THE GREAT BRONZE AGE OF CHINA

An Exhibition from the People's Republic of China

Edited by Wen Fong
The exhibition was made possible by grants from The Coca-Cola Company and the National Endowment for the Humanities, Washington, D.C., a federal agency.

Under the Arts and Artifacts Indemnity Act, indemnity was granted by the Federal Council on the Arts and Humanities.

The color photographs, made especially for this exhibition, were taken in China by Seth Joel. The color photographs of the gilt-bronze lamp no. 94 and the excavation of the terracotta figures (p. 335) were taken by Wang Yugui, Cultural Relics Bureau, Beijing.

Published in conjunction with the exhibition
*The Great Bronze Age of China* held at:

The Metropolitan Museum of Art, New York, April 12–July 9, 1980
Field Museum of Natural History, Chicago, August 20–October 29, 1980
Los Angeles County Museum of Art, April 1–June 10, 1981
Museum of Fine Arts, Boston, July 22–September 30, 1981

The Metropolitan Museum of Art, New York
Bradford D. Kelleher, Publisher
John P. O'Neill, Editor in Chief
Lauren Shakely and Rosanne Wasserman, Editors
Gerald Pryor and Andrius Balukas, Designers
Phyllis Ward: Maps, Charts, Drawings

Copyright © 1980 by The Metropolitan Museum of Art
All rights reserved under International and Pan-American Copyright Conventions. Published in the United States by The Metropolitan Museum of Art and Alfred A. Knopf, Inc., New York, and simultaneously in Canada by Random House of Canada, Limited, Toronto. Distributed by Random House, Inc.

Library of Congress Cataloging in Publication Data
ISBN 0-87099-226-0 (MMA)
ISBN 0-394-51256 (AAK)

Frontispiece: Detail, decor of Fu Hao fang ding no. 32
A strap handle runs upward from the lower part of one lobe to the line where the body and cover meet. The single band of decoration, in a sharply cast and handsomely drawn Style II relief, contains a taotie and two "dragons"—the latter lacking almost any organic feature apart from the neatly shaped lozenge that serves for an eye (see Fig. 23). The decor band does not extend under the handle. The opening in the lid has a molded edge, as though it were folded back; part of this edge has been restored. The matte surface is green mixed with brown and yellow. Except for the spout, the vessel seems to have been cast in a single pour. The spout was evidently added in a second operation, a teardrop-shaped puddle at its base belongs to this later pour.

In many respects the he shape is uncharacteristic of cast bronzes; its domed cover, for instance, which makes removal of the core after casting very inconvenient, is a feature that would hardly be invented in a founder's workshop. Thus, while the present vessel was made entirely by casting, it offers tantalizing clues to an earlier stage of metal technology that relied less exclusively on the casting process. The lobed lower part imitates an older pottery shape, as already noted. The cover, on the other hand, imitates a wrought-metal object so accurately that it can be used to illustrate the process of manufacture of its prototype. The domed shape is a typical product of the smith's hammering technique, and the tubular spout rolled from sheet metal is equally familiar in wrought-metal traditions. The cover would have been joined to the vessel proper by flaring the edges of both pieces and folding one over the other, a technique known as crimping; the crimped joint is meticulously reproduced here. Lastly, the handle of the present he has a form typical of wrought-metal vessels, not of cast bronzes. It imitates a composite structure whose horizontal upper section was hammered out from the rim of the vessel and then riveted to the separate strap below. (The lower end of the handle, which need not be so firmly joined to the vessel, would typically have been soldered on or secured by an adhesive. The spout would probably have been attached in the same way.) In China only the he vessel has a handle of this form; the simple strap handles of other early bronzes invariably lack the unnecessary horizontal upper part (nos. 1, 6, 15, 16). Among the earliest Shang bronzes the he thus stands apart, being uniquely close to some undiscovered wrought-metal prototype of still greater antiquity. Pottery copies of such a prototype, duplicating the domed lid made into a face and the composite handle of the present vessel, are known from a few sites that long predate the Shang period (Bagley, 1977, pp. 196-98). These pottery imitations of metal vessels reveal the existence in China of a developed metal technology long before the earliest bronze vessels known at present (e.g., no. 1).

