000 BCE	Palaeolithic cultures
7000	Neolithic villages, agriculture
3000–2000	Walled villages appear
2000	Erlitou culture
***c.* 1600–1045**	Shang dynasty
***c.* 1200**	Tomb of Lady Hao, chariots appear, sacrificial pits at Sanxingdui
1046	Zhou conquest
1045–771	Western Zhou dynasty
***c.* 1040**	Duke of Zhou
***c.* 1000–600**	*Book of Songs*
***c.* 900–800**	*Book of Documents, Book of Changes*
770	Zhou shifts capital east

Origin myths

Through most of the imperial period, literate Chinese had a 'great man' theory of how their civilization developed. Unlike other peoples who pointed to gods as their creators or progenitors, the Chinese attributed the inventions that step by step transformed the Chinese from a primitive people to a highly civilized one to a series of extraordinarily brilliant human beings. Fu Xi, the Ox-tamer, domesticated animals and invented the family. Shen Nong, the Divine Farmer, invented the plough and hoe. Huang Di, the Yellow Emperor, invented the bow and arrow, boats, carts, ceramics, and silk. He also fought a great battle against alien tribes, thus securing the Yellow River plain for his people. In China's earliest history, he was labelled the first of the five great pre-dynastic rulers, the last two of whom were Yao and Shun. Yao was credited with devising the calendar and rituals. Rather than hand over power to

Throughout history, Chinese civilization has had a strong association with agriculture. The earliest stages of Chinese culture developed in river valleys in which crops could be cultivated even with primitive techniques. Over time these early settlements spread broadly within the more temperate regions of eastern Eurasia.

his own less worthy son, he selected Shun as his successor, a poor peasant whose filial piety had been demonstrated by his devoted service to his blind father and evil stepmother. Shun not only became the next ruler but also married two of Yao's daughters. Despite their virtue, even Yao and Shun were unable to prevent floods, so Shun appointed an official, Yu, to tackle this problem. For over a decade Yu travelled through the land, dredging the channels that became the rivers of north China. So zealous was he that he passed his own home several times without pausing to greet his wife and children. Shun named Yu to succeed him. Yu divided the realm into nine regions and had bronze vessels cast to represent each one. When Yu died, the people ignored the successor he had chosen and turned to Yu's son to lead them, establishing the precedent of hereditary, dynastic rule. Yu and his son thus were the first two kings of the Xia dynasty, a dynasty which lasted through fourteen rulers. It was overthrown when King Jie, a tyrant, was deposed by a subordinate who founded his own dynasty, the Shang. This dynasty in turn lasted through thirty rulers until a self-indulgent and obstinate king lost the support of his nobles and people, making



Large differences in annual rainfall have shaped the crops that could be grown in different regions.

it easy for the armies of Zhou to come from the west to overthrow the Shang. The Zhou became the last of the three ancient dynasties (Xia, Shang, and Zhou).

These legends reveal how educated Chinese from the time of Confucius (*c.* 500 BCE) onward constructed 'the Central States' or, more loosely, China. To them, their land was defined by technology and statecraft – agriculture, writing, flood control, monarchy combining virtue and hereditary succession, and so on. They recorded the story of China as a single-stranded narrative or genealogy, centred on a succession of rulers; China's past was thus much like the past of a family that could be traced back through a single line of ancestors, one before the other.

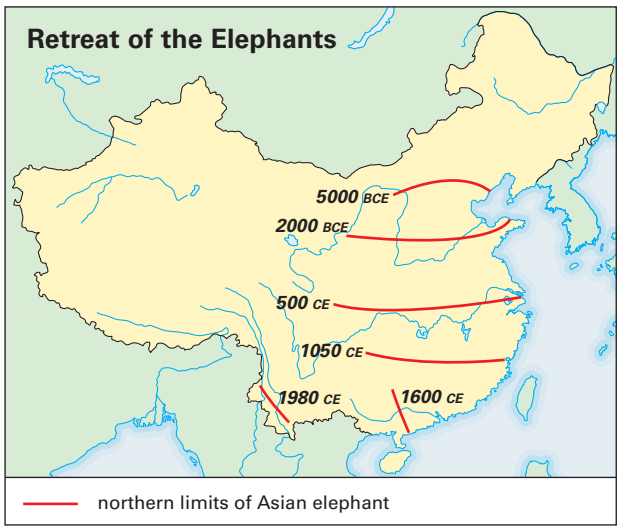
The natural environment

Chinese civilization developed in a particular geographical setting, the more temperate zones of eastern Eurasia, an area large and diverse enough to open many possibilities to early occupants, especially in the period after the last Ice Age (the Holocene, beginning *c.* 10,000 BCE) when the climate was warmer and more humid than today. The area south of the Great Wall – commonly called 'China proper' or 'inner China' – is more than 1,000 miles (1,609 km) north to south and east to west. This huge expanse of land is interlaced with mountain ranges which separate the more habitable river valleys from each other. It was in these river valleys that the first human settlements were established.

Two great river systems flow east through China proper, the Yellow River in the north and the Yangzi River in the centre. The Yellow River rises in the far western highlands, makes sharp turns through the northern deserts, then flows swiftly from north to south through a hilly area of loess – fine, wind-driven yellow earth that is highly fertile and easy to work even with primitive tools. At the southern end of the

loess highlands, the Yellow River turns abruptly eastward and spreads out, yellow with silt, between banks a mile or more apart. Finally, it traverses the whole of the alluvial plain and empties into the sea – though not always at the same place over the course of Chinese history. The other great river, the Yangzi, takes in water from many tributaries and carries a much greater volume of water. It rises in the Tibetan highlands, crosses the mountains encircling the Sichuan basin, moves through magnificent gorges with sheer cliffs 1,000 feet (300 m) or more in height, then flows eastward 1,000 miles (1,600 km) to the sea, each day delivering an average of ½ cubic mile (2.5 km³) of water into the Pacific Ocean, inspiring recent efforts to divert some of its flow north.

Today, the regions drained by these two rivers differ in soil, topography, temperature, and rainfall. The north is colder, flatter, and more arid; its growing season is shorter and its soil more alkaline, making it best suited to crops like wheat and millet. Once covered with hardwood forests of oaks and elms, it has been progressively deforested over time, reducing biological diversity. North of the Yellow River, rainfall is frequently too light for unirrigated agriculture; in many areas it averages less than 20 inches (508 mm) a year. Flood and drought recur with much greater frequency than in the south. The region drained by the Yangzi River is warmer and wetter than the north. Most of it stays green all year and receives more than 60 inches (1,520 mm) of rainfall annually, making it well suited to rice cultivation and to double-cropping. The Yangzi and many of the numerous small rivers criss-crossing the south are navigable, making the south a land suited to boat travel. In the north, by contrast, people travelled by land, and until modern times that meant travelling on foot, on the backs of horses or donkeys, or in carts drawn by animals.



Changes in climate, coupled with gradual deforestation and population growth resulted in slow shrinkage of the territory that could support elephants.

The environment in which Chinese civilization developed was biologically rich in both plant and animal species. In Neolithic times, elephants, tigers, rhinoceroses, deer, wild boars, and other large animals were to be found across the subcontinent. Pathogens were also a part of the natural environment: scientists believe malaria pathogens migrated with *Homo sapiens* out of Africa and have been found in Neolithic sites in south and southwest China.

Large stretches of land ill-suited to crop agriculture separated the Chinese subcontinent from Mesopotamia and the Indus Valley, the nearest sites of other early civilizations. Beyond China proper to the north is the steppe or grasslands of Inner Asia, a region even colder and more arid than north China, where animal husbandry is a more productive use of land than planting crops. Inner Asia was never populated primarily by sedentary farmers; instead it was the home of nomadic pastoralists, such as the Xiongnu and Mongols, China's traditional enemies. These steppes

Above
The Yellow River, shown here, acquired its name because the silt it carries gives it a muddy look. The earth of the north China plain is predominantly wind-borne and river-borne loess soil, which led early Chinese also to think of the earth as yellow.

Right
The well-watered hills and valleys of south China offer a much lusher landscape than the colder, drier north.

The geometric designs on the pots of the Yangshao culture (*c.* 3200–2500 BCE) often evolved from images of birds, fish, frogs, and other animals that may originally have had totemic significance. Drawn from many tombs, these pots were assembled to show the diversity of geometric designs used by potters.

