

3.5 SHANG RITUAL BRONZES

No other Bronze Age culture ever achieved a level of aesthetic perfection in bronze comparable to Shang culture. The imaginative vision and technical expertise that are combined in Shang ritual vessels represent a peak of virtuoso art that is rare in world history.

It should be understood that to achieve such a level of magnificence, the Shang had to invest enormous resources. Copper and tin, the principal components of Shang bronzes, were not easy to come by. Although there are substantial deposits of these minerals within a few hundred kilometers of Xiaotun, given the rudimentary forms of mining and transportation available, quarrying and shipping the ore to the capital would have been a great drain on labor and a major expense to the Shang elite.

Nor were these ores invested in productive industry. The Shang could have used copper or bronze to strengthen their ploughs, but they did not; they could have used them to reinforce their weaponry, but with few exceptions they did not. Bronze was reserved for the near-exclusive use of the ritual industries, and within that, chiefly for the manufacture of sacrificial vessels. It was the ancestors who enjoyed the fruits of the most developed form of manufacturing technology in Shang China.

Moreover, unlike Mediterranean and Central Asian Bronze Age cultures, the Shang employed bronze in a most resource-intensive way. Elsewhere, bronze objects were generally wrought – that is, thin sheets of bronze were hammered or otherwise shaped to form objects that were relatively light in weight, minimizing the amount of bronze necessary. The Shang, by contrast, cast bronze in molds, pouring large quantities to create thick-walled solid bronze objects. The largest are so heavy that they cannot even be lifted by a single person. Shang ancestors had no reason to complain that their descendants were stingy!

The earliest bronze object found in China to date is a neolithic knife dating from approximately 3000 B.C. Slag heaps nearby suggest that the site where it was found was one where bronze manufacture was well known. Nevertheless, it is not until the beginning of the Shang over 1000 years later that we see the birth of a true bronze culture in China.

A number of Shang cultural sites considerably earlier than the capital at Xiaotun have been excavated. Some are the ruins of substantial cities, and many scholars believe that they include the site of at least one earlier Shang capital – some scholars believe that one of the larger sites was a Xia Dynasty city, though others still do not accept the historicity of the Xia.

The sites of Shang culture that pre-date the capital of Yin, to which the Shang moved about 1300, have yielded a wide range of early bronzes. When we view these together with those excavated from the royal tombs at Yin – and the thousands that were taken from those graves over the centuries by grave-robbers and sold to private collectors and museums around the world – we can reconstruct a systematic portrait of the evolution of this emblematic art of the Shang.

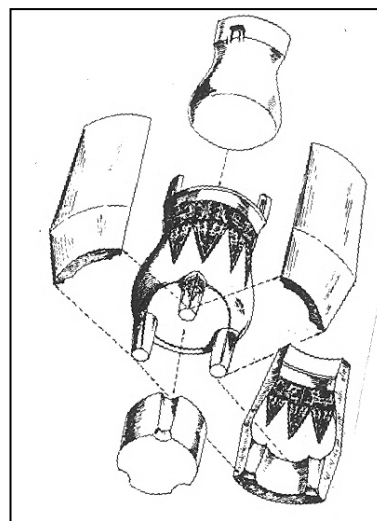
The forms of the bronzes and their casting

The bronzes were crafted both for use and for display. The Shang people had inherited a highly developed craft of pottery from their neolithic ancestors, a craft that had drawn ideas from many of the distinct agricultural societies that had flourished in China and joined the complex ethnic mix of the Shang. Potters did much more than produce pots, pans, dishes, and cups. A rich repertoire of conventional forms had evolved: tripods for boiling, covered steamers, bowls for hot grains, platters for meat and fish, kettles for hot drink, pitchers and jugs for wine, goblets, beakers, basins – each type with its own conventional variety of ever-evolving forms.

The bronzes were based upon these pottery forms, and one of their great aesthetic virtues is the way that they combine the angular potential of cast metal with the plastic suppleness of earthenware.

The way that bronzes were cast in Shang China suggests that it was the potters who first developed the arts of bronze technology. Bronze vessels were cast in clay molds. These molds were, in turn, shaped by clay models. The first step was for the bronze caster to design a model of the eventual bronze vessel in clay. He would shape the clay to the vessel form desired and then, using fine tools, he would inscribe the figure with designs of great complexity. The incision of the model was the great departure from pottery traditions, for pottery was rarely incised, it was generally pressed with patterns or painted. As the art progressed, the forms, as well as the designs, became increasingly elaborate and independent of forms associated with pottery.

