Understanding Ancient Chinese Bronzes,

Their Importance in Chinese Culture, Their Shapes, Functions and Motifs



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- Les Jiaguwen, Essai Bibliographique et Synthèse des Etudes (The Oracle Bones Inscriptions, Bibliographic Essay and Synthesis of Studies), Publication of the Ecole Française d'Extrême-Orient, volume 106, Paris, 1976.
- Chinese Bronzes, Fribourg, Switzerland, Office du Livre, 1980 (in French, English and German editions).
- Archaic Chinese Bronzes, Volume I: The Xia and Shang Dynasties, Paris, Arhis, 1995. Illustrated with more than 370 black and white and color photos, this volume is the first in a series of three, the second of which is devoted to the bronzes of the Zhou dynasty and the third to those of the Han dynasty.
- Ancient Chinese Gold, in collaboration with professor Han Wei, director of the Shaanxi Province Centre for Archeological Research., Paris, Arhis, Octobre 2001.
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- 2015 donation of 28 gold plaques, Early Eastern Zhou dynasty, 8th century B.C., to Gansu Provincial Museum



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Cover: *fanggui*, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Meiyintang Collection n° 65. Photographes: Vincent Girier-Dufournier Graphic design: René Bouchara Printer: Soler

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To my President and friend

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Chronology

Xia Dynasty 夏 (circa 21st – 17th/16th centuries B.C.)

• Erlitou culture 二里頭文化 (circa 19th – 17th/16th centuries B.C.)

Shang Dynasty 商 (circa 17th/16th - 12th/11th centuries B.C.)

- Erligang 二里岡 period (circa 17th/16th 14th centuries B.C.)
- Yinxu 殷墟 period (circa 14th 12th/11th centuries B.C.)

Zhou dynasty 周 (circa 12th/11th centuries – 256 B.C.)

- Western Zhou dynasty 西周 (circa 12th/11th centuries 770 B.C.)
- Eastern Zhou dynasty 東周 (circa 770 256 B.C.)
 - 。 Spring and Autumn 春秋 period (circa 770 476 B.C.)
 - Warring States 戰國 period (circa 475 221 B.C.)

Western Han dynasty 西漢 (206 B.C. – 9 A.D.)

Note: Regarding the exact dates for the earliest Chinese dynasties, i.e. the Xia, Shang and Western Zhou, there is still some disagreement among both Chinese and western scholars. Thus, in the above chronology, I have attempted to provide an all-encompassing range of dates that reflects most of the possible dates proffered by various scholars.



Introduction

The Earliest Bronze Production in China

As early as 18th/17th centuries B.C., during the Xia 夏 dynasty, sophisticated bronze vessels were being produced in China. From those early beginnings more than 3600 years ago and throughout China's ancient dynastic periods, bronze vessels were regarded by the Chinese as tangible symbols of their possessors' heaven-bestowed right to wield political power, as well as to worship and supplicate heaven, the spirits, and the clan's and nation's ancestors on behalf of themselves, their clans, their dynasties and their people, thereby ensuring peace, prosperity and heavenly protection from natural disasters within the lands under their control. Thus, in the minds of the Chinese people, bronze vessels were in the past, and are still today, inextricably linked to political power, the well-being of the nation and its people and to filial piety or ancestor worship, the most fundamental, most sacrosanct and most enduring quasi-religious sentiment shared by all Chinese, wherever they be found.

King Yu and His Nine Ding

According to legend, around 2200 B.C./2100 B.C. King Yu 禹 of the Xia 夏 dynasty (circa $21^{st} - 17^{th}/16^{th}$ centuries B.C.) succeeded in reigning in the natural elements and controlling overflowing rivers to save large stretches of previously submerged arable land, thus ushering in a new era of prosperity and growth for his people. He then divided his kingdom, with its newly increased arable land mass, into nine provinces, for each of which he cast one magnificent large bronze vessel in the form of a large tripod cauldron, a form known as *ding* 鼎 in Chinese. These 9 large bronze *ding* 九鼎 thus became the tangible symbols of royal power and the heaven-bestowed legitimacy of King Yu 禹 and his royal dynasty.

The Importance of Spirit and Ancestor Worship

The Xia $\overline{\mathbb{B}}$ dynasty (circa $21^{st} - 17^{th}/16^{th}$ centuries B.C.) was succeeded by the Shang $\overline{\mathbb{B}}$ dynasty (circa $17^{th}/16^{th} - 12^{th}/11^{th}$ centuries B.C.), the period in which the art of bronze production reached its zenith in China.

The rulers and people of the Shang not only believed in spirits and in an afterlife, but also believed, like many Chinese today, that both the spirits and the deceased had need, like the living, of proper nourishment and material comfort, and that the worship and propitiation of the spirits and the proper care or lack of it of the ancestors in the afterlife exerted a direct influence on the lives and fortunes of the living.

These beliefs gave rise to an active cult of ancestor worship which has survived among the Chinese people up to the present day.

During the Shang \hat{m} dynasty (circa $17^{th}/16^{th} - 12^{th}/11^{th}$ centuries B.C.) the cult of spirit and ancestral worship dominated the lives and activities of society at all levels. Thus, the oracle bone and tortoise shell inscriptions $\mathbb{P}\oplus\hat{\chi}$ *jiaguwen*, the earliest surviving examples of Chinese writing and China's oldest extant historical records, mention in detail not only ancestral, spirit and nature worship ceremonies, but also elaborate rituals of food offerings and libations, for all of which bronze vessels were needed.

These bronze ritual vessels were set apart from the vessels used in daily life and were employed only on solemn ritual occasions. Each had its own suitable form and size and each was used to cook, reheat and hold either edibles or beverages that were used as offerings to the spirits and ancestors, the edibles consisting of fish and various meats including beef, goat, chicken, dog, etc. and the heated beverages consisting of fermented musts or worts of grains such as rice, barley and sorghum.

The Esteem Accorded Ritual Bronze Vessels

In China, throughout the ages, the ancient bronze vessels employed in ancient rituals have been held in great esteem by the Chinese, so much so that even at the present moment, modern receptacles in the forms of these ancient vessels in both bronze, jade, porcelain and other media are still placed in temples and on modern-day family altars, where they are used to hold sticks of incense offered to the gods, to ancient deified heroes and to the spirits of the ancestors.

Today the great historic, cultural and artistic value of ancient Chinese bronze vessels is recognised by all. Indispensable in the ritual practices of the kings, emperors and nobility of ancient China, as well as symbols of political and religious legitimacy and primacy, these objects serve contemporary social scientists, historians and the modern general public as tangible, material witnesses to the political, social and religious life of the rulers and people of the Xia $\overline{\mathbb{Q}}$, Shang $\overline{\mathbb{R}}$ and Zhou $\overline{\mathbb{H}}$ and later dynasties, as well as to the creative genius, technical skill and sophistication of the ancient Chinese artisans who produced them.

Both inside and outside of China, ancient bronze vessels, and especially those of the Shang 商 and Zhou 周 are regarded with a special reverence by scholars and collectors alike and extensively researched by an elite group. Inside China itself success in the study of ancient bronzes and their inscriptions is regarded as a sign of great erudition. It is perhaps for this reason that on the mainland even today, many books on archaic ritual bronzes are still written in the traditional form of Chinese characters, rather than the simplified characters officially employed throughout mainland China since the late 1950s.

The Bronze Age in China

In China, the Bronze Age began around the $19^{th}/18^{th}$ centuries B.C. and continued throughout the Iron Age, which in China began near the end of the Spring and Autumn 春秋 period (770 – 476 B.C.), and lasted beyond the Iron Age for a few hundred more years, until traditional ancient bronze casting piece-mold techniques were completely superseded by those employing the lost wax process, sometime during the Han 漢 dynasty (206 B.C. – 220 A.D.) or according to Chinese scholars like Ma Cheng-Yuan 馬承源, as late as the Sui 隋 and Tang 唐 (581 – 907 A.D.) dynasties.

Copper being the major component of bronze, it was procured by the ancient Chinese both from open-air and subterranean mines. A great number of these ancient mines have been rediscovered in recent years, among them a mine in the present-day province of Hebei 河北省 at Tonglu 桐廬, south of present-day Beijing 北京. These ancient mines consisted of either vertical pits, or horizontal or sloping subterranean tunnels. Ancient texts record more than 1,000 km of such tunnels in Hebei 河北 province alone.

Bronze in Ancient China

Bronze, which is generally a mixture of copper and tin, could also be, in ancient China, an alloy composed of copper and lead, an alloy of copper and tin only, or an alloy of copper, tin and lead. The especially high quality of vessels produced in ancient China from this alloy is proof of the purity of the copper in the alloy and of the success of ancient Chinese artisans in controlling the temperature needed for melting the alloy, for the higher the proportion of copper in the alloy, the higher the temperature must be raised. Thus a temperature of 960 degrees is needed for a copper, tin and lead alloy containing more copper and only 15% tin, whereas a temperature of only 810 degrees is needed for an alloy containing less copper and 25% tin. The presence of lead in the alloy allows a lowering of the temperature necessary to melt the metal alloy.