A bronze he slightly more advanced than the present example was found in the tomb of Fu Hao at Anyang (chap. 4); it must already have been an antique at the time it was buried (China Pictorial 1978/1, p. 25).

PUBLISHED: Wenwu 1976/2, pl. 3-1; Tokyo, 1976, no. 2.

7 Ax (yue)

Mid-2nd millennium B.C. (Zhengzhou phase)
Excavated 1974 from Lijiazui M1, Panlongcheng, Huangpi Xian, Hubei Province
Length 41 cm. (16\text{\textfrac{1}{2}} in.); width 25.5 cm. (10 in.); weight 3.85 kg. (8 lb. 8 oz.)
Hubei Provincial Museum

The cast iron ax, which corresponds to the frieze divisions, were polished away from the body of the vessel but are clearly visible on the handle and down the legs. Further seams run from the inner edge of each leg to meet at a point in the center of the vessel bottom. The posts and caps appear to have been cast in the same pour as the rest of the vessel (unlike the larger caps on the jue no. 15 and jia no. 16). The legs are hollow and open to the interior of the vessel. The smooth surface has a fine light green patination.

The jia is one of the most characteristic of Shang vessel types. Nos. 16, 26, and 33 are later versions of the same shape. A few examples significantly earlier than the present one have bulbous hollow legs and sketchy decoration akin to that of the jue no. 1.

PUBLISHED: Wenwu 1976/2, pl. 4-3; Beijing, 1976b, no. 13.

6 Jia

Mid-2nd millennium B.C. (Zhengzhou phase)
Excavated 1974 from Lijiazui M1, Panlongcheng, Huangpi Xian, Hubei Province
Height 30.1 cm. (11\textfrac{1}{2} in.); diameter 19.5 cm. (7\textfrac{1}{2} in.); weight 2.25 kg. (5 lb.)
Hubei Provincial Museum

The body of this vessel—a flared upper part and a short skirt—rests on three stout legs of triangular cross section. A simple strap handle is set directly above one leg, above the other two legs, a pair of small posts with umbrella-shaped caps stands on the rim of the vessel. The whorl-circle pattern that decorates the post caps appears again in circular bosses on the skirt. The band of Style II decoration, at the narrowest part of the vessel, does not extend under the handle; it consists of a taotie unit flanked by two frieze sections whose patterns are organized around single eyes. While the disposition of the decor is thus the same as on the he no. 5, the "dragons" flanking the taotie on the two vessels have little in common beyond the focal point of the central eye (see Fig. 23). Different hands have moreover imparted quite different characters to these Style II patterns—taotie and dragons alike—those on the he being tense and energetic, on the jia relaxed, fluent, and richly varied. In both cases the casting is exceedingly fine, the sharp-edged relief areas rising cleanly above the vessel wall.

The casting seams, which correspond to the frieze divisions, were polished away from the body of the vessel but are clearly visible on the handle and down the legs. Further seams run from the inner edge of each leg to meet at a point in the center of the vessel bottom. The posts and caps appear to have been cast in the same pour as the rest of the vessel (unlike the larger caps on the jue no. 15 and jia no. 16). The legs are hollow and open to the interior of the vessel. The smooth surface has a fine light green patination.

The jia is one of the most characteristic of Shang vessel types. Nos. 16, 26, and 33 are later versions of the same shape. A few examples significantly earlier than the present one have bulbous hollow legs and sketchy decoration akin to that of the jue no. 1.

PUBLISHED: Wenwu 1976/2, pl. 3-1; Tokyo, 1976, no. 2.

7 Ax (yue)

Mid-2nd millennium B.C. (Zhengzhou phase)
Excavated 1974 from Lijiazui M2, Panlongcheng, Huangpi Xian, Hubei Province
Length 41 cm. (16\textfrac{1}{2} in.); width 25.5 cm. (10 in.); weight 3.85 kg. (8 lb. 8 oz.)
Hubei Provincial Museum

Fig. 24 Rubbing of ax no. 7. After Wenwu 1976/2, p. 33, fig. 34
9 You

Mid-2nd millennium B.C. (Zhengzhou phase)
Excavated 1974 from Lijiazui M1, Panlongcheng, Huangpi Xian, Hubei Province
Height 31 cm. (12¼ in.); weight 1.7 kg. (3 lb. 12 oz.)
Hubei Provincial Museum

Like the gui no. 8, which came from the same tomb, this gui is the earliest known example of its type. The taotie patterns are at about the same stage of elaboration as those on the gui, but they appear here with a design on the lid that might be classified as Style II (Fig. 28), and with a narrow abstract band of clumsy thread relief on the shoulder. A detail not seen on the preceding vessels is the generous use of small circles in rows bordering the various decor friezes. The smooth patination has a rich green color.