Right
The first sign of textile production is the appearance of spindle whorls like these ones found at Hemudu, near Shanghai, which date from about 5000 BCE. These wooden and ceramic whorls were used to put a twist in hemp yarn, making it strong enough to use in weaving.

This stemmed cup excavated from Tai'an, Shandong province, has extremely thin walls, as thin as an eggshell. Such finely made black pottery is a distinctive feature of Dawenkou culture (*c.* 2300 BCE).

extend across Eurasia to the Ukraine, but China proper is cut off from these steppe lands on the northwest by vast deserts where nothing grows except in rare oases. South of these deserts and directly west of south and central China is Tibet, the 'roof of the world', whose high mountains were as unsuited to Chinese farming life as the deserts and grasslands to the north. The mountainous regions southeast of Tibet (modern Yunnan and Guizhou provinces) were not quite so impassable, but by the time there was much reason to cross through them into South and Southeast Asia, travelling by sea had become the more practical option.

To see the Chinese subcontinent as early Chinese saw it, we must erase from our minds all the maps we have seen showing it to occupy only a small fraction of the landmass of Eurasia, and far to one side at that. The Chinese subcontinent is so vast that by the first millennium BCE the Chinese thought of it as All-Under-Heaven (*tianxia*), the entire earthly stage on which human beings acted out the drama of civilization. Surrounding it were vast oceans, wild deserts, steep mountains – regions much less central to the project of civilization. How far they extended, no one knew for sure. But the location of the centre of civilization was not in doubt.

Prehistory

Archaic human beings, called *Homo erectus*, appeared on the Chinese subcontinent more than a million years ago, having gradually spread from Africa and west Asia during the Pleistocene geological era (the Ice Age). Even though no major glaciers extended into China, the average temperature was colder than in subsequent ages, and mammoth, elk, and moose roamed north China. Peking Man, discovered in the 1920s, is one of the best-documented examples of *Homo erectus*. He could stand erect, hunt, make fire, and use chipped stones as tools.

Modern human beings (*Homo sapiens*) spread out of Africa beginning about 100,000 years ago. They reached China via India and Southeast Asia about 50,000 years ago and after some interbreeding with the archaic humans known as Denisovans eventually supplanted earlier hominins. Over time, several major language families emerged among the hunter-gatherers in the Chinese subcontinent, among them Sino-Tibetan (the family to which Chinese belongs), Austroasiatic, Austronesian, Mon-Kmer, and Tai-Kadai. Language expanded symbolic capabilities, allowing the development of notions of gods and kinship, for instance.

Pottery and agriculture appeared about 7000 BCE in both north and central China and over the next several millennia gradually spread widely. With the cultivation of

crops came denser and more permanent settlements. Pottery facilitated settled agriculture because jars are excellent for transporting water, storing grain, and boiling grain. People also began making textiles. Tending crops, weaving cloth, and fashioning pots require different sorts of technical and social skills than hunting, so warriors probably had to share leadership with skilled and experienced elders, some of whom may have claimed expertise in the stars and matters we would class as religious. The village, a territorial unit, would have supplemented kinship-based forms of organization. Over the course of thousands of years more reliable food supplies led to slow population growth and expansion of the area under cultivation.

Neolithic cultures found in China can be divided by latitude into the Yangzi rice zone and the northern millet zone. In the Yangzi valley rice may have been cultivated as early as 6800 BCE, supplemented with fish and aquatic plants such as lotus, water chestnut, and caltrop. At Hemudu (*c.* 5000–4000 BCE), an early site south of Shanghai, Neolithic villagers built wooden houses on stilts and made lacquered bowls and blackish pottery with incised geometric designs. Basketry and weaving were highly developed; residents left behind spindle whorls used to twist yarns and shuttles used in weaving. Other wooden tools included hoes, spears, mallets, and paddles. The technological level of the Hemudu villagers, in other words, was already higher than that of most North American Indian tribes in the seventeenth century.

In Neolithic times distinct cultures had emerged in many regions of the Chinese subcontinent, but by the third millennium BCE borrowing had become so extensive that this central China region had already become a sphere of interacting cultures.

North China was too cold and dry for rice; two kinds of millet became the foundation of agriculture. In Cishan, an early site in Hebei dating to about 6500 BCE, millet was cut with stone sickles and stored in crude pottery bowls, jars, and tripods (three-legged pots), often decorated with cord or comb impressions. The loess soil common in north China made cultivation relatively easy for primitive farmers as it was easily worked and its loose structure allowed fresh nutrients to rise to the surface. Neither millet nor wet-field rice require that fields be periodically left fallow, because nutrients were easily transported both through loess soil and the water of paddy fields, allowing denser settlements than areas where fields need to be alternated. Without fallow fields available for pasturing animals, Chinese agricultural practice concentrated on crops. Still, domesticated dogs and pigs were found in both the north and south as early as 5000 BCE. By 3000 BCE, sheep (an import from the West) had become important in the north and water buffalo in the south.

In addition to this north–south division on the basis of subsistence technology, Chinese Neolithic cultures can be roughly divided east–west on the basis of artistic styles and burial practices by the middle of the Neolithic period. In the west, in the

Yangshao culture area (primarily Shaanxi and Gansu provinces from about 5000 to 3000 BCE) burials were generally simple and pottery was often decorated with painted designs. Grain jars decorated in the fully developed Yangshao style were exuberantly painted in red and black with spirals, diamonds, and other geometric patterns. The range of shapes, however, was relatively limited, confined mostly to utilitarian jars and urns. By contrast, in the east, over an area extending from Liao-ning province to Shanghai, pottery was rarely painted, but more elaborate forms appeared very early, including tripods and pedestalled bowls and cups. By the late Neolithic period (3000–2000 BCE), the finest wares, formed on the potter's wheel, were thin-walled with a burnished surface almost metallic in appearance. Many forms were constructed by combining parts, adding legs, spouts, handles, or lids. The frequent appearance of ewers and goblets in this region suggests rituals of feasting or sacrifice.

Jade object with a snake- or dragon-like body and pig-like snout, 6 inches (14 cm) long, excavated at Sanguan Dianzi in Liaoning province (Hongshan culture, *c.* 3500 BCE). Neolithic villagers, using sand or other abrasives, would have had to devote many days or weeks to fashioning this small ornament or talisman.

Even more distinctive of the eastern cultures is their investment in the production of finely worked jade. Jade is a very hard stone, formed when the crystals of rocks have been crushed over millions of years to make a matted configuration of molecules. As jade does not split or fracture easily, to shape it requires grinding with abrasive sand in a slow, labour-intensive process. The most spectacular discoveries of Neolithic jades are from the Hongshan culture of Liao-ning province (*c.* 3500 BCE) and the Liangzhu culture of Jiangsu/Zhejiang provinces (*c.* 2500 BCE) – areas that even 2,000 years later were not considered fully 'Chinese'. In the Hongshan area, jade was made into ornaments and small figurines of turtles, birds, and strange coiled animals. Some of these figurines were found at sites of stone ritual structures, suggesting that they had symbolic or religious meanings. In the Liangzhu area as well, jade was fashioned into ritual objects, and hundreds of *bi* (disks) and *cong* (tubes) have been excavated. A couple of thousand years later *bi* and *cong* were still used in rituals and were considered to have cosmological significance, the circles and squares representing heaven and earth respectively. Elsewhere in the eastern half of China jade objects were less distinctive, but jade axes, presumably used for ritual purposes, have been widely found.

The late Neolithic period (*c.* 3000–2000 BCE) was a time of increased social and political complexity as well as increased contact. Pottery shapes and designs spread into new areas; cooking tripods, for instance, spread west, while geometric decoration spread east. Graves show greater differences in status as elite burials became more elaborate. At one site, Dawenkou in Shandong province (*c.* 4600–2600 BCE),

Left
The most spectacular Neolithic jade discoveries are from the Liangzhu culture (*c.* 3300–2250 BCE). This grave excavated at Sidun in Jiangsu province contained long rows of twenty-five *cong* (tubes with cylindrical bores and squared sides) and thirty-three *bi* (discs). Archaeologists speculate that the individual buried there was a priest interred with the treasures he used in ceremonies.