Metallurgical analyses carried out on scientifically excavated ancient Chinese bronze vessels at the Erlitou 二里頭 sites (circa 19th – 17th/16th centuries B.C.) at Yanshi 偃師, Henan 河南 province, and at Erligang 二里崗 period sites at Zhengzhou 鄭州, Henan 河南 province (early Shang 商 dynasty circa 17th/16th – 14th centuries B.C.) and at the Yinxu 殷墟 sites (second part of the Shang 商 dynasty, circa 14th – 12th/11th centuries B.C.) at Anyang 安陽, Henan 河南 province show that the alloy used in producing bronze vessels cast during these early periods was not consistent.

Thus at:

- Erlitou 二里頭, the alloy consisted of
 - Vessel v/1: 92% copper and 7% tin
 - Vessel v/2: 91.89% copper, 2.62% tin and 2.34% lead

- Erligang 二里崗, the alloy consisted of:
 - Object 1: 75.09% copper, 3.48% tin and 17% lead
 - Object 2: 87.73% copper, 8 % tin and 0.1% lead
- Yinxu 殷墟 (Anyang 安陽), the alloy in the bronze objects excavated from the Tomb of Fu Hao 婦好 consisted of:
 - Copper, in quantities of from 84.71% to 80.02%
 - Tin, in quantities of from 11.85% to 14.16%
 - Lead, in quantities of from 1.8% to 1.69%

However, studies carried out at several other sites show that the alloys employed in bronze vessel casting could vary considerably from region to region, as well as from different tombs within the same burial ground, and even among objects from the same tomb. Thus, the range of possible alloy composition was quite wide with:

- Copper content ranging from 60.39% to 92%
- Tin content varying between 2.62% and 5.97%
- Lead content varying between 0.1% and 27.57%





Casting Techniques

Scientific archaeological excavations undertaken between 1928 and 1938 at the site of the ancient Shang 商 royal cemetery at Yinxu 殷 墟 in present-day Anyang 安陽 in Henan 河南 province and years later at early Shang 商初期 sites at Zhengzhou 鄭州 and Erligang 二 里崗 in Henan 河南 province and at Panlongcheng 盤龍城 in Hubei 湖 北 province all revealed the existence of fragments of grey terracotta molds used during the casting of bronze vessels.

These discoveries proved beyond a doubt that in the beginning of bronze production in ancient china, bronzes were produced by multi-mold casting, and not by the lost wax process, as specialists had previously believed.

Multi-mould casting

The fragments of molds found at the above-mentioned sites enabled the archeologists of the Academia Sinica 國立中央研究院 led by Professor Li Ji 李濟 to establish with precision the different steps taken by the artisans of the Shang 商 and Zhou 周 dynasties in the production of a bronze vessel:

- 1. First a matrix of the desired vessel was made in terracotta. The terracotta matrix was an exact copy of the final product, bearing the same degree of fineness and beauty of decoration desired for the bronze vessel.
- 2. The matrix was then completely covered over with fine thin layers of clay to a thickness of 15 mm, which would eventually serve as the negative.
- 3. After baking, the negative was cut off in pieces, which would then become the parts of the mold.
- 4. These parts were then assembled and set in a tub or tray of sand.
- 5. Then a plain inner core was made and surrounded by the pieces of the mold, which were placed in such a way as to leave an empty space of from 5 to 15 mm between the core and the assembled pieces of the mold surrounding it.
- 6. Finally, hot liquid bronze was poured into the space between the core and the assembled mold.

After cooling off, the bronze vessel, which was usually cast upside-down, was removed from the mold. On many bronze vessels mold marks or seams can be detected on a close inspection of the piece, but on pieces of the highest quality, such marks are barely perceptible, since they are often located at the junctions where the vertical lines of the vessel join.

Lost wax casting

This technique was first utilized in China around the 5^{th} century B.C. in the late Spring and Autumn 春秋 period. It consisted of:

1. Making a wax model on a brick-clay core of the same size as the desired bronze vessel.

The decoration was then either carved by hand or stamp printed with the aid of a matrix, which was usually the case for the repetitive motifs of the Warring States \mathbb{R} period (circa 475 – 221 B.C.).

- 2. Once the decoration was completed, the wax object was bathed, once, in a small layer of liquid clay containing a resistant substance, then in several more layers of regular clay which thus formed a covering around the vessel.
- 3. On contact, the liquid bronze poured into the space between the core and the outer clay covering caused the wax to melt and escape through special openings left in the outer covering by the craftsman and simultaneously filled the space left between the matrix and the outer clay covering and took the form of the desired object.
- 4. After the metal cooled off, the mold around the bronze vessel was broken off, freeing the bronze vessel, which was retouched and manually finished wherever necessary.







Shapes of Ancient Chinese Bronzes

Part 1: Vessels shapes



Bu 瓿 (old pronunciation *pou*)



This bronze jug or pitcher which has a globular body with a cramped neck and is supported by a ring foot, sometimes also has some lateral flanges at its sides and a dome-like cover.

This vessel is mentioned very early on in Chinese historical records, at least as early as the *Zhan Guo Ce* 戰國策 (*Warring States Annals*) compiled between the 3rd and 1st centuries B.C.

There is some controversy regarding the exact use for which the bu \mathfrak{A} was employed, with many claiming it was used to hold fermented beverages, while others, citing the *Zhan Guo Ce* \mathfrak{R} \mathfrak{A} , etc. say it was used to hold various sauces, and still others claim the *bu* \mathfrak{A} was used to hold water. According to the *Han Shu* \mathbb{X} (*History of Han* \mathbb{X} completed by Ban Gu \mathfrak{H} during the Eastern Han dynasty \mathbb{R} in 111 A.D.), the *bu* \mathfrak{A} was used to hold foodstuffs such as minced meat and grains.

First coming into use at the end of the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the early Shang 商 dynasty, the *bu* 瓿 becomes rounder by the beginning of the Yinxu 殷墟 period (circa $14^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.) and gradually disappears by the end of the Shang 商 dynasty.

Bu, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height: 18.4 cm, diameter: 31.1 cm – Private Collection.

Ding 鼎



The *ding* 鼎 is the most important vessel in Chinese tradition and history. Since the origin of Chinese civilization, the *ding* 鼎 has been considered the symbol par excellence of the legitimacy of supreme royal power. Thus, the ability to produce or obtain a *ding* 鼎, and to continue to possess a *ding* 鼎 was considered a concrete sign of heaven-bestowed legitimacy and continuing heavenly protection and favour. Confirmation of this can be found in the classical books and especially the *Zhouli* 周禮 (*The Rites of Zhou*, written during the Spring and Autumn 春秋 period (circa 770-476 B.C.) and the *Zuozhuan* 左傳 (Variously translated as *Zuo's Annals of the Spring and Autumn, The Chronicles of Zuo, etc.* written in the 5th century B.C. by Zuo Qiuming 左 丘明). During the Zhou 周 dynasty, *ding* 鼎 vessels were always placed in uneven numbers in a tomb, with a set of nine *ding* 鼎 reserved for the king or emperor.

As a food container and cooking vessel, the *ding* # constitutes the most important category of vessels in the corpus of ritual bronzes. It is composed of a round, bowl-shaped body surmounted by two large handles and supported on three cylindrical legs. Over the centuries its morphology changes, with each modification being typical of its specific period.



Ding, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height: 24 cm – Private Collection.



Extremely common in pottery during the neolithic period, the *ding* 鼎 was first cast in bronze at the end of the Xia 夏 dynasty during the 3^{rd} and 4^{th} stages of the Erlitou cultural 二里頭文化 period (circa $17^{th} - 16^{th}$ centuries B.C.). The earliest *ding* 鼎 is composed of a flat- bottomed bowl with thin walls, topped by two vertical handles and supported by three triangular and hollow legs.

At the beginning of the Shang \ddot{e} dynasty, during the Erligang $\Box \equiv \ddot{e}$ period (circa 17th/16th – 14th centuries B.C.), *ding* \oplus are very thinly cast and have a deep, rounded body, two small vertical handles, and either hollow cylindrical legs or, extremely rarely, flattened legs.

During the Yinxu 殷墟 (Anyang 安陽) period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.), the vessel's body grows more rounded to become a complete round bowl shape, its vertical handles become thicker, and its legs become cylindrical and full-bodied. In exceptional cases, the *ding's* 鼎 legs are flat in the shape of simple blades or shaped like stylized dragons or birds, or, extremely rarely, like tigers. The animals on such legs are always shown in profile.



During the Zhou \exists dynasty (circa 1100 – 256 B.C.), the *ding* \ddagger is the most popular bronze vessel and becomes more massive and less deep; its vertical handles are now fixed on the sides of its body and not on the rim as in earlier periods.

At the beginning of the Zhou 周 dynasty, i.e. the Western Zhou 西 周 dynasty, when much emphasis was placed on social etiquette and

Ding, Spring and Autumn period (circa 770 – 476 B.C.) Height: 30.5 cm, diameter: 31 cm – Meiyintang Collection nº 81.

respect for rank, rules of proper conduct or *Li* 禮 dictated that in funeral rites nine *ding* 鼎 were to be used for a king only, while seven were allowed for a prince, and five *ding* 鼎 were allowed for a high official, with each *ding* 鼎 vessel being used to cook a different kind of meat or fish.