The vessel is circular in cross section and was cast in a mold with three vertical divisions. As neither handle lies on a mold division, the awkward asymmetry of the gui no. 8 is to some extent avoided, and from one side (not illustrated) the taotie is presented frontally. Three openings in the foot fall on the lines of the mold divisions. The handle, whose ends interlock with loops on the shoulder of the vessel, was made first and then inserted into the mold for the vessel proper, which was thus cast onto it. Two further operations were required to cast the link to the lid, and the handle to the link. (The order of these operations might of course be shuffled.)

You vessels circular in cross section are known also from the Anyang period, but the classic you of Anyang and later times has a pointed oval cross section, and is arranged so that the frieze unit spans the full arc of 180 degrees from one end of the oval to the other (e.g., no. 25). An early you only marginally more advanced than the present one was found in 1977 at a site in Pingqin Xian in Beijing (Wenwu 1977/11, p. 5, fig. 6:1, p. 7, figs. 19, 20).

PUBLISHED: Wenwu 1976/2, pl. 3:2; Tokyo, 1976, no. 3; Beijing, 1976a, no. 3.

10 Ge (halberd) blade

Mid-2nd millennium B.C. (Zhengzhou phase)
Excavated 1974 from Lijiazui M3, Panlongcheng, Huangpi Xian, Hubei Province
Length 93 cm. (36¾ in.); greatest width 13.5 cm. (5½ in.)
Hubei Provincial Museum

This extraordinary blade is worked from a single piece of jade. The stone is partly altered in composition due to long burial, giving it a warm cream color varied with grayish veins and a few darker patches of brown and gray. The surface was finished to a high polish.

The jade ge is based on the bronze ge halberd, the characteristic weapon of the Chinese Bronze Age. The blade of the bronze weapon, sharpened on both edges, typically has a slight downward curvature, a tang with a perforation, and a crosspiece between the two to facilitate hafting. The haft of the weapon was perpendicular to the length of the blade, and rested against the crosspiece. In jade, however, the ge was made for ceremonial or mortuary purposes. A blade like the present one was too large, too fragile, and too expensive for practical use, and was almost certainly never even hafted. In Shang tombs jade ge blades are frequently found in a small pit sunk beneath the coffin; the pit ordinarily contains either a dog or, in richer tombs, a man, both apparently serving as guardians. At Anyang, and probably at Panlongcheng as well, the ge blade regularly accompanies a human guardian. Like other jade ge from guardian pits in the Panlongcheng tombs, the present example was found broken in several pieces. The breakage may have been deliberate, serving to "kill" the blade before interment.

Because the jade ge did not serve the practical purposes of its bronze prototype, the jade worker was free, within the limitations of a given piece of stone, to arrange and manipulate the various elements of the blade on formal grounds alone. Thus the relative proportions of blade and tang, the degree of curvature, the placement of the median crest, and the size and location of the hafting crosspiece and of the perforation are freely variable; and Shang ge blades, which range in size from 3 or 4 centimeters all the way to the 93 centimeters of the present example, show an exceptional variety, each one having a character and personality of its own.

The unsymmetrical outline of the present blade is characteristic of both bronze and jade versions of the ge. The lower edge in this case is roughly horizontal, while the upper edge curves downward toward the point. The asymmetry of these curves is given emphasis by the median crest, which is extended illogically beyond the blade proper across the tang of the ge, to end at a point above the middle of the butt. This crest is not a simple ridge, but instead a slight bevel introduced between the upper and lower facets of the blade. The edges of the blade are ground very sharp so that near them the stone becomes translucent; the thickness of the ge nowhere exceeds half a centimeter. Near the point the taper is momentarily halted by a faint widening on both edges. The inconspicuous ridges at the base of the blade, derived from the hafting crosspiece of the bronze ge, are very small and neatly formed. On the side not illustrated, the median crest is less pronounced and runs more nearly axially; the small perforation in the tang is drilled from this side, and all three edges of the tang are sharply beveled. The extreme restraint and understatement of all these details, executed with the utmost precision on an object of such remarkable size, give an air of great austerity and subtlety of expression. It would be difficult to cite another ge of equal refinement and power.