Below
Skill at precise measurement and planning was needed to achieve the highly regular motifs on this jade *cong* tube found at Liangzhu. The prominent eyes and symmetrical design suggest connections with the famous *taotie* design found on bronzes a thousand years later.

some of the dead were buried in coffins and occasionally a wooden chamber was built to line the burial pit, giving a further layer of protection. The richest graves at this site contained fifty, sixty, or even well over a hundred objects, such as necklaces and bracelets made of jade, stone, or pottery beads. One unusual feature of the Dawenkou culture is that many people had their upper lateral incisors extracted, a practice Chinese authors in much later times associated with non-Chinese.

A further sign of increased social and political complexity is the appearance of large walled settlements, so big that some scholars think we should recognize these cultures as early states. In the southeast, near Hangzhou, Liangzhu had walls more than 4 miles (6.5 km) long, pierced with several water gates and criss-crossed with canals, probably a main means of transport. Nearby was a dam that controlled flooding and created a large reservoir. Although no metal or writing has been found at the site, the level of craftsmanship of the jades found in tombs was exceptionally high, suggesting the power of the elite to control both resources and labour and monopolize objects of religious significance. Liangzhu began to decline, however, after about 2500 BCE.

The stone ruins at Shimao, dating to about 2000 BCE, include stones carved with images of human faces.

Another huge settlement has recently been discovered in northern Shaanxi, at Shimao in the loess highlands, an unexpected location. This site, occupied from 2300 to 1900 BCE, had walls 3½ miles (5.5 km) long, made of stone rather than the rammed earth used at other settlements. Another exceptional feature, undoubtedly reflecting its northern location is the presence of bronze knives, arrowheads, and ornaments, similar to those found on the steppe in the same period. But Shimao was also in contact with settlements to the south and east and has ceramics and jades much like ones found there. Another striking feature is the discovery of pits containing human skulls under the walls of the main gate – a level of human sacrifice beyond what has been found at other sites of the period. Sacrificing captives may have been seen as a way of pleasing ancestors or gods; it probably also strengthened the political power of the elites who wielded the power of life and death so dramatically.

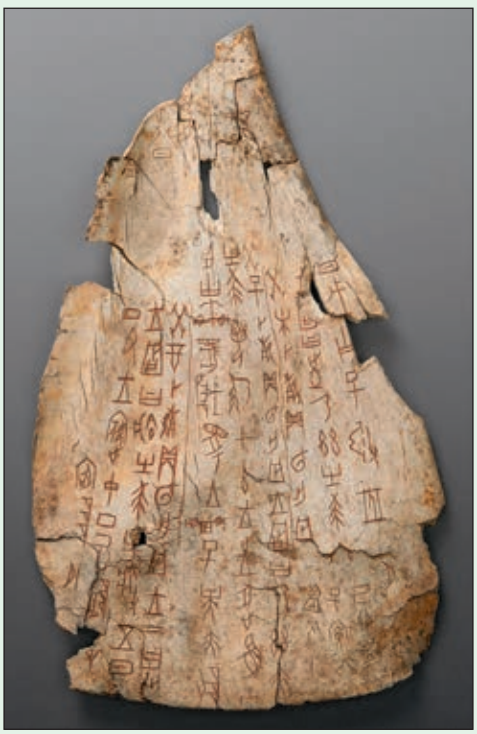
Much closer to later Bronze Age cities was Taosi (2300–1900 BCE) in southern Shanxi. It is especially notable for a huge semicircular ritual structure thought to be designed for viewing shifts in where the sun rose relative to the peaks of the mountains in the distance, making possible determination of the solar year. Taosi was a highly stratified society. In a nearby cemetery with more than 1,000 graves, nine individuals were given elaborate burials, with wooden coffins and more than a hundred grave goods each, including musical instruments, alligator-skin drums, stone chimes, jades, and jugs. Some eighty medium-sized graves had similar

Ancestors

The practice of burying the dead with containers of food and drink or other objects needed by the living was in historical times associated with beliefs about the mutual dependency of the living and their dead ancestors. The dead needed the living to supply them with offerings in the tomb and also through sacrifices after burial, while the living needed to please their ancestors so that they would protect them or at least do them no harm. Neolithic burials incorporating both utilitarian containers for food and drink and precious objects like jade and cowry shells suggest that such beliefs go back to prehistory. The oracle bone inscriptions of the late Shang period give fuller evidence of both ideas and practices.

Shang kings communicated with their ancestors through sacrificial rituals and through divination. The most common technique of divination involved the diviner applying a glowing metal poker or other heat source to turtle shell or cattle scapula. The resulting heat-stress crack was interpreted as an auspicious, inauspicious, or neutral response to a question or statement that the diviner had posed. Inscriptions on these oracle bones show that ancestors were often asked about sacrificial offerings – for instance, whether an offering of a cow would be appropriate. Ancestors could be asked other questions as well, such as whether they were causing the king's toothache or dream. Recent discoveries show that members of the Shang elite other than the king also used oracle bones to communicate with their ancestors.

Ancestors were no less central to the religious imagination in Western Zhou times. Both the Zhou king and lords belonging to the royal clan had ancestral temples where they made sacrifices to the royal ancestors. Bronzes were often inscribed with reports to ancestors detailing the achievements of their descendants. The *Book of Documents* portrays the Duke of Zhou as having a deep belief in the power of the Zhou royal ancestors to affect the welfare of both their descendants and the whole country. When his brother the king was ill, the duke performed an open-air ceremony, addressing his ancestors and offering to give up his own life to serve them in the netherworld if they would spare the king: 'Take me as a substitute for the king. I was kind and obedient to my father. I have many talents and skills and can serve the ghosts and spirits.' If this text accurately reflects early Zhou belief, family ethics and the ancestral cult were already merged: ancestral rites had a moral cast, reflecting notions of filial piety of sons toward fathers, and patterns of authority within the family had a religious cast, as parent–child relations would in time become ancestor–descendant ones.



Inscribed cattle scapula excavated at Anyang. The king Wu Ding (*c.* 1250 BCE) had this bone used several times to make predictions (such as 'in the next ten days there will be no disasters') and to record what actually happened after the divinations had been made. Among the events recorded were a death and a chariot accident.

Sacrificial odes in the *Book of Songs* portray ancestral rites in early Zhou aristocratic circles as emotionally charged rituals of great symbolic power. The ancestor was represented by a human impersonator, often a grandson, who acted as a medium so that the ancestral spirit could be present among those sacrificing to him. The impersonator was offered many glasses of wine, presented with the best available food, and entertained by singing and dancing.

The descendants, by joining the feast, were in communion with the ancestor present in the body of the impersonator. The odes often imply reciprocity: because the rites are performed meticulously and without mistake, the ancestors confer long life and many descendants.

objects in smaller numbers. More than 600 graves were simple burials with neither coffins nor grave goods.

A striking feature of each of these large settlements – Liangzhu, Shimao, and Taosi – is that after a few centuries they went into decline. In some cases, environmental stress may have been a factor, with the population leaving as their way of life became more difficult to maintain. Military defeat by other regional powers – perhaps resulting in the deportation of a significant share of the population – may also have led to the near abandonment of some of these large settlements.

All of these Neolithic communities contributed to the development of Chinese civilization, but we should not think of them as all proto-Chinese. Probably only those in the Central Plains spoke an early form of Chinese. Even 1,000 years later, many of the regions with these large settlements were considered 'barbarian' by those who left written records in Chinese – the only written records we have. Geneticists and historical linguists see the cultures of the Yangzi valley as likely ancestors of the southern minorities of contemporary China, speaking Austronesian, Mon-Kmer, and Tai-Kadai languages. In a similar way, sites such as Hongshan and Shimao, well north of Shang and Zhou territory, were probably populated by ancestors of northern peoples.