During the Spring and Autumn \overline{a} and Warring States \overline{m} periods (circa 770 – 221 B.C.), *ding* \overline{m} sometimes have covers decorated with small animals or birds in the round, and handles fixed on the outer walls of their bodies, and sometimes curved legs in the form of stylized animals.

Dou 豆



This hemispherical cup supported by a high flared foot, was used to hold and display food offerings during ritual banquets. The vessel's cover, when turned upside-down, serves as a second food receptacle with its own legs.

Known in pottery since the Longshan cultural 龍山文化 period (3000 - 2000 B.C.) of the neolithic period and discovered in white pottery at

Dou, Late Spring and Autumn period (circa 6th – 5th centuries B.C.) Height: 17.5 cm – Meiyintang Collection n° 113.





the Yinxu 殷墟 Shang 商 dynasty archaeological sites in modern-day Anyang 安陽 in Henan 河南 province, the *dou* 豆 seems to have first appeared in bronze only around the 9th century B.C..

This bronze vessel was most popular during the Spring and Autumn 春秋 and Warring States 戰國 periods of the Eastern Zhou 東周 dynasty (circa 770 – 256 B.C.).

Dui 敦



This round vessel which is surmounted by a cover or top section of the same shape and often the same size, was most probably used both to hold and to serve food.

Although the *dui* \aleph is already described in the *Erya* \aleph \Re , written in the 3rd century B.C., as an 'entirely spherical' vessel, it was the antiquarians of the Song \Re dynasty who began using the term *dui* \aleph exclusively to refer to such spherical vessels.

First appearing towards the end of the 6th century B.C., this type of vessel disappears towards the middle of the 4th century B.C. during the Warring States 戰國 period.

Dui, Warring States period (circa 475 – 221 B.C.) Height: 31.5 cm – Meiyintang Collection n° 110.

Fangding 方鼎



This important and quite common cooking vessel is, as its name indicates, a 'square' β or, more precisely, a rectangular form of the *ding* \mathbb{R} . This rectangular vessel with two vertical handles fixed on the rim is supported by four legs, usually cylindrical, but, in some rare cases, blade-shaped.

Known in pottery as early as the Erlitou \Box 里頭 period (circa 19th – 17th/16th centuries B.C.), the *fangding* 方鼎 appears cast in bronze for the first time at the beginning of the Shang 商 dynasty during the Erligang \Box 里崗 period (circa 17th/16th – 14th centuries B.C.). Its casting is already extremely sophisticated with thin walls and hollow cylindrical legs and hollow vertical handles. Sometimes the *fangding* 方鼎 of early periods were of an extremely large size, like the two *fangding* 方鼎 excavated in 1974 in Zhengzhou 州市 city, Henan 河南 province, one of which is 1 meter high, 61 cm wide and 62.5 cm long and weighs 86.4 kg, while the second is 87 cm high, 61 cm wide and weighs 62.25 kg.

During the Yinxu 殷墟 period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) small morphological changes appear in the *fangding* 方鼎; its legs and handles are no longer hollow, but are now full-bodied. The vessel is more heavily cast with thicker walls and more powerful legs. Sometimes *fangding* 方鼎 may be of a huge size. The largest Shang 商 *fangding* 方鼎 known, excavated from one of the sites at modern-day Anyang 安陽

is the "Si Mu Wu fangding" 司母戊方鼎, dating from the reign of the Shang King Wen Ding 商王文丁 (circa 1112 – 1102 B.C.). It has a height of 133 cm and weighs 875 kg and was cast as a memorial to King Wen Ding's mother. The most spectacular fangding 方鼎 in design is the "He Da fangding" 禾大方鼎 found in 1959 at Ningxiang 寧鄉, Hunan 湖南 province. This very unique vessel, from the late Shang 商 dynasty, and of quite medium size, being 38.5 cm high and 29.8 cm long, is decorated on each of its four sides with a large human mask, the rarest motif in the corpus of Shang 商 bronze designs.



The shape of the *fangding* 方鼎 undergoes no major changes during the Western Zhou 西周 dynasty (circa $12^{th}/11^{th}$ centuries – 770 B.C.), but sometimes flanges appear on the vessel's body and legs; at other times the legs are thinner and higher. The major changes are in the vessel's decoration which follows the typical motifs used in this later period.

Fangding 方鼎 disappear from the repertoire of ritual bronze shapes during the Western Zhou 西周 dynasty.

The author showing to President Jacques Chirac an exceptional bronze vessel fangding.

Fangyi 方彝



The *fangyi* 方彝 is, as its Chinese name indicates, a square or rectangular vessel, similar to a small house with its four walls and a high roof-like cover of four sloping sides.

The Chinese character $yi \not \approx$, which is frequently found in inscriptions, is the general term used in ancient Chinese for ritual or sacrificial vessels.

The term *fangyi* 方彝 or square *yi* first appears in the Song dynasty work *Kaogu tu* 考古圖, a record of ancient bronzes and other antiquities in the imperial and private collections with illustrations and inscriptions, compiled by the scholar Lü Dalin 呂大臨 in 1092 A.D..

Although nowadays the *fangyi* 方彝 is generally classed among vessels used for fermented beverages, we cannot be certain as to its actual use in antiquity. Chinese antiquarians of the Song 宋, Ming 明 and Qing 清 dynasties believed the *fangyi* 方彝 was used to hold food. In recent times, eminent archeologists and scholars such as Chen Mengjia 陳夢 家 and Bernhard Kalgren hold to the same view, but others such as Rong Geng 容庚, Ma Chengyuan 馬承源 and Minao Hayashi 林巳奈夫 regard the *fangyi* 方彝 as a vessel used to hold fermented beverages.



Fangyi, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 22.8 cm – Private Collection.



The *fangyi* 方彝 form, known in pottery since the neolithic period, also appears in white marble during the Shang 商 dynasty. The first *fangyi* 方彝 in bronze seems to have appeared at the beginning of the Yinxu 殷墟 period of the Shang 商 dynasty or perhaps during the transitional phase between the end of the Erligang 二里崗 period and the beginning of the Yinxu 殷墟 period around the 14th century B.C..

The *fangyi* 方彝 disappears at the beginning of the Western Zhou 西 周 dynasty after having undergone some morphological changes such as the addition of flanges, or protruding design parts, or even lateral handles in the shapes of elephant trunks, making the later-period vessels look quite Baroque.

Fu 簠



The term fu fu was employed very early on in classical texts to refer to a vessel used to hold offerings of millet during rituals.

This oblong vessel of rectangular form with upwardly sloping sides in its lower section, is supported by a flared foot and topped by a cover of the same shape and size as its body but in reverse, which can be used as a second receptacle when placed upside-down.

The *fu* 簠 appears during the end of the Western Zhou 西周 period, or, more precisely, at the end of the 9th century B.C. and becomes very popular during the subsequent Spring and Autumn 春秋 period (circa 770 - 476 B.C.).

Fu, early Spring and Autumn period (circa $8^{th} - 7^{th}$ centuries B.C.) Height: 21 cm, length: 36.5 cm – Meiyintang Collection n° 109.





The *gong* \Re , sometimes pronounced *guang*, is a large vessel for fermented beverages, with a lower section in the shape of a sauceboat supported by a ring foot and an upper section consisting of a long cover in the shape of the back and head of an animal. In some rare examples, the head of the animal is attached to the vessel's lower section, as in the *gong* illustrated here on page 39.

First appearing during the Yinxu 殷墟 period of the Shang 商 dynasty (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.), the *gong* 觥 continues to be used until the middle of the Western Zhou 西周 dynasty, at which time the vessel's ring foot is sometimes replaced by four small feet.

The shape of this bronze is sometimes said to have been adapted from earlier vessels for fermented beverages mentioned in ancient classical texts as having been made from the horns of water buffaloes, the animals most commonly used in sacrificial worship ceremonies in the earliest periods. This theory seems to have been confirmed by the discovery in 1959 at Shilou Huazhuang $\overline{\Box}$ # \overline{theta} in Shanxi \Box province of a bronze buffalo-horn-shaped *gong* \mathfrak{K} with its narrower front section ending in the head of a horned dragon.



Gong, early Western Zhou dynasty (circa 11th century B.C.) Height: 27.5 cm, length: 27 cm – Meiyintang Collection n° 185.



Gu 觚



The $gu \not ||$ is one of the most common bronze goblets used for fermentedbeverage libations. Its chalice-shaped body is flared in its upper part and at its base. Slightly protruding at the middle, it is sometimes flanked by four flanges, or cast with a décor in open work, or, extremely rarely, the whole vessel may be of a square shape.

The term *gu* 觚, which is not mentioned in early bronze inscriptions, appears in the *Shuowen jiezi* 說文解字 written during the Eastern Han dynasty and other early encyclopedic dictionaries and the term was confirmed in usage by the Song π scholar Lü Dalin 呂大臨 in 1092 in his famous work, the *Kaogu tu* 考古圖.