PUBLISHED: Beijing, 1976b, no. 15.
62 Zeng Zhong You Fu hu

8th century B.C.
Found 1966, Jingshan Xian, Hubei Province
Height 66 cm. (26 in.); weight 31.85 kg. (70 lb. 1 oz.)
Hubei Provincial Museum

The ornament of this stately vessel is dominated by the slow uninterrupted horizontal movement of large undulating ribbons, filling three registers on the body and repeated in the freestanding crown on the lid. The highest frieze on the vessel proper displays the pattern of ribbons, and the filler elements above and below them, as flat grooved bands. Elsewhere, however, the surface acquires a rich plasticity from the dished profile given both the ribbons and the filler motifs. Two narrow registers, one on the lid and one on the vessel at the level of the handles, contain recumbent S-shaped elements punctuated with eyes, executed in the same plastic technique. The handles, surmounted by crested animal heads, carry pendant rings whose decoration of overlapping scales calls to mind the preceding ling vessel, no. 61. The lid is perhaps misnamed, since it does not close the vessel; behind the fringe of the crown it is open to the interior. The rough surface has a rich blue green patination. The handles, which were precast, have a slightly different olive green patina.

This hu is one of a pair identically inscribed from a hoard of ninety-seven bronzes found near Jingshan in Hubei Province. The style of the vessels is consistent with a date around the eighth century, but whether they belong just before the end of Western Zhou or just after is not certain. A total of six bronzes in the Jingshan cache bear inscriptions naming sons of a marquis of Zeng. These and other inscriptions from recent finds in Hubei and south-west Henan have helped to establish the location of the Zeng state (see pp. 252-53, bibliography). The inscription of the present hu, cast in the lid and repeated in the neck of the vessel, reads, "You Fu, second son of [the marquis of] Zeng, used bronze to make this precious ritual hu vessel" (see Fig. 85).

PUBLISHED: Wenwu 1972/5, pp. 9-11, pl. 6:3; Tokyo, 1976, no. 49.

63 Fu

8th century B.C.
Found 1963, Feicheng, Shandong Province
Height 17.5 cm. (6½ in.); length 26.7 cm. (10½ in.); weight 4.25 kg. (9 lb. 6 oz.)
Shandong Provincial Museum

The two parts of this vessel are nearly identical halves, so that the lid can be inverted to serve as a second container standing on legs of its own. Handles at the ends of each half take the form of three-dimensional tigers with arching striped bodies. The legs of the vessel are small, wispy dragon silhouettes, their snouts to the ground. Each set of four legs bounds a horizontal rectangular area filled by an enlarged and flattened version of the abstract recumbent S-shaped motif (see Fig. 86) seen in two narrow registers on the hu no. 62. The patterns elsewhere are equally flat, but the motifs on the sloping sections of the vessel are not abstract. Each of these areas contains a pair of independent pattern units formed of dragons. On the long sides of the vessel the units consist of two heads at opposite ends of a single body; on the shorter sides only one head is attached to each body. The broad grooved ribbons composing these dragons are curved and distorted to fill the entire surface uniformly. The even, swirling texture thus obtained was the artist's chief end, while individual motifs served him as nothing more than raw material. The designs stand in a direct line of descent from the patterned versions of zoomorphic motifs that evolved in the course of Western Zhou, but the present fu was probably made after the end of that period. At any rate its textured decoration based on dragon units offers a foretaste of the dominant modes of ornament of early Eastern Zhou (see chap. 7).

One of a pair, this vessel was found with ten other bronzes, including two hu vessels whose inscriptions name a marquis of Chen (see p. 253). The rough patination is in varying shades of green, blue, and brown. The corrosion carries imprints of a woven material that was in contact with the vessel during burial.

PUBLISHED: Wenwu 1972/2, pp. 47-53, pls. 9, 10; Beijing, 1972b, pls. 71-73 (several bronzes from the hoard).
69 *Hu*

**Eastern Zhou** (early 5th century B.C.)

*Found* 1923, Liyu, Hunyuan, Shanxi Province

*Height* 44.2 cm. (17¾ in.); *greatest diameter* 25 cm. (9¼ in.); *weight* 5.77 kg. (12 lb. 11 oz.)