Bronze Age

Some time soon after 2000 BCE there emerged out of the diverse Neolithic cultures in the north China plain more complex Bronze Age civilizations marked by metal-working, class stratification, and hierarchical polities we can call states. The earliest stages of this transition are traditionally associated with the Xia dynasty, but no site that might possibly be Xia has yielded written documents. Archaeologists refer to the early states that emerged by the sites where they were first identified, Erlitou and Erligang, in the region of modern Luoyang and Zhengzhou, not far south of the Yellow River in Henan. Bronze production was less advanced in the Erlitou stage, and only a few locally produced bronze objects have been found in Erlitou tombs, mostly cups. The Erligang stage has more and larger settlements. Especially notable are the enormous walls of Zhengzhou's inner city, 60 feet (18 m) wide, 30 feet (9 m) high, and more than 4 miles (6.5 km) long. They would have taken ten to twenty years to complete, even with 10,000 labourers working to move and ram the earth. Some labourers were clearly slaves, others probably closer to serfs. There is also some evidence of human sacrifice at Zhengzhou. Coercion, backed by violence, was an essential element of this early state.

The cultural influence of the two great states of Bronze Age China, the Shang (*c.* 1600–1050 BCE) and the Western Zhou (*c.* 1050–771 BCE) extended from the Yellow River valley into the Yangzi River valley.

The abrupt appearance of the light, spoke-wheeled war chariot in about 1200 BCE suggests contact with bearers of Indo-European culture – similar chariots with large, many-spoked wheels had been in use in the Caucasus for several centuries. In late Shang and Zhou warfare, chariots came to play such an important role as symbols of rulership that they were sometimes buried with their owners in their graves. This burial pit, unearthed at Liulihe in Hebei province and dating from the Western Zhou period, contains the remains of horses and chariots.

It is only at the next stage, known from the important site at Anyang, that we have written documents and clear linkage to the transmitted account of the Shang dynasty (*c.* 1600–*c.* 1045). These documents confirm the list of kings transmitted in later histories and show that the throne passed from brother to brother and son to son along patrilineal lines, never to daughters or sisters. The Shang was said to have had five successive capitals, and several large settlements of Shang date have been discovered, including Zhengzhou, possibly an early cult centre, and Anyang, from which the Shang kings ruled for more than two centuries. Shang civilization was not as densely urban as that of Mesopotamia, but these cult centres were large and complex. At their core were large palaces, temples, and altars constructed on

This tomb (Number 1001) of a Shang king is one of eleven large tombs and over a thousand small graves excavated at Anyang, all of which are oriented north–south. This tomb was robbed in ancient times, perhaps even by the Zhou invaders, but when excavated it contained numerous stone, jade, shell, bone, antler, tooth, bronze, and pottery artefacts. As the pit is more than 30 feet (10 m) long and 60 feet (18 m) deep, moving the earth to create the tomb must have required a huge mobilization of labour.

rammed-earth foundations, in one case 26 by 92 feet (8 by 28 m) in size. Surrounding the central core were industrial areas occupied by bronze workers, potters, stone carvers, and other artisans. Further out were small houses built partly below ground level and, beyond them, burial grounds.

The Shang state did not control a very large part of China proper – their domain probably did not even extend into all of Henan, Anhui, Shandong, Hebei, and Shanxi provinces, and there were smaller polities viewed as enemies within those regions as well. The influence of Shang culture, however, extended far beyond its territorial control, with its technology and decorative motifs adapted by peoples throughout the Yangzi valley.

The inscribed oracle bones found at Anyang present a picture of an embattled central power, allied with some local powers and at war with others. The king sent out armies of 3,000 to 5,000 men on campaigns. Over time, vassals became enemies and enemies became allies. War booty provided the king with resources: captives could be made into slaves or slaughtered as sacrificial victims. Even though agricultural technology had not advanced much since pre-Shang times, military technology had. Bronze-tipped spears and halberds, composite bows, and

horse-drawn chariots provided significant advantages in warfare to the warrior elite who possessed them.

Contact with cultures of the steppe is evident in the spread of wheat and horse-drawn chariots during the Shang period. Horses were domesticated on the southern Russian steppe by about 4000 BCE but spread to other areas only slowly. Chariots first appeared near the Caspian Sea around 2000 BCE. The chariots that reached Shang by 1200 BCE were much like ones used earlier by the Hittites of ancient Anatolia but bigger and with more spokes. Pulled by two or four horses, the chariot allowed commanders to supervise their troops and gave archers and soldiers armed with long halberds more mobility. Chariots were also used in royal hunts, grand outings *cum* military exercises that might last months. Deer, bears, tigers, wild boars, elephants, and rhinoceroses were plentiful, indicating that there was considerable forest cover in the north China plain.

Shang kingship, however, was not based simply on military supremacy but was firmly grounded in religion and ritual. The king played a priestly role during his frequent travels through the realm, for he often stopped to make sacrifices to local spirits such as the Yellow River, the Taihang Mountains, and the Wind of different directions. The king was also the priest in the worship of the royal ancestors, a role that justified his political powers. Among the dead his patrilineal ancestors were best able to intercede with the high god Di, the Lord on High, who could grant bountiful harvests, lend divine assistance in battle, and send rain, thunder, wind, drought, or epidemics.

To discover the wishes of gods and ancestors, the king employed professional diviners to prepare the bones used in divinations. The diviners posed yes-and-no

Headless skeletons of human sacrificial victims in Tomb 1001 at Anyang. Textual evidence of the practice of human sacrifice has been confirmed by discoveries of clearly aligned headless skeletons like these. The heads were found elsewhere in the same tomb.

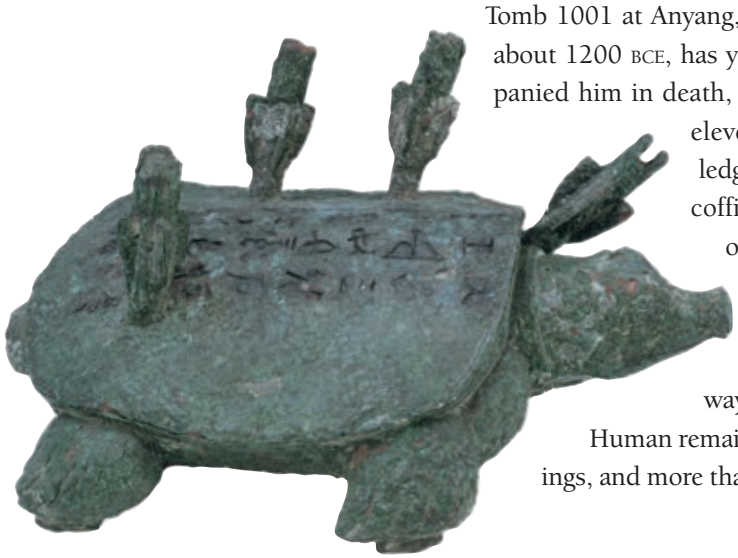
questions, finding answers in the directions of the cracks produced by heat applied to the bones. The king himself interpreted the meaning of the heat-induced cracks, some of his predictions sounding almost like magical incantation or prayers – 'It will rain', or 'During the next ten days there will be no disasters.' Some divination texts are very short, but others give more detail:

> Crack-making on *guisi* (day 30), Que divined: 'In the (next) ten days there will be no disasters.' (Prognostication:) The king read the cracks and said: 'There will be calamities; there will be (someone) bring alarming news.' (Verification:) When it came to the fifth day, *dingyou* (day 34), there really was (someone) bringing alarming news from the west. Zhi Guo reported and said: 'The Tufang have attacked in our eastern borders and have seized two settlements. The Gongfang likewise invaded the fields of our western borders.'

These Shang divination texts are our earliest Chinese historical documents, giving us the names of identifiable people, indications of their thoughts and actions, and events that were meaningful to them.

As in many other societies, both animals and human beings were sacrificed to royal ancestors and to various nature gods. One oracle bone mentioned making offerings to 3 royal ancestors of 100 cups of wine, 300 sheep, cattle, and pigs, along with 100 Qiang prisoners. The principles underlying sacrifice, in China and elsewhere, are reciprocity and feeding: we make offerings to those from whom we want help, and we feed rich foods to the god or ancestor to keep him strong. Shang kings frequently offered sacrifices of human beings, sometimes dozens at a time. Subordinates would also voluntarily 'accompany' a superior in death, showing that they felt obligations tantamount to servitude to those above them. At the early or middle Shang elite burials at Zhengzhou, one, two, or three sacrificial victims were often buried between the inner and outer coffin chambers or on the roof of the outer chamber.