Very common in ceramic during the neolithic period and the Erlitou cultural 二里頭文化 period (circa 19th – 17th/16th centuries B.C.), the *gu* 觚 vessel appears in bronze at the beginning of the Shang 商 dynasty during the Erligang 二里崗 period (circa 17th/16th – 14th centuries B.C.). At that time the *gu* 觚 is small in size but roughly cast with thin walls. Its chalice shape is like an uninterrupted vertical line from its foot to its rim. It is usually decorated with a frieze of primitive *taotie* 饕餮 masks, or, much more rarely, its foot is decorated with geometric motifs in openwork.

During the Yinxu 殷墟 period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.), the *gu* 觚 becomes, with the *jue* 爵, the most popular vessel, and the two

Gu, Shang dynasty, Yinxu period (circa $14^{\rm th}-12^{\rm th}/11^{\rm th}$ centuries B.C.) Height: 32.1 cm – Private Collection.

together form the basic set of vessels found in Shang $\bar{\mathbf{B}}$ tombs. The late Shang gu fit is taller, slimmer and more elegant, and can be entirely covered with decor.

This shape disappears around the $10^{\rm th}$ century B.C. during the early Western Zhou $\boxplus \exists$ period.

Gui 簋



Often termed a *duan* 段 in bronze inscriptions, the *gui* 簋 was principally used to hold cooked rice, millet and sorghum. The vessel is composed of a circular, bowl-like body supported on a ring foot and may have two, three or, more rarely, four large semi-circular lateral handles. The same-shaped vessel, but without such handles is called a *yu* 盂 (*See photo on page 20*).

Rare during the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the early Shang 商 dynasty, the *gui* 簋 of that time has a bowl-shaped body with a thin lip, a ring foot and two lateral handles. A wonderful example of an early Erligang 二里崗 *gui* 簋, perhaps the earliest so far discovered, was excavated in 1974 from tomb M1 at Lijiazui 李家嘴, Panlongcheng 盤龍城, Hubei 湖北 province.

Still quite rare at the beginning of the Yinxu 殷墟 period (circa 14th – 12th/11th centuries B.C.) of the Shang 商 dynasty, the *gui* 簋 begins to become much more popular at the end of the Shang 商 dynasty and throughout the beginning of the early Western Zhou 西周, and becomes one of the most important bronze vessels used in rituals.



Gui, early or middle Western Zhou dynasty (circa 10th century B.C.) Height: 15.2 cm, length: 21.8 cm – Meiyintang Collection n° 98.



Towards the end of the 11th century B.C., the *gui* 簋 begins sometimes to have a cover and its original ring foot is replaced by three small legs (*See photo on page 156*) or a large, high cubical stand, sometimes larger than the vessel itself. These are known as *fangzuo gui* 方座簋 (square-based *gui* 簋) in Chinese (*See photo on page 135*).

With the increased emphasis on hierarchy and status which came about with the codification of Li 禮 or rites during the Western Zhou 西 周 dynasty (circa 12th/11th centuries – 771 B.C.), the number of *gui* 簋, like the number of *ding* 鼎 permitted to be used in rituals or burials, was strictly regulated, with eight *gui* 簋 used for a King and six for a prince and/or for a very high ranking official. Thus during the Western Zhou 西周, sets of *ding* 鼎 and *gui* 簋 were essential for all important rituals carried out by the high nobility.

He 盉



The exact use of this ewer or kettle-like vessel in ancient times is difficult to determine. Every scholar agrees that this type of vessel was designed to pour liquid but the question is which kind, water or fermented beverages, or a mixture of both? According the *Shuowen jiezi* 說文解字, the '*Analytical Dictionary of Characters*', one of China's earliest dictionaries, compiled by the lexicologist Xu Shen 許慎 during the Han 漢 dynasty, the *he* 盉 was used to mix sauces. However, modern scholars like Wang Guowei 王國維 and Li Xueqin 李學勤 class the *he* 盉 in the category of vessels used to mix water and fermented

He, Shang dynasty, Erligang period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) Height: 23 cm – Meiyintang Collection n° 20.

beverages. The French scholar Maud Girard-Geslan indicates that this vessel was used for fermented beverages during the Shang 商 dynasty but its function changed during the Zhou 周 dynasty, when it was used to hold and pour water during ritual ablutions.

Known in pottery as early as the Dawenkou 大汶口 (4300 – 2500 B.C.) and Longshan 龍山 (3000 – 2000 B.C.) cultural periods in the neolithic period, the first *he* 盉 cast in bronze appears during the later stages of the Erlitou period 二里頭 (circa $18^{th} - 17^{th}/16^{th}$ centuries B.C.). The only vessel of this type actually known from that period was found in tomb 1 in section II of the Erlitou 二里頭 site, and is dated from Erlitou 二里頭 stage IV. It strongly resembles the pottery vessels of similar shape of the same period, i.e., it has a tri-partite body in the shape of a bulbous *li* 鬲, a cylindrical spout, a semi-circular handle and a wide round opening at its top.

At the beginning of the Shang $\overline{\oplus}$ dynasty, during the Erligang $\Box \equiv \exists \overline{\oplus}$ period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.), the *he* $\underline{\pm}$ is very thinly cast and its body is supported by three hollow legs like the *li* $\overline{\oplus}$ (*See photo on pages 66-68*), and it has a small opening in its upper part, and a small semi-circular handle. This primitive vessel is often considered a hybrid type and is sometimes referred to as a *lihe* $\overline{\oplus}$ $\underline{\pm}$. (*See photo on page 44*).



During the Yinxu 殷墟 period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.), the vessel's body grows rounder, the three legs and pouring spout become cylindrical, but the handle remains semi-circular, and a cover appears



He, Warring States period (circa 475 – 221 B.C.) Height: 22.3 cm – Meiyintang Collection n° 24.

that is attached to the handle with a chain. Some rare examples are square in shape, in which case they are supported by four cylindrical legs.

By the end of the Shang \oplus dynasty, the *he* \pm undergoes morphological changes and its body becomes globular.

With the Western Zhou 西周 dynasty (circa 12th/11th centuries – 771 B.C.) the morphological changes become more pronounced. The *he*'s 盂 body can be either round, or flat, or oblong, or, most rarely, it can assume the shape of a hybrid animal (*See drawing & photo on pages 46-47*). During the Spring and Autumn 春秋 period (circa 770 – 476 B.C.), the vessel is sometimes circular and is supported on four small, stylized-animal-shaped legs.

This ewer-type vessel disappears by the end of the Warring States \mathbb{R} g period (circa 475 – 221 B.C.) or the beginning of the Han $\not\equiv$ dynasty (circa 206 B.C. or afterwards).

Hu 壺



The classification $hu \equiv$ is used in Chinese to denote large vase and jar-shaped vessels of various forms which, despite their morphological differences, share a certain number of characteristics which include a bulbous body which narrows around its shoulders, a long neck and a ring foot. Sometimes the $hu \equiv$ has a cover, lateral handles or suspended handles and a chain.

Hu, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 30.8 cm – Meiyintang Collection nº 176.



The precise function of the hu 壺 is problematic. The Zhou dynasty (circa 12th/11th centuries – 221 B.C.) *Yili* 儀禮 (*The Book of Rites and Ceremonies*) mentions that the hu 壺 was used to hold alcoholic beverages, but certain inscriptions and other classical texts classify the hu 壺 among vessels used for holding water. The general opinion among scholars nowadays is that the hu 壺 was used to hold either alcoholic beverages or water, depending on what the situation called for.

Several scholars, including Ma Chengyuan 馬承源, believe that the $hu \equiv \text{first}$ appeared in bronze as early as the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the early Shang B dynasty, but no such early example has as yet been unearthed by archaeologists. During the Yinxu 殷墟 period (circa $14^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.) of the Shang B dynasty, most $hu \equiv \text{take}$ a form which resembles the lower, rounded part of a pear that gradually becomes a bit narrower as it rises towards its narrower and much shorter neck. A pair of cylindrical lug handles appears near the top, one on each side of the neck and the usually coverless vessel stands on a high ring foot. If there is a cover, it is usually dome-shaped.

Sometimes, the body of the usually coverless hu \equiv becomes more oval in shape and some, called *fanghu* \exists , are even square.

Gradually the shape of the *hu*'s $\overline{\oplus}$ body changes, and by the end of the Shang $\overline{\oplus}$, the pear-shaped lower section narrows half way up towards the top of the vessel and the *hu*'s $\overline{\oplus}$ neck becomes much longer and the later *hu* $\overline{\oplus}$ usually has a high cover, often with a wide, high, thick-lipped, open-mouthed shallow cup-like appendage on its top (*See photo on page 52*).

From the Warring States \mathbb{R} period (circa 475 – 221 B.C.) onwards, the *bianhu* \mathbb{R} \mathbb{E} , a flattened-egg-shaped vessel on a low rectangular foot and topped by a short, rather narrow cylindrical neck with a slightly protruding lip and a low cover with a small ring handle on it, becomes very popular in addition to the rounder version of the *hu* \mathbb{E} (*See figure on page 53*).



Hu, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height with handle: 40 cm – Meiyintang Collection n° 183.





a - *hu*, Warring State period

b - *hu*, Zhou dynasty

The $hu \equiv is$ very popular during all of the Han $\not\equiv$ dynasty (circa 206 B.C. – 222 A.D.), by which time its body, pear-shaped or square, with a long neck and cover, is cast in a simpler fashion, and with thinner walls. The Han $\not\equiv hu \equiv is$ usually without decoration, except for a pair of *taotie* $\not\equiv \not\equiv \not\equiv masks$ (*See pages 109-118*) in light relief to which moveable handles are attached.