Once the clay model was complete and had hardened, the caster would press wet clay around the model until he had shaped it fully and pressed it to absorb all the delicately incised designs. Then, before it was dry, he would cut it off in sections, usually three. This would become the outer mold for the bronze. He would then create a solid core which would rest on small bronze studs laid upon the base of the reassembled mold. This core would create the space of the interior of the vessel – its “useful emptiness,” as Laozi might put it. Sometimes this core was also inscribed, usually with the name of the ancestor to whom the vessel was to be dedicated and perhaps with an elaborate clan mark which would signify its origins. Occasionally, towards the end of the Shang, a longer inscription might be written to record the occasion on which the bronze was cast, but such inscriptions are rare in the Shang (they become very common during the Western Zhou, as you will see).



piece-mold casting

Finally, molten bronze would be poured into the fully assembled mold. The bronze studs which supported the core over the base of the vessel would be melted into the vessel’s base. Once the bronze had cooled, the clay mold was shattered, freeing the vessel, which was then polished. Any defects were carefully corrected, yielding the sharply detailed designs still visible after

millennia. Although the vessels we see today have all developed the rich green patina of oxidized bronze, the newly cast vessels would have gleamed like gold.

The sight of these shining masterworks arrayed in rows upon the altars of the dead would have been a sight to marvel at. Perhaps it was the unparalleled artistry of the bronzes which not only made them sacred to the Shang but which led them to ignore more utilitarian potentials of their new metal craft.

The bronze motifs

The forms of the bronzes are outstanding artistic creations, but what particularly captures the imagination are the inscribed designs. The bronzes designs reflect a fantastic animal world, filled with dragons, monsters, regal birds, snakes, cicadas, and other animals, both real and fantastic. These animal images occupy space filled with intricate and pulsating patterns; the rarest surface of a Shang bronze is smooth, bare space – except for occasional punctuating regions of relative quiet, the fully evolved bronze conveys a sense of dynamic movement in every part.

Although there is a great wealth of animal imagery, a single motif tends to dominate the bronze designs, by its frequency, its size, and its central placement. This is the image of a strange symmetrical monster mask, known by Classical times as a *taotie* image. The *taotie*, Classical texts tell us, was a beast of insatiable greed – both of the Chinese characters used to write its name are based on the graphic element of the verb “to eat.” The *taotie* image that we see on the bronzes, with its staring eyes and ever-gaping jaw, does suggest such a rapacious beast – but why is it there? Nothing we know would permit us to claim that the “*taotie*” beast Classical imagination drew on the same mythical or symbolic lore that the Shang designers had in mind.

The *taotie* generally occupies the central bands, or “registers,” of the bronze, and is centered so that its symmetrical form extends to the edge of each side of the vessel. If you look at the entire form, the face of the beast stares at you. But if you look at either side alone, you see instead a full figure of the beast in profile.



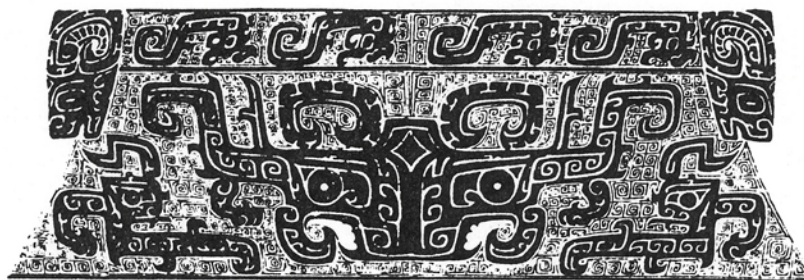
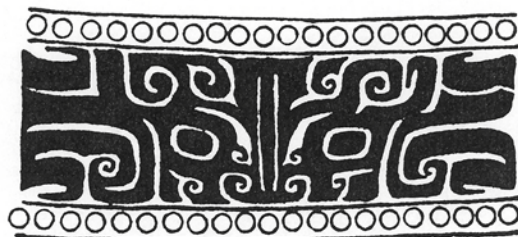
This double figure of the *taotie* is more visible in some cases than in others, but generally constitutes a basic feature of the motif.

There may be no issue of Shang culture that has created more controversy than the question of the significance of the eerie animal imagery of the bronzes. The bronzes have been known since antiquity, though not necessarily as artifacts of Shang culture, and traditionally it was widely assumed that these designs had some very direct symbolic function which was mysterious only because we lacked the interpretive key. During the middle part of the 20th century, however, an art historian named Max Loehr, working at the University of Michigan, proposed an entirely different approach. He suggested that it could be possible to see the *taotie* and other forms as developing solely from an artistic imperative, with no fixed symbolic meaning whatever.

