

CHAPTER 4

66 ORACLE BONES

EVERYBODY TALKS ABOUT THE WEATHER AGRICULTURE AND ORACLES

If rain doesn't fall at the right time, or if a frost kills the crop, people starve. It would be very helpful if we could predict the weather more accurately, and even better if we could change it. Even today with the help of satellites and radar, weather forecasting is difficult and not always on target, so imagine how bewildering the whole process must have seemed thousands of years ago.

People during the rule of the Shang dynasty (about 1500 to 1046 BCE) assumed that nature gods were in charge of the weather. If only people could communicate with these gods, they could find out what they wanted and give it to them. Then, if the gods were pleased with their gifts, they might end a drought or make the air warm for growing plants.



Scholars have sometimes found important clues to humanity's past in China's drugstores. The German paleontologist who purchased "dragon teeth" 100 years ago was interested in human prehistory, not in grinding these fossils into medicine.

The problem is that you can't call up a god and ask for a favor. People in most ancient cultures thought that they could at least take a guess about the gods' will by observing natural events—storms, animal behavior, cloud formations, and so forth. But it turns out that the people of the Shang era also used another form of communication, one that was forgotten for a long, long time and rediscovered only by chance.

In 1899, almost 3000 years after the end of the Shang dynasty, a sick man named Wang Yirong said that his doctor had prescribed for his illness ground-up “dragon bones”—fossils and relics that most Chinese people at the time thought came from long-dead dragons. His family brought him belly-shells of turtles from the pharmacy. Wang, a scholar who could read ancient Chinese writing, realized that what looked like scratches on the shells were actually words. He told his family not to grind them up, and began looking for other shells and bones.

People who collected “dragon bones” for medicine found many of them in a village called Xiaotun near Anyang in Henan Province, on the banks of the twisting Huan River. As Wang Yirong's news spread, scholars from China, the United States, and Japan began visiting this dry area, digging in the yellow, windblown dust to unearth the mysterious bones. Chinese archaeologists began formal excavations in 1928. The inscriptions on these bones show the most ancient Chinese writing that has survived to modern times.

Why would people write on bones? Didn't they have anything else to use? Well, yes, but these flat, thin bones were special. For some unknown reason, the ancient Chinese people thought that turtle shells and shoulder bones of oxen had a special connection to the world of the gods. If people handled the “dragon bones” correctly, they thought, they could use them as a kind of instant messenger to the heavens.

Correct handling involved a special ceremony where the king asked a question. A priest drilled two shallow pits into the bone or shell.

The priest then pressed a hot metal bar into the bone until the heat made it crack. The BOK sound that the bone made when it cracked opposite the holes sounded similar to the

The first step in preparing an oracle bone was to bore pits into the back. Touching a hot rod to these pits made the cracks on the other side.



“ Oracle bone, 1500–1000 BCE



MEANWHILE IN CRETE...

At about the same time that people in China were developing their writing, people on the island of Crete, in what is now Greece, were doing the same. They used symbols in two different systems of writing that are now called “Linear A” and “Linear B.” Nobody today can read Linear A, but a scholar named Michael Ventris deciphered Linear B in 1952. It turned out to be an early form of Greek.

66 Oracle bone, Anyang, 1200–1080 BCE

Sometimes it was hard to get a straight answer out of the gods. To cover all bases, Shang diviners often asked the gods the same question many times, sometimes in both positive and negative forms (“Will it rain? Will it not rain?”). On this oracle bone, from about 1200 BCE, diviners wrote positive questions and their answers on the right, and negative questions and their answers on the left.

ancient word for “divination” (foretelling the future), which is now pronounced *bu*.

The priest would interpret the pattern made by the cracks—nobody knows how he did this—to find the answer to the question. Someone, a priest, the king, or someone else, would then write the gods’ answer on the bone.