Hu, late Western Zhou dynasty (circa $9^{th} - 8^{th}$ centuries B.C.) Height: 51 cm – Meiyintang Collection n° 39.

Jia 斝



This vessel used for warming fermented beverages is very similar to the *jue* \oiint but differs from it in its larger size and its lack of a pouring spout. From the upper rims of the *jia*'s body, which can be round or cylindrical, with a flat bottom or a round one, has two vertical protuberances surmounted by knobs arise. The vessel's semi-circular lateral handle can sometimes be decorated with a wonderful animal head cast in the round.

The term *jia* 斝 is mentioned for the first time in the *Liji* 禮記 (*The Classic of Rites of the Zhou*), where a commentary by Zheng Xuan 鄭玄 says that the *jia* 斝 was used by the King for making fermented beverage libations during rituals, while the *jue* 爵 was used for the same purpose by those of the rank of Marquis. A pictogram carved on an oracle bone, *jiaquwen* 甲骨文, from the Shang 商 dynasty strongly resembles the shape of this vessel.

Jia 斝 vessels appear as early as the end of the Xia 夏 dynasty. Some were excavated from Stages III and IV tombs in the Erlitou 二里頭 (circa $18^{\text{th}} - 17^{\text{th}}/16^{\text{th}}$ centuries B.C.) area. These primitive examples have a flat bottom, a body narrowing at the middle, a semi-circular lateral handle, two vertical protuberances surmounted by knobs, and three triangular legs, which can sometimes be hollow, similar to those on a vessel *li* 鬲 (*See pages 66-68*).



Jia, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 33.5 cm – Meiyintang Collection n° 172.



At the beginning of the Shang \ddot{m} dynasty, during the Erligang $\Box \equiv$ \ddot{m} period (circa 17th/16th – 14th centuries B.C.), the shape of the *jia* Ξ changes slightly, but generally the body consists of two sections: a lower section with outwardly expanding, rounded sides and an upper section with a narrow waist that flares outwards as it rises to its rim. The conical legs are hollow and extend outwards as they descend.

During the Yinxu \mathbb{B}_{\pm} period (14th – 12th/11th centuries B.C.), the apogee of Shang \mathbb{B} bronze vessel production, the shape of the *jia's* \oplus body hardly changes, and it remains round, tall and convex, or sometimes square, as in the magnificent vessel illustrated here on page 56. The legs are triangular and sometimes hollow and open on their inner sides. Size can also vary greatly, with the largest reaching over 80 cm in height.

Toward the end of the Shang 商 dynasty and the beginning of the Zhou 周 dynasty, the body of the *jia* 斝 becomes dumpier and sometimes looks like the body of a *li* 鬲 (*See pages 66-68*), composed of three clustered round swells supported by three small cylindrical legs that narrow into points as they descend. The vessel's semi-circular, lateral handle becomes thicker and is often surmounted by a bovine head cast in the round. The *jia* 斝 disappears around the middle of the Western Zhou \exists dynasty around the 10th century B.C..

Jian 鑒



The *jian* 鑒 is a huge, deep-basin-shaped vessel, with either a ring foot or a flat bottom, and resembles a very large and very deep *pan* 盤. The *jian* 鑒, which was the largest bronze vessel in size in ancient China, appears exclusively in the Spring and Autumn 春秋 and Warring States 戰國 periods, stretching from circa 770 to 221 B.C..

Fangjia, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height: 50.9 cm – Meiyintang Collection n° 10. The *jian* $\frac{1}{2}$ was used as a container for water or ice. When the *jian* $\frac{1}{2}$ was filled with water, the water's surface was also sometimes used as a mirror. So common was this practice that in ancient China bronze mirrors were also called *jian* $\frac{1}{2}$, since one could see one's reflection on a bronze mirror's well-polished surface, just as one could see one's reflection on the surface of the clear water in a *jian* $\frac{1}{2}$.

When filled with ice, the *jian* 鑒 was also used to cool alcoholic beverages. A most extraordinary *fangjian* 方鑒 or square *jian* 鑒 was excavated from the tomb of the Marquis Yi of Zeng 曾侯乙 in Hubei 湖 北省 in 1978. The elaborately decorated multi-sectioned piece consists of a large square *jian* 鑒 envelopping a smaller square *zun fou* 方尊缶 (square *zun jar*). Ice was placed in the space between the outer *jian* 鑒 and the inner *zun fou* 尊缶 to cool the alcoholic beverage stored therein.

Jiao角



This wine vessel, which very closely resembles the *jue* 爵 in shape, has major differences; it has no pouring spout and no vertical protuberances surmounted by knobs, but it has two upwardly pointing, outwardly extending, horn-like sides.

Known in pottery during the neolithic period, the *jiao* 角 appears in bronze at the end of the Erlitou 二里頭 cultural period (circa $18^{th} - 17^{th}/16^{th}$ centuries B.C.), but in a hybrid *jiao-he* 角/盉 form. This *jiao's* 角 oval body with its pointed prolongations, has a very long pouring spout, identical to that of a *he* 盉 vessel, positioned towards the middle of its body (*See photo on page 104*).

Jiao, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 23.5 cm – Private Collection (ex. Meiyintang Collection).





During the Erligang $\Box \equiv \exists \exists$ period the vessel, with a very thin inner wall, has an oval body and a flat bottom and is supported by three extremely thin triangular legs.

During the Yinxu 殷墟 period, the *jiao* 角 develops like the *jue* 爵: its body, initially oval in form, becomes rounder, and its bottom, which was flat during the Erlitou 二里頭 cultural period and the Erligang 二 里崗 period, becomes round.

The *jiao* 角 becomes very popular in the transitional period between the late Shang 商 dynasty and the early Western Zhou 西周 dynasty around the 12^{th} and 11^{th} centuries B.C., when it sometimes has a cover.

Jue 爵



The tripod *jue* 爵, used to hold and to warm up fermented beverages for libations during ritual ceremonies, was the first bronze vessel to appear in Ancient China. Its name and use was already recorded in China's earliest written histories and dictionaries and the vessel was illustrated and described in the *Kaogu tu* 考古圖 written by Lü Dalin 呂大臨 in 1092, probably the oldest study on ancient Chinese bronze vessels.

Known in pottery from as early as the beginnings of Chinese culture, the first *jue* \mathfrak{B} cast in bronze appears during the Erlitou $\Box \boxplus \mathfrak{M}$ period's stage III, which dates to the end of the Xia \mathfrak{Z} dynasty (circa $21^{st} - 17^{th}/16^{th}$ centuries B.C.). This wine cup, supported by three triangular legs, has a long pouring spout on one side of its rim, a shorter pointed rim on the other side, two vertical protuberances surmounted by knobs

Jue, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height: 20.5 cm – Private Collection.

just over the area where the long spout extends from the vessel's body and a semi-circular handle cast on one of its sides (*See photo on page* 63). The morphology of the *jue*'s 爵 body changes slightly in subsequent periods.

In its primitive form, during the Erlitou 二里頭 period, the *jue* 爵 is usually small in size and has a very simple shape. Its body is thinly cast and oval with a flat bottom, a semi-circular handle and three short triangular legs. *Jue* 爵 of this period are usually without decoration, but sometimes they have just a frieze of small bosses on their bodies. Another characteristic of these most early pieces is the absence of knobs, with only small projections located at the pouring-spout's originating point, a harbinger of their future development.

At the beginning of the Shang 商 dynasty, during the Erligang 二里 岡 period (17th/16th – 14th centuries B.C.) the morphology of the *jue*爵 remains simple. The vessel is cast with a flat bottom, a narrow pouring spout, and three triangular legs (*See photo on page 162*). Some rare examples are either tetrapod (one example from the L. Jacob Collection is now in the Guimet Museum, Paris. See pages 51-53 of Maud Girard-Geslan, *Bronzes Archaïques De Chine.*) or have only a single central knob on a triangular protuberance just over the section of the spout where it extends from the vessel's body. Usually the vessel is decorated with a small frieze cast with a primitive *taotie* 饕餮 mask (*See drawing on page 110*).

During the Yinxu 殷墟 period (second part of the Shang 商 dynasty, circa 14th – 12th/11th centuries B.C.), a period often called the Anyang $\overline{\mathcal{G}}$ 陽 period, after its location in modern-day Anyang $\overline{\mathcal{G}}$ 陽, Henan 河南 province, the *jue* 爵 becomes extremely popular and is always used together with a *gu* 觚 vessel, to form a basic set used in Shang 商 rituals. The *jue*'s 爵 shape changes slightly, its body becomes rounder, its bottom is either rounded or curved, rarely flat, its pouring spout is dumpy and shorter and its size may vary considerably, with some *jue* 爵 extremely tall, while others are of square shape, and still others have a cover. The *jue* 爵 vessel disappears after the beginning of the Western Zhou西周 dynasty, as libations with fermented beverages become less common.



Jue, Xia dynasty, Erlitou culture (circa 19th – 17th/16th centuries B.C.) Height: 21 cm, length: 18.6 cm – Meiyintang Collection n° 2.