Loehr was writing at a time when Xiaotun was the sole excavated Shang site. Although he was able to view the bronzes in private and museum collections throughout the world, as well as

those from Xiaotun, there existed no variety of Shang sites that would allow him to compare the work of earlier casters with those of the later period at Yin. Undaunted by this lack of any chronological control mechanism, Loehr suggested that he could detect which among the known bronzes were early and which were late. The earliest, he said, were those which included a single thin band of decoration on which the sole discernable animated motif were pairs of staring eyes. These, Loehr claimed, were the artistic inspiration for the *taotie*. As the bronze caster's artistic imagination evolved, Loehr believed, the band expanded and the eyes were elaborated into the full animal face. At this stage of the developmental process, the artists began to incorporate supplementary imagery into the vessels to complement the central motif. Finally, the latest vessels were engulfed in animal imagery, designs that frequently began to influence the shape of the vessel itself, not only the patterns inscribed on it.

Altogether, Loehr identified what he believed to be five distinct stages in the evolution of the bronze imagery. The force of his claim was to deny that the imagery on the bronzes possessed any religious significance. Aesthetics alone, Loehr held, could account for the development of the tradition.



Examples of Loehr's stylistic progression: Styles II, III, and IV

Loehr's model gained enormous prestige decades later when other Shang sites were excavated. The results were precisely as Loehr had predicted. The earliest sites yielded exclusively bronzes consistent with Loehr's "Period I" criteria; mid-Shang sites possessed bronzes of the first through the third of Loehr's periods; late Shang sites possessed all five styles. Loehr's model of the evolution of bronze decor was decisively confirmed.

Nevertheless, Loehr's conclusions concerning religious versus aesthetic significance continues to be open to debate. In the 1980s K.C. Chang published an alluring set of essays that portrayed Shang religion very much in terms of shamanism, with the spirit world populated by the angular animals of the bronzes as well as by the ancestral spirits. Animals were, for Chang, the shaman's vehicle: they were the intermediaries between the human and spiritual worlds in a way resonant with totemic societies elsewhere in the world.



Animals whispering in the ears of a shaman?

Chang's theory resonates very well with much of what we know about early Chinese religion, but it also leaps far beyond the evidence we currently possess. It can be called a "speculative" hypothesis, one not yet subject to a definitive test, much as Loehr's theory was once considered speculative. Perhaps in the future, additional archaeological finds will allow us to pass as convincing a verdict on Chang's ideas as we have been able to on some of Loehr's.

Other theories concerning the origins and significance of the animal figures on the bronzes have been offered in great profusion. Two theories that bear some relationship to Loehr's and to Chang's may offer a middle ground. The first of these develops in more detail the significance of the staring eyes in the earliest bronzes and suggests that while there may have been some animistic significance in inscribing eyes on the sides of the bronzes, the subsequent elaboration of the eyes into animal forms actually follows only aesthetic criteria. Hence there may be a religious significance in the motifs taken as a whole, but not in any individual motif. The other theory

suggests that the particular style of the animal motifs was derived from another arena of religious significance: ceremonial animal masks worn for the performance of ritual dances. Evidence that animal masks and costumes were common paraphernalia for religious ceremonies is abundant, and while we are not able to know the specific forms that these masks and costumes took during the Shang, it is reasonable to assume that their forms were governed by both religious and aesthetic considerations.

If we mediate between these two theories, we lose some of the direct shamanistic and totemic symbolism predicated by Chang's theory, but preserve many aspects of it. We could suggest that Loehr was correct in positing that the development of the motifs was driven by aesthetic considerations, but we can link that aesthetic to arenas of religious significance beyond the bronzes themselves, and perhaps to rites associated with shamanism.



KEY TERM

taotie

STUDY QUESTIONS

1. *What scale of cost did bronze technology represent, and how did the Shang invest these resources? How does this seem to reflect Shang values?*
2. *How does Shang bronze technology differ from Bronze Age techniques elsewhere in the world?*
3. *What theories exist concerning the imagery on Shang bronzes?*

Sources and Further Readings

An authoritative introduction to Shang bronzes, both in terms of technology and through a rich array of annotated illustrations of bronzes, is Robert Bagley, *Shang Ritual Bronzes in the Arthur M. Sackler Collection* (Cambridge, Mass.: 1987). (Of course, nothing substitutes for seeing the bronzes first hand, and most major US museums include a selection in their holdings on display, but no one location can accommodate the type of overview that Bagley's opulent volume provides.)

Max Loehr's arguments were made over half a century ago in his, "Bronze Styles of the Anyang Period" (*Archives of the Chinese Art Society of America* VII [1953], 43-53). K.C. Chang's ideas concerning Shang shamanism were laid out in many of his publications, but the most engaging presentations are in his *Art, Myth, and Ritual: The Path to Political Authority in Ancient China* (Cambridge, Mass.: 1983).