By the late Shang, many more people accompanied the rulers into their graves. Tomb 1001 at Anyang, which may be for the king Wu Ding who reigned about 1200 BCE, has yielded the remains of ninety followers who accompanied him in death, seventy-four human sacrifices, twelve horses, and eleven dogs. These victims were placed in the shaft, ledges, and ramps. Some followers were provided with coffins and bronze ritual vessels or weapons of their own, some (generally female) with no coffins but with personal ornaments; others were provided with no furnishings and were beheaded, cut in two, or put to death in other mutilating ways. Human sacrifice was not limited to royal tombs. Human remains have been found under the foundations of buildings, and more than 2,500 sacrificial pits have been found in the royal



This bronze turtle, 8½ inches (22 cm) long, has arrows piercing its shell and a long inscription on its plastron. It records that the Shang king had shot a turtle while floating in the Huan River and later gave it to one of his officials. The official commemorated the gift by having this bronze model cast.

Lady Hao's Tomb

The ancient Chinese did not invest in the construction of stone monuments; there are no Chinese equivalents of the pyramids or the Parthenon to make later visitors ponder their greatness. What comes closest in terms of expenditure and desire for permanence are the vast tombs of the Shang royal family, the splendours of which were hidden from public view underground.

The only royal Shang tomb never to have been robbed before it was excavated is Tomb 5 at Anyang for Lady Hao (*c.* 1250 BCE). It is one of the smaller tombs, measuring about 13 by 18 feet (4 by 5.5 m) at the mouth and about 25 feet (7.5 m) deep, and is not in the main royal cemetery; nonetheless, it was filled with an extraordinary array of sacrificial goods.

Human sacrifice is evident (the sixteen human skeletons include males and females, children and adults), but not on as great a scale as some of the larger tombs. Rather the inclusion of a profusion of valuable objects is the most striking feature of this burial. In this tomb were 460 bronze objects (including more than 130 weapons, 23 bells, 27 knives, 4 mirrors, and 4 tigers or tiger heads), nearly 750 jade objects, some 70 stone sculptures, nearly 500 bone hairpins, more than 20 bone arrowheads, and 3 ivory carvings. In addition, there were nearly 6,900 cowry shells, possibly evidence that these shells were used for money. Most of these items are distinctly metropolitan in style.

Visitors today can gaze at Fu Hao's burial chamber with many of the original objects in place, including sacrificial remains.

The 2¾-inch (7-cm) jade figure was both among the goods in Lady Hao's tomb. The figure kneels in the formal posture adopted in China before the chair came into common use more than 2,000 years later.

The 200-odd bronze vessels constitute the largest and most complete set of ritual vessels unearthed from a Shang grave. More than twenty types are represented, including goblets, tripods, and basins. Vessels for holding wine predominate, suggesting that as a last step at the funeral ceremonies mourners made a libation of wine and tossed in the wine cup as well as the wine. Some sixty bronze vessels have Lady Hao's name inscribed on them. Striking among them are ones in the form of real animals, possibly reflecting influence from the south where similar forms had been produced earlier.

The artefacts in this tomb do not provide much evidence of what Lady Hao was like as a person. Probably she is the same Lady Hao mentioned in many oracle bone inscriptions as one of the many wives of the king Wu Ding (*c.* 1200 BCE). The king made divinations concerning her illnesses and pregnancies. From these inscriptions we also know that she took charge of certain rituals and had a landed estate outside the capital. She even led military campaigns, once with 13,000 troops against the Qiang to the west, at other times against the Fufang in the northwest, the Bafang in the southwest, and the Yi in the east.

cemetery grounds, many with dozens of victims, some with hundreds, evidence that sacrificial offerings continued to be made to royal ancestors in subsequent generations long after their deaths.

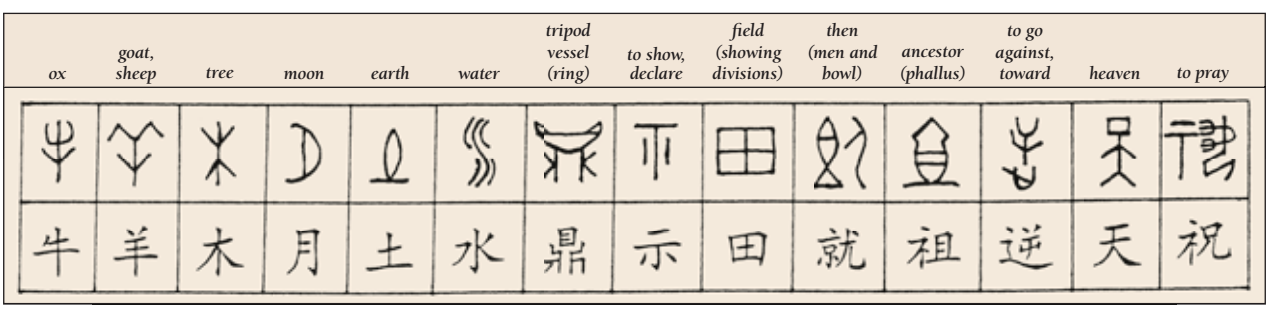
What of the people who built and furnished the elaborate tombs? Craftsmen who worked in stone, bone, bronze, and clay were concentrated in certain sections of the city. They were probably not among the huge levies of labour mobilized to build the rammed earth city walls, dig the great tombs, open new lands, and fight in wars. Farmers subject to those levies continued to grow millet and rice, and by the end of the Shang also wheat and soybeans, still using stone tools and supplementing their diet by hunting and fishing.

Writing

The organizational capabilities of the Shang government probably should be credited in part to the perfection of a system of writing. Writing is a process that, once adopted, has profound effects on social and cultural processes. With it comes list-making and efforts to organize thoughts that facilitate higher-order mental processes of abstraction and theorizing.

Exactly when writing was first used in China is not known since most writing would have been done on perishable materials like wood, bamboo, or cloth. Symbols or emblems inscribed on late Neolithic pots may have some connection to later Chinese graphs, and early Shang bronzes sometimes have similar symbols cast into them. From oracle bone inscriptions, there can be no doubt that the Shang used a language directly ancestral to modern Chinese and, moreover, used a written script that evolved into the standard Chinese logographic writing system still in use today. From this point on, a literate elite associated with state-level polities begins to give us their version of what is important by producing the documents that colour how we see what lies beyond them – not only other peoples they considered to be foreign, but also other elements in their own society, ranging from slaves to rival elites.

Of the thousand-odd characters that have been deciphered, some are pictographs that visually represent a thing or an idea, some are borrowed for their sounds, and others were created by combining two elements, one giving meaning, the other sound. It is essentially accidental that the Shang developed a logographic script rather than a phonetic script like most of those that eventually became dominant



The modern Chinese writing system (lower row) evolved from the script employed by diviners in the Shang period (upper row).

elsewhere in Eurasia. Because the Chinese logographic script did not change to reflect differences in pronunciation, the literate elite easily identified with others whose writings they could read, including predecessors who lived many centuries earlier and contemporaries whose spoken languages they could not comprehend.

Bronzes

As in many other parts of the world, the development of more complex forms of social organization in Shang China was tied to perfecting metal-working techniques. The small bronze objects found in late Neolithic sites in the northwest suggest that some form of knowledge of metal probably came from further west. Bronze vessels appear first from about 1700 to 1600 BCE at Erlitou. The extreme thinness of some of the vessels found there (in one case only 1 mm thick), coupled with features of their shapes, such as sharp angles and crimped edges, suggest the possibility of imitation of sheet-metal prototypes. Shang bronzes show further development, and by late Shang times huge bronze vessels were produced, one from about 1200 BCE weighing more than 1,900 pounds (862 kg).

When compared to bronze objects made in other early societies, Shang bronzes stand out for their quantity, their decoration, and the ways they were manufactured. The great bulk of the surviving Shang bronze objects are cups, goblets, steamers, and cauldrons, beautifully shaped and decorated, in a great variety of shapes and sizes, presumably made for use in sacrificial rituals. Some distinctive Neolithic pottery forms, such as tripods, were reproduced in Shang bronzes, showing links between the artistic tradition of the Shang and the previous cultures of the area. The complexity of design of Shang bronzes was achieved through mould casting and prefabrication. Thus legs, handles, and other protruding members were cast first and then the body was cast on to them.