People must have been very anxious to find out what the gods had said. Everything—not just weather, but the king’s health, the outcome of wars, luck in a hunt—depended on the gods’ protection. If the gods and spirits were in a good mood, they might give people information that would help them with their lives. They would tell them what to do to cure an illness, or give advice about whether rain would ruin a hunting party, or let them know if the queen was going to have a boy or a girl.

The gods and dead ancestors (parents, grandparents, great-grandparents, and so on, who were also a kind of god) would speak through the bones to tell people what would keep them happy. The king might ask: “Should we send someone to the river to throw in three sheep and sacrifice three oxen?” Sometimes it might be hard to figure out which spirit was angry. The answer to a question such as “Is it Ancestral Father Ding who is cursing the king?” would narrow down the field to the ancestor whose feelings needed to be soothed.



The Shang believed that sacrifices kept the touchy gods and equally touchy ancestors happy. Because many animals would be slaughtered, the rituals that the king performed were very expensive. Of course, the killing had to be done correctly. One dragon-bone inscription from the Shang period shows the king’s eagerness to get the offering just right, as he asked, “Should the king pray for a good harvest to Wanghai [an early king] by offering a dog, a

sheep, a pig, a burnt offering of three sets of sheep and pig, and the slaughtering of nine oxen, three piglets, and three Qiang tribesmen?”

Not only did sacrifices have to be done correctly, they also had to be performed at the right time on the right day. The calendar was so complicated that often scholars had to be consulted to resolve questions about it. The Shang scholars knew a lot about the stars and the planets. They calculated the length of a month to a very accurate 29.5 days and a solar year to 365.5 days. Inscriptions on bones speak of both solar and lunar eclipses. The Shang also observed and recorded comets and other phenomena in the night sky.

The oldest male member of every **clan** was responsible for sacrificing to his own ancestors. Although younger male members of any family could also sacrifice to their ancestors, their offerings must have been much less extravagant. The king's sacrifices would have used up so many resources that if others had such huge rituals, the country would have run out of sacrificial animals.

Like the spirits of ancestors, the gods in charge of the all-important weather weren't necessarily kind or cruel—they were more or less neutral, and how they acted toward humans depended on how the people treated them. So the king sacrificed to them as he asked questions inscribed on **oracle** bones such as, “Will the Yellow River not order it to rain?” (Like all rivers, the Yellow River was a god—probably a dragon—and river gods were responsible for rainfall.)

When a hoped-for weather outcome didn't happen, the Shang would assume that a sacrifice hadn't been done correctly or hadn't been sumptuous enough, or that there was some other reason that the nature gods didn't come through. So although the Shang kings continued to try to cajole the gods into helping out, and were cheered up when it appeared that they had responded, they had to rely on the hard work and skill of the farmers to make sure that there was enough to eat.

The king was the symbolic leader of the farmers and he performed the ritual first planting of the season. An inscription on an oracle bone asks, “Should the king lead the many