Lei 罍



The term *lei* 罍 is used to refer to a group of vessels that can be either round or square and supported either by a ring foot or a flat base, and which all share similar characteristics including a constricted, short neck, an ovoid-shaped body, a shoulder wider in diameter than the rest of the body and, sometimes, a dome-like cover.

According to classical texts, the *lei* arrow was used to hold either fermented beverages or water. Some experts believe that the*lei* $<math>
arrow first appeared in bronze during the Erligang <math>
arrow extsf{2} extsf{2} extsf{2} extsf{3} extsf{2} extsf{3} extsf$

This early, vase-shaped vessel, if we consider it to be a *lei* 罍, undergoes important changes in its form during the Yinxu 殷墟 period: its shoulders become convex, two small handles appear at the level of the vessel's shoulders and a third handle appears at the base of the body just above the foot. It is also during this period that large square *lei* 罍 or *fanglei* 方罍, begin to appear.

Very popular at the end of the Shang 商 dynasty and the beginning of the Western Zhou 西周, this shape disappears from the Chinese bronze repertoire towards the end of the 3rd century B.C..

Lei, Shang dynasty, Yinxu period (circa $14^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.) Height: 34.3 cm – Meiyintang Collection.

Li 鬲



This tripod vessel named a $li \equiv$ is composed of three clustered bulbous swells and was used to cook meat and cereals. Its shape is conducive to quick heating, as the vessel's design makes it possible for the fire to reach the largest possible surface of the vessel in a relatively short amount of time.

The $li \ Bar{B}$ is known in pottery in the neolithic period, but it is not too common at that time. Its pottery form becomes more popular during the Shang $Bar{B}$ and Zhou $Bar{B}$ dynasties. It first appears in bronze in the early Shang $Bar{B}$ dynasty, at the beginning of the Erligang $\Box \blacksquare Bar{B}$ period (circa $17^{th}/16^{th} - 14^{th}$ centuries B.C.). It is a very simple vessel, thinly cast, with a body composed of three hollow clustered swells, supported on three small hollow legs, and with two vertical handles fixed to the rim. By the end of the Erligang $\Box \blacksquare Bar{B}$ period, the casting becomes much thicker.

During the Yinxu 殷墟 period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) and the early Western Zhou 西周早期 dynasty (circa $12^{th}/11^{th} - 10^{th}$ centuries B.C.), a neck appears in the upper part of the vessel's body, the three bulbous swells become more shallow and less elongated and the legs can be full-bodied and cone-shaped, making the whole piece look larger and more powerful. Four-legged *li* 鬲 or square *li* 方鬲 are extremely rare; one as yet unpublished example is conserved in the Guimet Museum, Paris.



Li, Shang dynasty, Erligang period (circa 17th/16th – 14th centuries B.C.) Height: 25.3 cm – Meiyintang Collection n° 91. By the middle of the Western Zhou 西周 dynasty, the morphology of the $li \equiv$ changes slightly, with the vessel becoming much smaller, and its handles being either fixed to the sides of the vessel or disappearing completely. The three lobes become less visible and are supported by three short thin legs, either cylindrical or cabriole-shaped, and the lip or the rim can be sharply flared or everted and flat.



The li 鬲 shape disappears at the beginning of the Spring and Autumn 春秋 period (circa 770 – 476 B.C.)

Liding 鬲鼎



This controversial name was used for the first time by Professor B. Kalgren and is based on the translation of a bronze inscription which means, according to different scholars, either "a $li \extbf{B}$ and a *ding* 鼎" or "a *liding*" 鬲鼎.



Liding, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 20.8 cm – Private Collection.


This hybrid vessel, whose shape is a mixture of a $li \equiv and a ding \equiv appears at the end of the Shang <math>\equiv dynasty$. At this period, the vessel's body, cast with deep grooves separating the vessel's three bulbous swells, is supported by three cone-shaped, pointed, fully rounded legs.

During the transitional period, from the late Shang 商晚期 dynasty to the early Western Zhou 商晚期 dynasty (circa 12th – 11th centuries B.C.), the vessel's bulbous swells become less obvious and less delineated.

During the Western Zhou 西周 (circa $12^{th}/11^{th}$ centuries – 771 B.C.) the separation grooves virtually disappear, with only lines separating the body into three sections.

Lian 奩 / Zun 樽



The *lian* \triangleq or, more correctly *zun* \notin , is a vessel of cylindrical shape, supported by three small feet, sometimes in the form of animals, and topped by a cover.

Called a *lian* \widehat{a} in the catalogues of collections written by antiquarians from the Song $\widehat{\pi}$ dynasty to the Qing $\widehat{\beta}$ dynasty (circa 960 – 1911 A.D.), this vessel was originally considered to be a receptacle for cosmetics. However, the unearthing by archeologists in 1962 at Youyu Dachuan $\widehat{\pi} \widehat{\pm} \widehat{\times} 11$ Village in Shanxi $\coprod \overline{a}$ province of one such vessel with an inscription recording the real name by which the vessel was known in antiquity and its precise use, has now made it possible for us to correct

Lian / Zun, Warring States period (circa 475 – 221 B.C.) Height: 19.6 cm – Meiyintang Collection n° 133.

former inaccuracies and to state with certainty that this vessel is a type of *zun* 樽, and that it was used to warm alcoholic beverages.

Pan 盤



The name of this vessel, which was used for ritual ablutions during ceremonies, appears in a great number of bronze inscriptions and in a number of classical texts, including the *Yili* 儀禮 (*The Book of Rites and Ceremonies*) in which the vessel's use is clearly explained.

The *pan* 盤 is a large, round basin of some depth, supported by a ring foot. Very rare during the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the early Shang 商 dynasty, *pan* 盤 become more numerous towards the end of the Shang 商 dynasty and the beginning of the Zhou 周.

From the beginning of the Western Zhou 西周 (circa 12th/11th centuries – 771 B.C.), the *pan* 盤 undergoes a slight morphological change, with the appearance of lateral handles fixed to the rim of the vessel. Later, three feet, sometimes in the form of humans or animals, support the basin. The *pan* 盤 disappears from the repertoire of Chinese bronze vessels towards the 5th century B.C..



Pan, Shang dynasty, Erligang period (circa $17^{th}/16^{th}$ – circa 14^{th} centuries B.C.) Height: 24 cm, diameter: 37 cm – Meiyintang Collection n°116.





b - Ladle bi

Called either a *shao* 勺, *dou* 斗 or *bi* 上, this ladle was used to ladle out liquids and sometimes food from vessels. Generally this type of ladle resembles a tobacco pipe consisting of a long handle at the end of which is attached a small cup-like receptacle, the exception being the *bi* \vdash , which looks more like a spoon. Very popular during the Shang 商 dynasty (circa 1600 – 1100 B.C.), these ladles are often found together with vessels such as *jia* 斝, *jue* 爵, *gong* 觥, *zun* 尊, *you* 卣, *yu* 盂, and *jian* 鑒.

Such ladles undergo some important changes during the Warring States 戰國 period (circa 475 - 221 B.C.) when a ring foot is attached to the cup-like part of the ladle to support it.

Of all the three types of ladles used to ladle out liquids or food, only the bi \vdash has a rather flat receptacle on the end of its handle, similar to the end of a shallow European spoon, but more flat. This type of ladle was common during both the Western Zhou 西周 and Eastern Zhou 東周 dynasties.



Ritual bronze ladle *dou*, early Western Zhou dynasty (circa $11^{th} - 10^{th}$ centuries B.C.) Length : 22.6 cm – Meiyintang Collection n° 34



Xu 盨



The xu (28), used to hold food and especially rice and other grains, is an oblong vessel of rectangular shape, with a cover of similar shape. Very close in form to a fu (26), it differs by its round angles and a cover that is clearly smaller in size than the vessel's body, but which, when turned upside-down, can also be used as a second receptacle on which to display the food contained in the vessel.

The character xu $ext{in}$ appears in inscriptions on a number of such vessels, but may have been considered a variant of a *gui* $ext{in}$ or a *xugui* $ext{in}$ $ext{inscriptions}$ wherein the vessel is thus named.

First appearing in the middle of the Western Zhou 西周中期 (circa 9th century B.C.), the *xu* 盨 disappears at the beginning of the Spring and Autumn 春秋 period (circa 8th – 7th centuries B.C.).

Xu, late Western Zhou dynasty (circa $9^{\text{th}} - 8^{\text{th}}$ centuries B.C.) Height: 20 cm, length: 34 cm – Meiyintang Collection n° 108. Yan 甗



The pronunciation of the Chinese character used to identify this vessel is usually *yan* an, but some scholars pronounce it as *xian*. This vessel was used for steaming rice or other grains and is composed of two parts:

- Its lower part, similar to a $li \equiv -shaped tripod$, contained the water.
- The upper part, called a *zeng* 甑, was used to hold rice or other kinds of grain food to be cooked by steaming. Between the vessel's two sections, a strainer-like metal plate called a *bi* 箄is fixed.