The bronze vessels produced in Shang China reveal much about Shang culture and society. As many as 200 vessels could be interred in a single grave. Their numbers testify to the willingness of the Shang elite to devote huge quantities of a valued resource to ritual uses. Trees had to be cut down in very large quantities to feed the foundries' fires. Shang rulers also had to mobilize men and material to mine, transport, and refine the ores, to manufacture and tool the clay models, cores, and moulds used in the casting process and to run the foundries. Additionally, the history of the decoration on Shang bronzes provides evidence of the dynamics of cultural change during Shang times. The animal mask or *taotie* was the predominant decoration throughout, but its appearance changed markedly over time (see pages 38–39). Moreover, in some periods patrons were more open to borrowing new forms from their neighbours; at other times they turned back to old forms and motifs, reworking them, presumably finding something admirable in their antiquity.

Bronzes did not, of course, constitute all of Shang art, even if they have survived the best. Finely worked jade objects, many perpetuating Neolithic forms, such as *cong*, *bi*, knives, and axes, continued to be included among the objects in opulent

burials. Silk was already being woven, and traces of elaborate silk weaves have been found. Carved wood and ivory, sometimes inlaid with turquoise, have been discovered, as have traces of lacquer decoration. All this suggests that the Shang kings and probably other noble families lived surrounded by objects of great beauty.

The spread of Shang bronze technology did not necessarily carry with it Shang religious ideas or other elements of their culture. In 1989, a rich tomb was found at Xin'gan in central Jiangxi, far from direct Shang control; it is notable for the large number of bronze tools and weapons and above all for four large bronze bells, larger and finer than any found in the north. Sets of tuned bells have been found in many other sites south of the Yangzi, suggesting that bell music played a bigger role in court ceremony in that region than in central Shang territory. Further from Anyang, an even more distinct bronze culture was discovered at Sanxingdui in Sichuan province in 1986. Two sacrificial pits at this site were unlike anything found earlier. One contained about 300 gold, bronze, jade, and stone objects along with 13 elephant trunks and nearly 100 cubic feet (3 m^3) of burnt and broken animal bones. The most astonishing finds were life-sized bronze heads with angular facial features and enormous eyes. The second pit, about 100 feet (30.5 m) away, contained a life-sized statue and forty-one bronze heads of varying size, some with gold masks, perhaps originally attached to wooden statues. As most objects had been burnt and broken, archaeologists infer that these two pits are the remains of large-scale sacrificial ceremonies held about a generation apart. There is no evidence of human remains in these pits, which has led to speculation that the bronze heads and the statue stood in for the sacrifice of human beings. Further archaeological investigations of the Sanxingdui region have revealed that these sacrificial pits were located within a large walled city. This city was abandoned about 1000 BCE, perhaps because of flooding. The existence of sites like Sanxingdui and Xin'gan reminds us of the power of those who leave written records to shape how we understand the past. Shang rulers saw their state as the central one, but there is no reason to assume that the ruling elite of Sanxingdui or Xin'gan did not have similar conceptions of themselves.

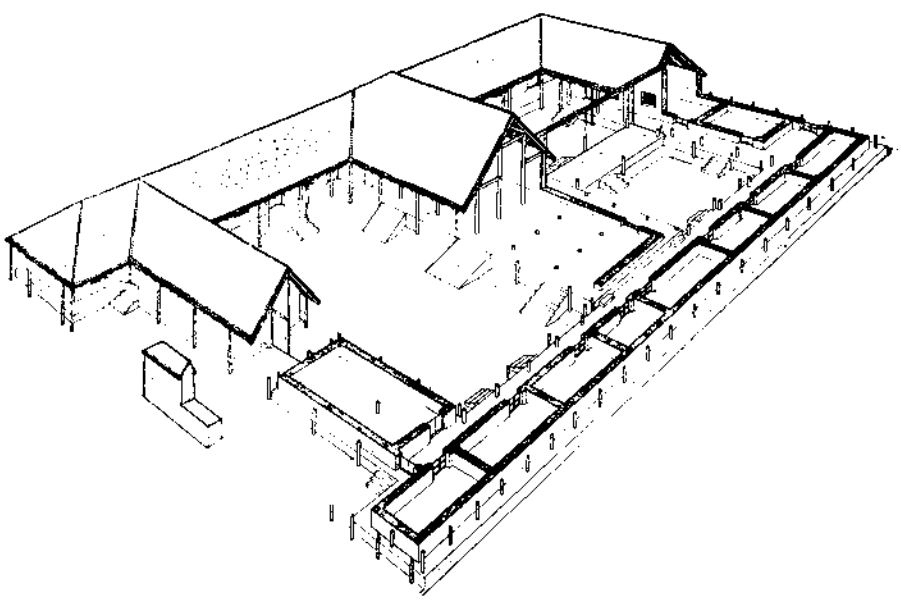
Regions beyond Shang political control were not necessarily backward, but without written records we know little of them. This 18 inch/46 cm-tall bronze head was excavated at Sanxingdui, Sichuan province. It was discovered in one of two pits filled with bronze heads, masks, elephant tusks and other objects that reveal a technologically advanced culture whose religious practices differed from those of the Shang and early Zhou.

The Zhou conquest

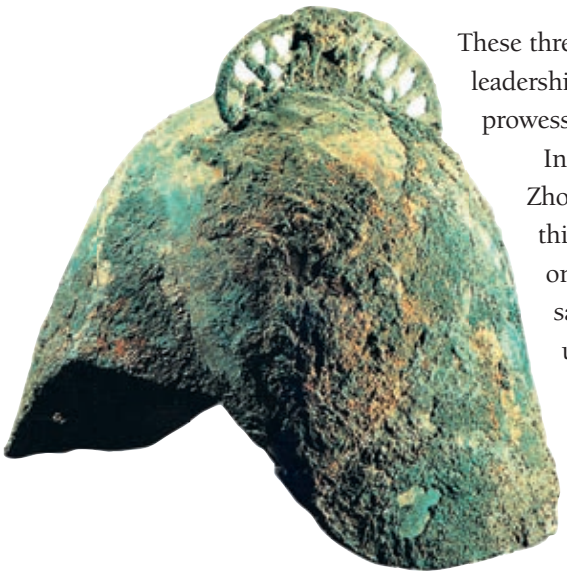
How directly or tightly the Shang controlled its territories can be only dimly discerned from oracle bones and archaeological excavations. Certainly the Shang campaigned constantly against enemies, perhaps especially after 1100 BCE when the climate turned colder and drier. To the west were the Qiang, perhaps speaking a proto-Tibetan language. The Shang raided Qiang villages for captives and might swoop down when their wheat fields ripened to steal the harvests. Between the Shang capital and the Qiang was a frontier state called Zhou, which seems both to have inherited cultural traditions from the Neolithic cultures of the northwest and to have absorbed most of the material culture of the Shang. In 1046 BCE, the Zhou rose against the Shang and defeated it in battle. The first phase of the Zhou period is described as the Western Zhou (1046–770 BCE), since the capital was in the west, in the Wei River valley of Shaanxi province.

The early Zhou is the first period from which texts have been transmitted. The *Book of Documents* (*Shujing*), later deemed one of the Confucian Classics, purports to contain texts from the beginning of the Zhou, giving us the Zhou version of their history. These documents describe the Zhou conquest of the Shang as the victory of just and noble warriors over decadent courtiers led by a dissolute, sadistic king. The last Shang ruler, a spokesman for Zhou proclaimed, was licentious and dissolute, indifferent to the misery of the people, arousing the anger of the deity Heaven. Besides these transmitted texts, thousands of inscriptions on ritual bronzes have survived from the early Zhou period. Particularly useful are inscriptions that record benefactions from the king and mention the services that had earned the king's favour.

In these early texts, three Zhou rulers have been given great credit for establishing a stable state. King Wen (the 'Cultured King') formed alliances with neighbouring states and tribes in preparation for attacking the Shang. His son King Wu (the 'Martial King') built a new capital further east and launched the expedition that succeeded in defeating the Shang army and taking its capital. Rather than kill all members of the Shang royal house, he left a son of the last king as nominal ruler of the city to continue sacrifices to his powerful ancestors. King Wu died young, only six years after the conquest, and his brother, the Duke of Zhou, acted as regent for King Wu's young son. The Duke of Zhou extended and consolidated the new territories, conducting a series of expeditions eastward to bring much of the Yellow River plain under Zhou control, destroying in the process, it is said, fifty states and driving away the tigers, leopards, rhinoceroses, and elephants. He built a new city at modern Luoyang in Henan province from which to govern the eastern territories and moved former Shang nobles to this new city. When the young king came of age, the Duke of Zhou relinquished his powers and became at once the most reverent of subjects.