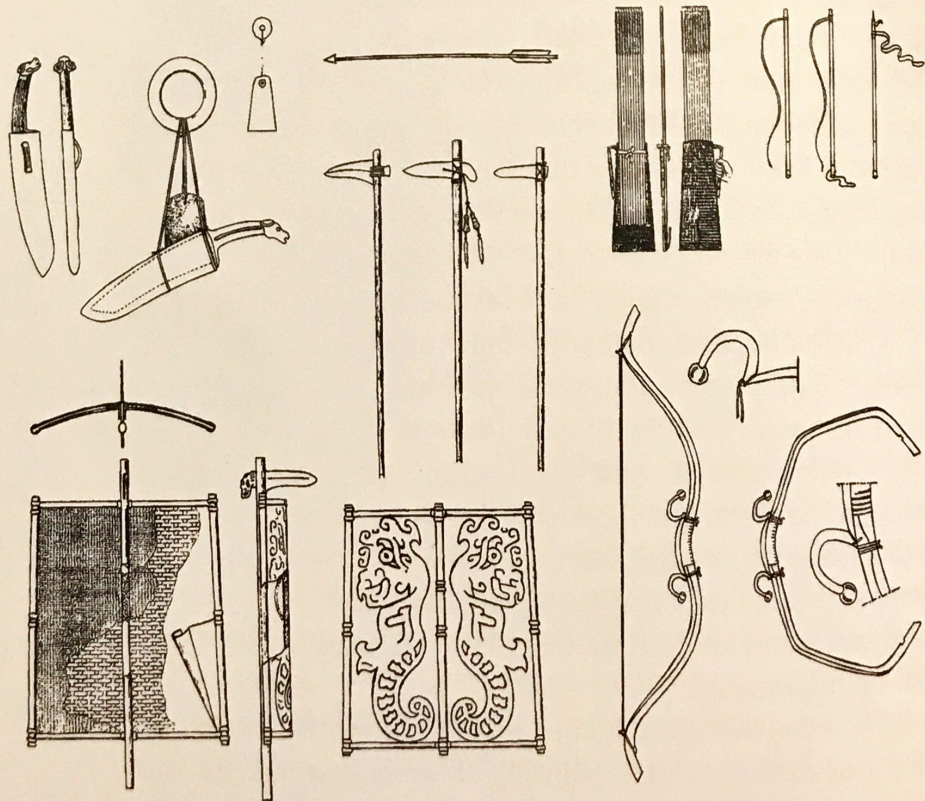
A clan is a group of people who claim descent from a common ancestor. A clan can be as small as an extended family or as large as a tribe.

An oracle is a person or object that transmits a god's communication, usually about the future.

people in planting grain?" "Should we pray for a good harvest to Di [the high god]?" asks another questioner, who wants to be sure his prayers go to the right god, and another, nervous about the fate of the crops, asks, "When we reach the fourth month, will Di make it rain?" Apparently at some point it was so dry that extra sacrifices had to be made: "If we burn a woman [as a sacrifice], will there be rain?" Not just farming, but hunting too was an important source of food and just as dependent on the gods' good will. "If we go hunting at Ji, going and coming will there be no disaster?" is one anxious question on a bone.

The largest and least powerful group in Shang-era society was made up of peasants, who worked the land and acted as servants, and craftsmen, who made the products that both the rich and the poor used. Oracles bones, the only written source from this time, seldom mention workers, and very little is known about their lives. Judging from what scholars know about other similar societies, it's probable that members of this lowest group had few rights and

A wealthy Shang warrior would have been buried with a wide variety of weapons. Soldiers did not yet use long swords for hand-to-hand combat. Instead they preferred the wicked-looking dagger axes in the center of the drawing. Only a strong warrior could have used the double-curved bow on the right. It would have taken a great deal of strength to bend the bow enough to string it.



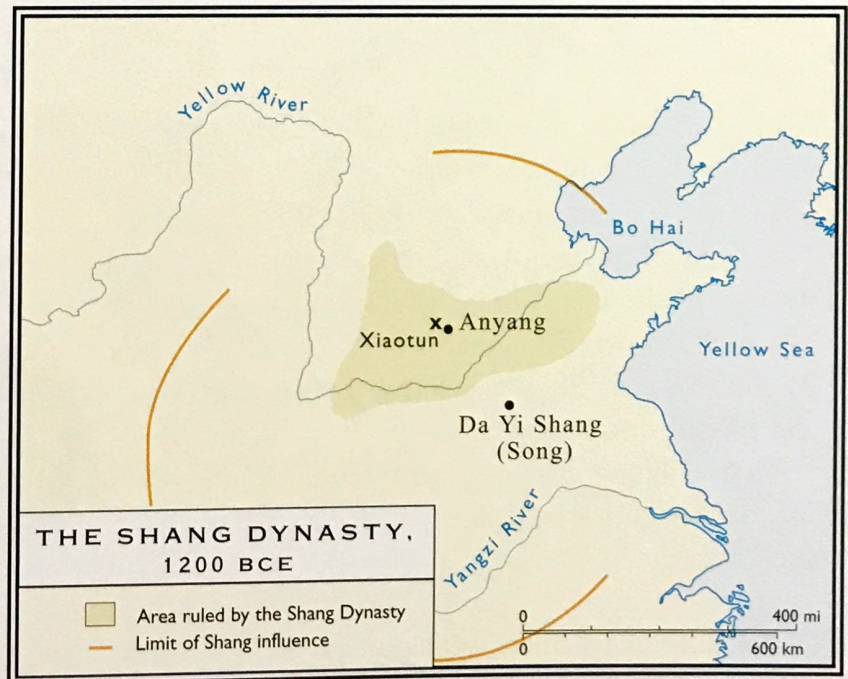
that their freedom was very limited. Some modern historians have described the Shang as a slave society, but there is no word for “slave” on any oracle bones, and so nobody knows whether slavery was practiced at this time.