Found in pottery as early as the neolithic period, the earliest known *yan* 甗 in bronze, dating from the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the early Shang 商 dynasty, was excavated at Panlongcheng 盤龍城, Hubei 湖北 province between 1974 and 1976. During the Shang 商 dynasty, the *zeng* 甑 or upper part of the vessel is much larger than the lower *li* 鬲-like tripod-shaped lower section.

Towards the end of the Shang 商 dynasty and the beginning of the Western Zhou 西周 dynasty, the upper part of the *yan* 甗 ends in a horizontal lip on which vertical handles are secured.

The *fangyan* 方甗 or square *yan* 甗, supported by four legs, also appears in this period, but is quite rare, with only a few examples being published by Hayashi M. 林巳奈夫, *In Shu Jidai Seidoki no Kenkyu (In*

Yan, Shang dynasty, Erligang period (circa 17th/16th – 14th centuries B.C.) Height: 45 cm - Meiyintang Collection n° 88.





Shu Seidoki Soran Ichi) 殷周時代青銅器の研究: 殷周青銅器綜覧(一) 圖版, – Conspectus of Yin and Zhou Bronzes, Tokyo 1984, in Volume 1 part 2, on p. 79 no. 80 – 81, and p. 80 no. 83 (See photo on page 159).

The *yan* \boxtimes was used up to the end of the Han \cong dynasty (206 B.C. – 24 A.D.). During this period, its legs disappear and the lower part of the vessel is cast in the shape of a bowl with a flat bottom.

Yi 匝



The name $yi \boxtimes$ is used to refer to a group of pouring vessels of various forms, with or without feet, with round or flat bodies, semi-circular or flat handles and large spouts, often in the form of animal heads or stylized animals.

According to the *Zuozhuan* \pm (\oplus or *Commentary of Zuo*, which was composed before 389 B.C. and is one of China's earliest works of narrative history, the *yi* \boxplus was used for the ceremonial washing of hands during certain rituals.

Some experts also believe that the $yi \times was$ used to pour water into the $pan \times was$ basin.

The yi 匜, whose form was somewhat inspired by the body of the vessel *gong* 觥, first appears at the end of the Western Zhou 西周, around the 8th century B.C. and disappears towards the 4th century B.C.

Yi, Spring and Autumn period (circa 770 – 476 B.C.) Height: 15.8 cm – Meiyintang Collection n° 197.

You 卣



The *you* \doteq , a bronze jar-shaped vessel used to store and transport fermented beverages, consists of a bulging pot-like body, either ovoid or pear-shaped, supported by a ring foot and topped by a cover and an arch-shaped moveable handle which is usually attached to two small ring handles, one on each side of its body, and these in turn are often decorated with animal heads.

The *you* 卣 first appears near the end of the Erligang 二里崗 period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the Shang 商 dynasty, when it is sometimes mistakenly called a *hu* 壺 in inscriptions.

Quite popular and commonly used from the middle of the Shang 商 dynasty and throughout the early part of the Western Zhou 西周 dynasty (circa $17^{\text{th}}/16^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.), the *you* 卣 disappears towards the 9th century B.C..

An extremely rare variant of the pot-shaped *you* 卣, is the cylindrical *you* 卣, of which only eight examples have been so far recorded (*See photo on page 84*).



You, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 29.5 cm – Private Collection.



Yu 盂



This vessel comes in two main types, a smaller, usually handleless vessel with long, straight sides that slope inwards as they descend. Hayashi calls this the 'small yu 盂' (*See photo on page 20*). The second, larger type of yu 盂 with its deep-bowl-like body, also with long, straight sides, has two handles that jut straight out, one from each side of the vessel, before turning upwards towards the vessel's upper rim. Hayashi calls this type of yu盂: the 'large yu 盂'. (See Hayashi M., 林巳奈夫, *In Shu Jidai Seidoki no Kenkyu (In Shu Seidoki Soran Ichi)* 殷周時代青 銅器の研究: 殷周青銅器綜覽 (一) 圖版), *Conspectus of Yin and Zhou Bronzes*, Tokyo 1984, Vol. I, p. 24 – 25).

Thus, the $yu \equiv$, whether 'small' or 'large', differs primarily from the $gui \equiv$ by the straightness of its sides as opposed to the convex body of the $gui \equiv$, and by the wideness of its mouth and the thickness of its rim, which often extends outwards from the body of the vessel like an eave.

In the classical texts, the $yu \equiv$ is described as a vessel used to hold water for 'ablutions' or 'washings'. But according to other texts, the $yu \equiv$ was used to hold ice to keep foodstuffs fresh during the summer. Certain scholars consider the $yu \equiv$ to be the predecessor of the large, deep-basin-like vessel *jian* \cong (*See pages 57-58*).

Of a very large size during the Erligang 二里崗 period (circa $17^{th}/16^{th} - 14^{th}$ centuries B.C.), the *yu* 盂 becomes more medium-sized during the second part of the Shang 商 dynasty and the beginning of the Western Zhou 西周. By the end of the Western Zhou 西周, the *yu* 盂 sometimes attains to ten times the holding capacity of a *gui* 簋. This type of vessel disappears from the repertoire of Chinese bronze vessels during the Spring and Autumn 春秋 period (circa 770 – 476 B.C.).

You, early Western Zhou dynasty (circa $11^{th} - 10^{th}$ centuries B.C.) Height including the handle: 31.5 cm – Meiyintang Collection n° 187.



Zhi 觶



The *zhi* fipsilon is a cup which was used for drinking fermented beverages. The name *zhi* fipsilon appears very early in classical texts.

The *zhi* \notin is cast with a bulging round body topped by a flared neck and is supported on a ring foot. Very often this vessel has a dome-like cover, with or without a knob in its centre.

Extremely popular by the end of the Shang 商 dynasty (circa 13th century B.C.), this vessel disappears around the middle of the Western Zhou 西 周 dynasty (circa 10th century B.C.).

 \overline{Zhi} , Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 17 cm – Private Collection.



Under the name *zun*尊, a character which early appears in inscriptions on ancient bronzes, we find three types of vessels used to hold fermented beverages:

1. A wide-shouldered vessel with a large, wide body, a much narrower, neck that flares outwards as it rises and a high, downwardly sloping ring foot. This form of *zun* 尊 is known in bronze from as early as the Erligang 二里崗 period (circa 17th/16th – 14th centuries B.C.) of the early Shang 商.

During the Yinxu 殷墟 or Anyang 安陽 period (circa 14th – 12th/11th centuries B.C.) and until the disappearance of this particular shape of *zun* 尊 in the middle of the period, the *zun* 尊 is the most common of the large bronze vessels produced, more so than the *lei* 罍. The most beautiful and rarest wide-shouldered *zun* 尊 is the *fangzun* 方 尊, the square version of the early *zun* 尊.

The most famous is a *fangzun*方尊 decorated on each of its four corners with an almost full-front-bodied ram with a large, magnificently horned head jutting out over each side of the



Zun, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 35 cm – Private Collection.



vessel. This masterpiece was excavated in 1938 at Ningxiang 寧 鄉, Yueshanpu 月山鋪 in Hunan province 湖南 (*See illustration below*).

2. By the end of the Yinxu 殷墟 period, the wide-shouldered *zun* 尊 is replaced by the high, narrower, cylindrical *zun* 尊 with its wide flaring top and base (*See photo on page 90*).

The high cylindrical vessel bulging at its centre and opening out as it rises to end in a trumpet-like mouth, is similar to an enlarged version of a $gu \notim$, but is of larger, stockier proportions. Like the gu's \notim , this type of zun's \notim foot is also flared.

3. A third type of *zun* 尊 take the form of an animal. Such animalshaped vessels grouped under the heading *zun* 尊 are known cast in the form of elephants, buffaloes, rams, rhinoceroses, rabbits, pigs, mythological hybrid animals, etc. or birds. Considered to be southern in origin, such animal-shaped vessels appear in the repertoire of Chinese bronzes as early as the beginning of the Shang 商 dynasty, during the Erligang 二里崗 period (circa 17th /16th – 14th centuries B.C.).

In general *zun* 尊 in the form of animals are spoken of as *niaoshouzun* 鳥獸尊 (bird-animal *zun* 尊), *xizun* 犠尊 (ox *zun* 尊), *xiangzun* 象尊 (elephant *zun* 尊), etc. in Chinese to differentiate them from regular *zun* 尊.



Zun, late Shang dynasty or early Western Zhou dynasty (circa 11th century B.C.) Height: 31.6 cm – Meiyintang Collection n° 62.



Shapes of Ancient Chinese Bronzes

Part 2: Bells shapes



Bells (Ling 鈴, Nao 鐃, Zheng 鉦, Zhong 鐘, Bo 鏄)

During the Shang \oplus dynasty (circa $17^{\text{th}}/16^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.) when the earliest *bells* appear in bronze in China, *bells* usually come in groups of three, each of a different size.

During the Western Zhou 西周 (circa 12th/11th centuries – 771 B.C.), bells usually come in groups of 5, or 8, or 9 or even more, each of a different size. By the beginning of the Eastern Zhou 東周 (circa 770 – 256 B.C.), i.e. the Spring and Autumn 春秋 period (circa 770 – 476 B.C.), bells are usually grouped into sets of nine or more, varying in size from very small to very large. The largest set of bells so far excavated, consists of 65 bells found in the Warring States 戰國 period (circa 475 – 221 B.C.) tomb of Marquis Yi of Zeng 曾侯乙墓 near present-day Wuhan 武漢 in the Hubei 湖北 province.