Remains of rammed-earth foundations at Fengchu in Shaanxi province have allowed archaeologists to reconstruct the design of this early Zhou palace or temple. The compound was 145 by 105 feet (44 by 32 m), the main hall in the centre 56 by 20 feet (17 by 6 m), and the whole was built around courtyards in the fashion typical of later Chinese architecture.



Bronze was used not only for ritual objects, but also for more practical things such as weapons and armour. This early Zhou helmet was probably actually used in warfare, as it was unearthed alongside weapons in the Beijing area.

These three early Zhou rulers thus became emblematic figures, representing the leadership qualities required for the establishment of enduring states: military prowess, the morally based civil arts, and loyalty.

In transmitted texts and bronze inscriptions alike, the victory of the Zhou kings was attributed to the favour of the deity Heaven. According to this theory of the Mandate of Heaven, a king and a dynasty could rule only so long as they retained Heaven's favour. If a king neglected his sacred duties and acted tyrannically, Heaven would display its displeasure by sending down ominous portents and natural disasters. If the king failed to heed such warnings, Heaven would withdraw its mandate, disorder would increase, and Heaven would eventually select someone else upon whom to bestow a new mandate to rule. Moral values were thus built into the way the cosmos worked, and history could be read as a mirror of Heaven's will. Because these ideas do not seem to have been part of Shang cosmology, it may be that they were elaborated by the early Zhou rulers as a kind of propaganda to win over the conquered subjects of the Shang. Whatever their origin, the ideas proved compelling and remained a central tenet of Chinese political cosmology until modern times.

The early Zhou was a period of great territorial expansion. From their capital in the Wei River valley, the Zhou rulers sent out relatives and trusted subordinates with troops to build walled garrisons and organize the clearing of land for farms. The lords created in this way were given considerable autonomy to rule the distant territory as they saw fit, though the king did assign each of them an inspector and expected them to make visits to the capital from time to time. Moreover, not all land was parcelled out; the kings also set up a central proto-bureaucratic administration that made extensive use of written records. In addition, the kings maintained a royal army that fought alongside warriors contributed by the regional lords.

Lineage was central to the Zhou power structure, and familial ethics of obedience, respect, and kinship solidarity underlay the relations between the king and the lords. The king bore the title 'Son of Heaven' and had the unique right to make sacrifices to Heaven at the capital. He also presided at rites to royal ancestors, in much the way as the Shang kings. Lords conducted similar sacrifices to the first holder of their fiefs as well as their more recent ancestors. Marriage among patrilineal relatives was not practised, so the king and lords of his clan had to marry with the families of lords of other clans (with other surnames), linking virtually all of the upper ranks of the nobility through either patrilineal or affinal kinship.

The Zhou king travelled frequently, making visits to his lords. Their interaction is captured in many of the inscriptions cast into bronze vessels by the lords, which often quote the king's words. One early Zhou inscription, for instance, has the king praise his own ancestors, then urge the recipient to emulate his own grandfather in taking charge of weaponry: 'From morning to night assist me, the One Man, in taking care of the four quarters. Go on an inspection tour of the peoples and territories

received by the former kings.' The inscription lists the gifts conferred by the king, ranging from clothing and horses to more than 1,000 people, including barbarian officers, serfs, and state officers.

By 800 BCE there were around 200 lords with domains large and small, of which only about 25 were large enough to matter much. Each lord appointed various officers under him, men with ritual, administrative, or military responsibilities, and these posts and the associated titles were often passed down within a family. In this way each domain came to have aristocratic families with patrimonies in offices and associated lands. Society was conceived in strongly hierarchical terms, ranging from the Son of Heaven, through the lords, to the great ministers, other officers, the knights and court attendants, and finally the ordinary farmers who generally seem to have been attached to domains in a serf-like manner.

Along the Zhou borders and interspersed among the Zhou domains were foreign peoples who resisted Zhou hegemony. The Zhou fought constantly against such groups, such as the Yi of the Huai River region and the Xianyun of Shaanxi. Chinese writers of the time grouped them into four categories by direction: the Yi in the east, the Man in the south, the Di in the north, and the Rong in the west. These outsiders were not necessarily primitive tribesmen. In the south, along the Yangzi, several political entities had come into existence independently of the Zhou – the states of Chu, Wu, and Yue. Their rulers called themselves kings, but by the end of the eighth century BCE the Zhou kings looked on them as peripheral parts of the Zhou order.

Ancestor worship remained a fundamental element of the religious landscape, but there were signs of change in other regards. The scale of human sacrifice at burials declined drastically, suggesting that ideas about death and the afterlife were changing. The practice of voluntary accompanying in death continued, but on a considerably smaller scale. Divination continued but the use of oracle bones declined and a new system gained ground, one laid out in the *Classic of Changes* (*Yijing*) which involved interpretations of randomly selected sets of broken and unbroken lines.

Inscribed bronze ritual vessel – unearthed in 1967 from a storage pit in Fufeng, Shaanxi province – 18.5 inches (47 cm) in diameter. The 284-character inscription on this bronze, composed shortly before 900 BCE by Historian Qiang, relates the major events under the six kings from Wen to Mu, such as campaigns against various 'barbarians', as well as the deeds of Qiang's own ancestors in the service of these kings.

Zhou art also shows important shifts from Shang traditions. Large bronze ritual vessels continued to be produced in great abundance in early Zhou times, probably often by the same craftsmen who had served under the Shang rulers. Nevertheless, within a couple of generations of the conquest of the Shang, the dominant motif on Shang bronzes, the animal mask or *taotie*, all but disappeared. Birdlike imagery became more important, along with purely ornamental decorations, such as spikes and ribs. The use of bold ribs and spikes suggests that vessels were being viewed from greater distances during rituals performed in front of audiences. At the same time, ritual vessels came to be frequently treated as vehicles for texts, which grew

longer and longer. Perhaps the vessels were seen as family heirlooms in the making, with thought to their effects on descendants as much as on ancestors. Court music also shifted from Shang traditions, as the Zhou imported the bells and ways of using them of the Yangzi regions.

The earliest Chinese poetry dates to the early Zhou period. Many of the 305 poems in the *Book of Songs* (*Shijing*) would have been sung at court during important ceremonies. Some celebrate the exploits of the early Zhou rulers; others praise the solemnity with which the living offer food to their ancestors during sacrifices. One court ode expresses a distrust of women's involvement in the affairs of government:

> Clever men build cities,
> Clever women topple them.
> Beautiful, these clever women may be
> But they are owls and kites.
> Women with their long tongues
> Are masters of cruelty.
> Disorder is not sent down from heaven;
> It is born of women.

Other poems in the *Book of Songs* appear to have begun as folk songs. These include love songs and songs depicting ordinary people at work clearing fields, ploughing and planting, gathering mulberry leaves for silkworms, spinning and weaving. There are even complaints about tax collectors and the hardships of military service. One stanza of a love poem reads:

> Please, Zhongzi,
> Do not leap over our wall,
> Do not break our mulberry trees.
> It's not that I begrudge the mulberries,
> But I fear my brothers.
> But my brother's words – those I dread.

One poem even rebukes the ancestors:

> The drought is so extreme
> That it cannot be stopped.
> Fiercely burning,
> We have no place to escape.
> Our fate is reaching its end,
> We have none to turn to.
> The many dukes and former rulers
> Do not help us.
> Father and mother and the ancestors,
> How can you bear to see us like this?

Poems like these remind us that ancient China was populated by more than kings, warriors, diviners, and bronze workers. The vast majority of the population, then and later, were farmers, toiling in their fields, trying to fashion satisfying lives and to limit the exactions of those with power over them.