Shanghai Museum

This pear-shaped wine vessel is one of a pair reported to be from Liyu; the mate remains in the Shanghai Museum. The broken stumps on each side of the neck mark the position of handles, presumably feline-shaped (cf. Pope, 1967, pl. 91; Yetts, 1939, pls. 16, 17). According to Ma Chengyuan, curator of bronzes at the Shanghai Museum, the missing handles and a lid are now in a Paris collection. Otherwise, this vessel is remarkably well preserved, covered by a light green patina. Two seams running down the sides of the vessel, partially covered by the remains of the handles, indicate that it was cast in a mold made in two sections.

The vessel is decorated in four horizontal registers separated by narrow bands. The first three registers carry identical motifs of a backward C-shaped dragon, its body distinguished by two parallel rows of U-shaped scales overlapping in slight relief. Intertwined with the dragon is an S-shaped, birdlike creature whose head, seen en face and alternately upside down, possesses a strangely human quality, and whose body, with granulated scales, is dominated by a long feathered wing (see Fig. 96). This motif is repeated around the vessel, and its scaly, feathery, granulated, and spiraled surfaces are set in low relief against the smooth bronze ground. The birdlike creature is a rare Liyu motif that appears only once again, in higher relief, on the outside of a large rectangular basin in the Palace Museum, Beijing (*Wenwu* 1972/11, pl. 1, p. 61, fig. 2).

The fourth register carries a more typical Liyu composition, a large mask with magnificent coiled horns and a pair of addorsed birds, their heads visible behind the mask (see colorplate, detail, no. 69). The birds' bodies are conceived as spiral-filled bands that disappear behind the mask to emerge below, between its fangs. They then turn upward, passing over and under the horns of the mask to interlace with the body of the neighboring bird (see...
This interlacing unit of mask and birds is repeated four times around the vessel in an unbroken rhythm which has the grace and discipline of classical choreography. As in the other three registers, a myriad of filler ornaments decorates the motifs, which are set in different levels of relief against the plain bronze ground.

Similar designs are abundant among Liyu style bronzes produced at the Houma foundry which were studied by George Weber in an exhaustive catalogue (1973). The most famous example is a pair of similar hu vessels, formerly in the Cull collection, now in the British Museum, London, with an inscription dating them to soon after 482 B.C. (Yett's, 1933, pls. 16, 17, pp. 45-75; G. Weber, 1973, pp. 67-81). Also of exceptional quality is a pair of large jian basins, one in the Freer Gallery of Art, Washington, D.C. (Lodge, 1946, pl. 30; Pope, 1967, pl. 88; C. Weber, 1973, pp. 82-91), the other in the Pilbuck Collection, the Minneapolis Institute of Arts (Karlgren, 1952, pl. 71); both jian are also inscribed and datable before 453 B.C. A comparable hu in the Freer Gallery is not inscribed (Pope, 1967, pl. 91). The inscribed examples suggest a date no later than the early fifth century B.C. for the Liyu hu.

In low relief against plain bronze is the lowest register is a series of gooselike birds whose long, graceful necks are alternately raised and twisted. The concave foot carries two bands, one a twisted rope, the other a cowrie design; while a plaited rope band in high relief circles the foot ring.

Small reclining animals in high relief are placed regularly around the narrow dividing bands, a feature not uncommon among Liyu bronzes (see no. 68; Shanghai, 1964, no. 72). It is unusual that, in addition to the rather harmless reclining animals on this hu, there are such creatures as a tiger with a man in his jaws, a leopard attacking a boar, and a bearlike creature holding another in its mouth. Here, the steppe animal-combat theme has been robbed of its sinister overtones and exploited largely for variety as a quaint miniaturized ornament.

This vessel is one of the best of its kind, its exceptional design and workmanship evident everywhere from the lyrical interlace to each finely executed detail, and from the three-dimensional animal forms to the subtle layered effect created by controlled variations in relief.

PUBLISHED: Wenwu 1960/4, pp. 79-80; Shang, 1936, pl. 18; Tokyo, 1976, no. 58; Beijing, 1976a, no. 59.