Many people formed this lowest group, and most of them worked very hard. One early Shang city was surrounded by a wall four miles long, 60 feet thick, and 30 feet high. No records survive to say how long it took to build the wall, or how many people worked on it, but one estimate is that the total amount of labor was about 200,000 **man-years**. Then, of course, many people were required to build the palaces and everything else inside the wall. Farmers and soldiers also worked hard to keep the growing population fed and defended from enemies.

Although the Shang were protected by these huge walls, they always had to be on their guard against other states, and it was important to make sure that the gods were in the mood to help out when they went to war. “This season,” reads a question on one oracle bone, “if the king should follow Wang Cheng to attack the Xia Wei, will we receive assistance in this case?”

Archaeologists keep turning up evidence about this long-ago time, and what they find sometimes seems grim to modern people. At a site that they think was a major city from the time of the Shang, archaeologists have found evidence of mass human sacrifice. They estimate that as many as 13,000 people lost their lives in the last 250 years of the dynasty’s rule, killed to satisfy the seemingly never-ending hunger of the emperors’ ancestors.











A man-year is a unit expressing how much work one man can do in one year. A job requiring 200,000 man-years would take 200 men 1,000 years to complete, or 2,000 men 100 years.



WRITING CHINESE

Unlike an alphabet in which each letter represents a sound, or a syllabary in which each character represents a syllable, usually a consonant-vowel combination, each Chinese character stands for an entire word. People in different parts of China, speaking different types of Chinese, might pronounce the same character differently, but it would have the same meaning for each of them.

Some characters are pictographs, or pictures, of the word they represent. In many cases the picture has changed so much over the centuries since it was first written that it's hard to see the resemblance. In this table, modern characters are listed below their ancient Shang versions. You can see the similarity between the modern Chinese and the ancient Shang version of the character for goat, but the ancient form is more goatlike and shows the animal's horns.

Ox	Goat, sheep	Tree	Moon	Earth	Water	Tripot vessel (ring)	To show, declare	Field	Then
									
牛	羊	木	月	土	水	鼎	示	田	就

Other characters are called ideographs, because they represent an idea, not a thing. The modern character meaning *good* or *to like* (好) is a combination of two characters, one meaning *woman* (女) and the other *child* (子).

For numbers, the Chinese started with horizontal lines: 一 (one), 二 (two), and 三 (three). After three, the lines became hard to count, so they found an ingenious solution for the higher numbers. For example, the word *four* and the word *neigh* were both *si*, pronounced "szz." To write four, the Chinese used the character for *neigh*, a drawing of a horse's open mouth: 四. The modern version looks like 四.

Most Chinese characters are made up of one part that tells you the sound of the word and another part that gives a clue to its meaning. For example, the words for *goat* and *ocean* are both pronounced "yang." Ocean (洋) is written in two separate parts: 羊 (*goat*), and three dots representing drops of water 氵. The three dots tell the reader that in this case the kind of *yang* he or she is reading about is the ocean, not the goat. More than 80 percent of Chinese characters are made up of two different parts like this.