Most of the basic elements of ancient Chinese civilization were not unique to China. All over the world, people discovered that animals and plants could be domesticated; there is little reason to think agriculture was invented in one place and then carried to all parts of the world through migration of peoples or communication of ideas. Very basic ideas about kinship and religion – such as tracing descent solely through the male line, or making sacrifices of animals or humans to gods or ancestors – and very basic ideas about social order – such as enslaving those defeated in war and passing kingship from one man to his son or brother – are also extremely common cross-culturally. These phenomena are more plausibly attributed to shared human psychology than to cultural contact.

Much less common in world history is the leap to complex civilization, to the ideas and technology that allow co-ordination of large populations. Writing, metallurgy, and strong priestly kings appeared together in several ancient civilizations: Mesopotamia, Egypt, the Indus Valley, China, and Mexico. It is generally accepted that the American civilizations must have been independent in origin from those of Asia and that those of the ancient Near East were influenced by each other. The Chinese case falls somewhere in between. Today most historians and archaeologists accept that metallurgy, sheep, wheat, the chariot, the domesticated horse, and the compound bow spread from west Asia. But there are still some who seem to think that it is more to China's credit the less their ancestors learned from others and the more they discovered or invented themselves. At any rate, Chinese civilization is obviously not an offshoot of any of the ancient civilizations of the Middle East in any meaningful sense, since its language, script, cosmology, and art are too distinctive.

Understanding the development of civilization in the China region requires not only recognizing that some elements were imports from the outside world, but also that in both the Neolithic and the Bronze Age there were multiple centres where advances in political organization and technology occurred. Over time one polity might decline as another gained in strength, but there were also contemporary rivals that traded and fought with each other. The simple story of one dynasty succeeding to another is a later projection back, a story that had its own political purposes, and which should not be taken as simple fact.

Animal and Human Imagery in Bronze Vessels

In the art of the ancient Middle East, including Egypt, Assyria, and Babylonia, representations of agriculture (domesticated plants and animals) and of social hierarchy (kings, priests, scribes, and slaves) are very common, matching our understandings of the social, political, and economic development of those societies. Thus it is somewhat puzzling that images of animals predominate in Shang art.

The zoomorphic images on Shang bronzes range from clearly mimetic low- or high-relief images of birds, snakes, crocodiles, and deer, to imaginary animals that we call dragons, and to highly stylized *taotie* designs that allude to animals but do not directly represent them. It is much less common for bronze implements to have images of human beings, and these rare human images are generally associated with images of animals. Since bronze vessels were used in sacrificial rituals as containers for food or drink, most observers assume the decoration on them symbolized something important in Shang political and religious cosmology. Unfortunately, texts that discuss the meaning of images exist only from much later periods.

This bronze axe blade found in the entrance ramp of a late Shang tomb at Sufutun in Shandong measures 13 by 14 inches (33 by 35.5 cm). It may have been used for the execution of some of the forty-eight sacrificial victims found there. The face, depicted by perforation, bears some resemblance to more standard *taotie* forms yet seems at the same time distinctly human.

Some animal images readily suggest possible meanings. Jade cicadas were sometimes found in the mouths of the dead, and images of cicadas on bronzes are easy to interpret as images evocative of rebirth in the realm of ancestral spirits, as cicadas spend years underground before emerging. Birds, similarly, suggest to many the idea of messengers that can communicate with other realms, especially ones in the sky.

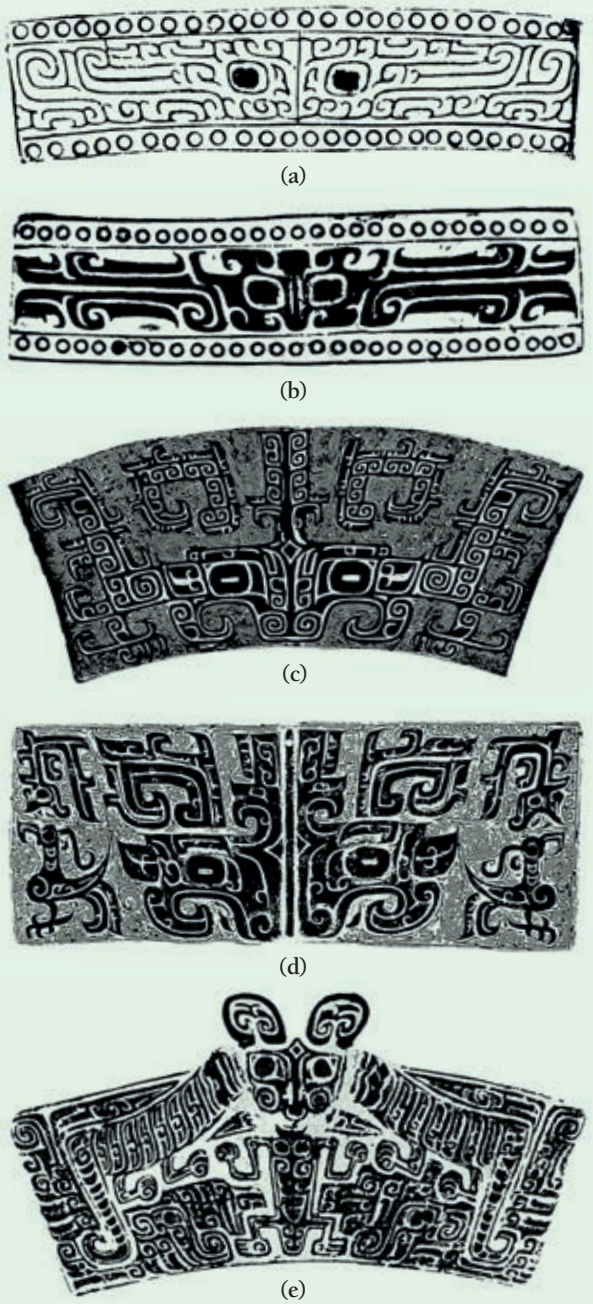
More problematic is the most common image, the *taotie*. To some it is a monster – a fearsome image that would scare away evil forces. Others imagine a dragon – an animal whose vast powers had more positive associations. Some hypothesize that it reflects masks used in rituals, others that it carries over the face-like imagery on Neolithic jades from the Liangzhu area or the stone carvings from Shimao. Still others see these images as hardly more than designs. Perhaps the *taotie* came simply to be associated with the Shang kings and the order they presided over, respected and admired because it was an emblem of power and focus for identity more than for any association with real or imagined animals.

Those who wish to find significance in the fact that Shang imagery made so much use of animals (much more than plants, for instance) have tended to associate it with animal sacrifices, totemism, or shamanism. Since animals were slaughtered to be offered in sacrificial ceremonies, the argument goes, the decoration on the vessels used in the ceremonies probably alludes to eating, killing, and the transformation brought on by death. Others point to signs that ancient tribes or clans saw themselves as descended from particular animals (totemism) and may have worshipped particular animals or birds. Shamanism is brought in because men and animals are occasionally associated on Shang bronzes. As practised elsewhere in later times, shamans commonly relied on animals to help them communicate with the spirit world. In this interpretation, images on bronzes of men in the mouths of animals depict shamans submitting to the powers of the animals who aid them in their trances.

China in ancient times was undoubtedly no less diverse a place than China in more recent times, and these explanations need not

Man and animal are fused in an unusual way in this Shang bronze ritual vessel, 13 inches (33 cm) tall. The vessel takes the shape of a bear or tiger with mouth open and poised to swallow a man. The man seems not at all concerned, but rather to be holding on to the animal as a child would hold on to its mother. Other animals, including a deer, serpents, cattle, and dragons, are incorporated into the decoration of the sides.

be mutually exclusive. There are enough regional differences in design to suggest that animal and human imagery may have had different meanings in different times and places. Even in the late Shang period the *taotie* did not have the same absorbing interest to the southern artist that it had in Anyang. But images of distinguishable birds and animals proliferate in the south, suggesting that they were given meanings there that were not commonly awarded to them in the Anyang area.



Rubbings of *taotie* decoration on Shang bronzes. Examples *a* to *d* are from central Shang sites, *e* is from further west in Sichuan province. An early theory that *taotie* designs evolved from simple lines and dots to high relief and more prominent eyes, horns, and claws, has not held up as more sites have been excavated. Regional differences, however, have been confirmed. The treatment in the last example from the Sichuan area is in marked contrast to those from central Shang sites.