70 Dou

Eastern Zhou (late 6th-5th century B.C.)

Found 1923, Liyu, Hunyuan, Shanxi Province

Height 20.7 cm. (8¼ in.); diameter 17.5 cm. (6¾ in.); weight 1.8 kg. (3 lb. 15 oz.)

Shanghai Museum

The red copper-inlaid animal and human figures decorating this vessel stand out clearly in contrast to the even, light green patina of the plain bronze surface. The figures are randomly and liberally distributed across the surface with a kind of horror vacui, and with no indication of setting or spatial relationships. The animals portrayed are not all recognizable species; many are represented as vague types or adorned with imaginary appendages. All of them, however, are marked by large spiral shapes at their haunches, a motif commonly found on animal representations in steppe Animal Style art (see Fig. 97).

The Animal Style connections of this decoration are supported by two hu vessels with similar copper-inlaid designs. The first hu, now in the Museum für Völkerkunde, Staatliche Museen Preussischer Kulturbesitz, Berlin, carries an inscription saying that the vessel was acquired from the Xianyu barbarians, who became the rulers of the state of Zhongshan during the Warring States period (Kümmel, 1928, pls. 22, 23; C. D. Weber, 1968, fig. 65:a-d). The second hu was unearthed at Tangshan, Hebei Province, a border site in northeast Yan territory, on the edge of the steppes (Kaogu Xuebao 1953/6, pl. 10; C. D. Weber, 1968, fig. 62:a-f). A third hu, in the Asian Art Museum, San Francisco, deserves mention for its superb quality, although the vessel has no inscription and was not scientifically excavated (Lefebvre d'Argence, 1977, pl. 54).

An unusual inlay process was apparently used for the copper decoration of these vessels. X-ray studies of a large copper-inlaid hu with animal decorations in The Metropolitan Museum of Art have suggested to Pieter Meyers of the Museum's research laboratory that its copper motifs were cut from sheet copper and secured between the mold and the core by chaplets. In the subsequent pouring process, the molten bronze flowed around these chaplets, thus locking (or "casting") the copper motifs into place. The inscribable chaplet marks visible throughout this dou suggest that it too was inlaid during the casting process, as Charles D. Weber has suggested (1968, pp. 196-97). This technique appears to be restricted to copper-inlaid animal and pictorial style decorations (cf. no. 91), and does not seem to have been used for inlays of gold, silver, or copper in geometric designs, which were hammered into existing depressions in the cold bronze surface (see nos. 73-76, 93).

PUBLISHED: Shang, 1936, pl. 14; Shanghai, 1964, no. 71; Tokyo, 1976, no. 59; Beck, 1976a, no. 57. For a detailed study of this dou and related examples, see C. D. Weber, 1968, pp. 189-93.

71 Jian

Eastern Zhou (early 5th century B.C.)

Reportedly found 1941, Hui Xian, Henan Province

Height 45 cm. (17¾ in.); diameter 73 cm. (28¾ in.); weight 54 kg. (118 lb. 13 oz.)

Cultural Relics Bureau, Beijing

Three identical large basins were reported to have been found with the present one. One of them, now in the Historical Museum, Beijing, bears an inscription that associates the vessel with Fuchai, the last king of the Wu state (reigned 485-473 B.C.). Of the other two basins now in the Shanghai Museum (Shanghai, 1964, no. 78), one apparently also carries an inscription, but the thick incrustations have rendered it illegible. A fourth identical basin carries an inscription similar to that of the Fuchai jian but lacks the tiger handles. It was in the Oeder collection, Berlin, but was lost after the Second World War (C. D. Weber, 1973, pl. 5). Both the inscriptions and the decor style of these basins (see p. 259) support a date no later than the early fifth century B.C. for the group.

Although the surface is heavily encrusted with patches of blue, green, and brownish red patina, the size of this vessel makes it powerful and impressive. The uniform surface decor, a raised comma pattern that covers much of the basin, is offset by the strongly arched silhouette of the tigers climbing up the sides to peer over the brim. The other pair of handles, formed by animal-head loops, carries movable rings decorated with C-curves curiously reminiscent of designs on jade rings of the sixth century B.C. (Guo [B.], 1959, pl. 111:4).

PUBLISHED: Tokyo, 1976, no. 61; Beijing, 1976a, no. 60.