Ling 鈴



Scientifically excavated from Stage II at the Erlitou 二里頭 site in Henan 河南 province, *ling* 鈴 bells are actually the earliest-known bronze objects produced in China. These small, oval, cup-like bells with very thin sides, have a long, thin attached handle with rounded ends jutting out from one side, and sometimes a tongue inside, and were cast in two parts.

Ling 鈴 bells become more numerous by the end of the Shang 商 dynasty during the Yinxu 殷墟 period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.). Usually around 7 to 8 cm in height, they rarely come larger than 10 cm high. Some specialists consider these small bells to be the ancestors of the larger *bo* 鎛 bell of subsequent periods.

Nao, late Shang dynasty (circa 12th/11th centuries B.C.) Height: 71 cm – Excavated at Ningxiang, Hunan province.

Nao 鐃



This medium to large-sized bell composed of a large, elliptic, cup-like section that, unlike bells of later periods, is placed upwards towards the sky, rests on a long, thick, cylindrical, handle-like projection, which in fact serves as the bell's base. The sound emitted by this ritual instrument is produced by percussion.

Under the heading *nao* 鐃, specialists place two types of bells, similar in shape, but quite different in size:

The *nao* 鐃, which according to the *Shuowen jiezi* 說文解字, written around the 2nd century B.C., is the name given to fairly small bells of between 7 cm and 21 cm in height, which were used during the Shang \ddot{m} dynasty. Such *nao* 遶 have been excavated from Yinxu 殷墟 period (circa 14th – 12th/11th centuries B.C.) tombs and are usually found in groups of three or four, or exceptionally, as in the case of the Fuhao 婦 F (Lady Hao) Tomb excavation in present-day Anyang 安陽, Henan 河 \ddot{m} province, in a group of five.

The *zheng* \mathfrak{L} , often simply called *nao* \mathfrak{B} or large *nao* \mathfrak{B} , is shaped exactly like the smaller *nao* \mathfrak{B} , but is of a much larger size, sometimes reaching 90 cm in height; usually very heavy, the *zheng* \mathfrak{L} type of *nao* \mathfrak{B} can weigh as much as 154 kg and its walls can be as thick as 3 or 4 cm.



Nao, late Shang dynasty, early Werstern Zhou dynasty (circa 12th/11th centuries B.C.) Height: 46.4 cm – Meiyintang Collection.



Generally found alone and positioned with its opening towards the sky, the *zheng* \cong was used during ritual sacrifices to the natural elements, such as the wind, the rain, the stars, etc. as well as to mountains and rivers.

These large *zheng* 鉦 bells were very popular from the end of the Shang 商 dynasty throughout the early part of the Western Zhou 西周 and have been mainly excavated in more southerly provinces of China including Hunan 湖南, Jiangxi 江西, Zhejiang 浙江, Fujian 福建 and Guangxi 廣西.

Bo 缚 / Zhong 鐘



The *bo* 鎛 and *zhong* 鐘 are fairly thick-sided bells which, like western bells, are suspended facing downwards from their handles. For the *bo* 鎛, the handle is semi-circular, sometimes simple, but more often elaborately decorated with three-dimensional animal forms, while for the *zhong* 鐘 the handle consists of a single long, thick, tubular or multi-sided projection. *Bo* 鎛 and *zhong* 鐘 are usually found in sets of from four or five to fourteen, or sometimes of as many as sixty-five, as in the set of bells excavated from the tomb of the Marquis Yi of Zeng 曾 侯乙墓 in 1978.

Bo, Eastern Zhou dynasty (circa 5th century B.C.) Height: 29.3 cm – Private Collection.



Drums – Gu 鼓



A type of early bronze drum in the shape of a large barrel on a rectangular base supported by four legs was produced during the Shang 商 dynasty and was most probably used during military campaigns. So far only two such drums have been excavated. One is conserved in the Sumitomo Collection in Japan 日本住友泉屋博古館 and the other, which was excavated in 1977 in Chongyang Baini 祟陽白霓, Hubei 湖北 province is now conserved in the Hubei Provincial Museum.



The Decorative Elements on Chinese Ritual Bronzes

from the Xia 夏, Shang 商 and Zhou 周 Dynasties

 $\overline{ \text{Two taotie masks from Erligang period (circa 17^{th}/16^{th} - 14^{th} \text{ centuries B.C.)} }$ Detail of a *jia* – Meiyingtang Collection n° 167.



The Decorative Elements on Chinese Ritual Bronzes from the Xia 夏, Shang 商 and Zhou 周 Dynasties

From Simple to Sophisticated

The most ancient Chinese bronze vessels date from the end of the Xia 夏 dynasty (circa 21st – 17th/16th centuries B.C.) and belong to what is termed the 3rd and 4th stages of the Erlitou cultural 二里頭文化 period (18th – 16th centuries B.C.). Although most of these early bronzes are completely undecorated, a small number are embellished with one or more horizontal lines, or a motif of small button-like shapes or a combination of both.



At the very beginning of the Shang \hat{m} dynasty (circa 17th/16th – 12th/11th centuries B.C.), during what is now termed the Erligang 二里崗 period (circa 17th/16th to 14th centuries B.C.), filiform thin-line patterns in low relief (called by some archaeologists Loehr I motifs) with pairs of oval eyes in their centres, began to appear on the bodies of bronze vessels. These are considered to be a primitive form of what are called *taotie* 饕 masks. During the middle of the Erligang period, the filiform thin-line motifs began to expand to become wide, ribbon-like bands (Loehr II), making the *taotie* 饕餮 mask design more prominent and clearly recognizable.

After the Shang $\overline{\alpha}$ rulers moved their capital to Yin $\underline{\beta}$ near Anyang $\overline{\beta}$ in present-day Henan $\overline{\beta}$ province, the decorative motifs on bronze vessels became more sophisticated and the walls of the vessels' bodies themselves became thicker. Artisans began producing bronze

Jiao, Xia dynasty, Erlitou culture (circa $19^{\text{th}} - 17^{\text{th}}/16^{\text{th}}$ centuries B.C.) Height: 18.5 cm – Meivintang Collection n° 2.

vessels completely covered in decorative motifs, which were more clearly separated and bordered, making it possible for the artisans to create a more elaborate decorative scheme, with contrasting high and low relief motifs, all on a background of deeply and crisply cast, fingerprint-like spirals in lower relief.

After the conquest of the Shang 商 by the Zhou 周 around 1100 B.C. and a short initial period during which the decorative motifs of the former dynasty continued to prevail, the repertoire of rather ferocious, spirit-worship inspired decorative motifs of the Shang 商 were gradually replaced by fabulous bird or phoenix motifs, less ferocious-looking *taotie* 饕餮 and other animal masks, stylized dragon motifs, etc. as well as by purely decorative motifs such as spirals and other geometric patterns. This trend continued throughout the Western 西周 ($12^{th}/11^{th}$ century – 770 B.C.) and Eastern Zhou 東周 (770 – 256 B.C.), Spring and Autumn 春秋 (770 – 476 B.C.) and Warring States 戰國 (475 – 221 B.C.) periods until by the Western Han 西漢 (206 B.C. – 220 A.D.) period, many of the familiar, more ancient motifs, rarely, if ever, appeared on bronze vessels.

Changes and Innovations in the Use of Bronze Vessels and the Technique and Decorative Motifs Employed during the Spring and Autumn 春秋 and Warring States 戰國 Periods of the Eastern Zhou 東周 (circa 770 – 256 B.C.)

Simultaneously with the weakening of the Zhou Royal House's power during the Eastern Zhou 東周 period and the growth in the power and prestige of the individual princes and dukes ruling their own small fiefdoms or principalities within the Zhou Kingdom, petty princes and dukes began attaching greater importance to the prestige that their right to produce and possess bronze ritual vessels lent them and their illustrious ancestors for whose ancestral temples such vessels were being produced. As a result, there was an increase in the types of ritual vessels produced as well as an ongoing attempt to produce larger and more spectacularly shaped vessels to impress and thus increase the prestige of the individual ruler, his state and his ancestors.

This desire to impress and produce even more sophisticated vessels

with more eye-catching décor fostered innovation in casting methods, the most important perhaps being the introduction of the lost-wax casting process sometime during the Spring and Autumn \overline{a} period (circa 770 – 476 B.C.).

By the end of the Spring and Autumn 春秋 period and the beginning of the Warring States 戰國 period (circa 475 – 221 B.C.), moreover, the repertoire of decorative motifs employed by artisans changed greatly from the *taotie* 饕餮, phoenix 鳳凰, *kui* 夔dragon motifs frequently appearing on Shang 商 and Western Zhou 西周 bronzes. Now bronzes were most frequently embellished with elaborate geometric patterns, intertwining rising dragons and even hunting, fruit gathering, fishing and communal-worship ceremony scenes based on the real life of the people of the period.

Bronze Vessels as Tangible Signs of Royal Power and as an Essential Part of Royal Worship

We have seen that from earliest times, bronze vessels, and especially bronze tripod *ding* 鼎 were regarded as sacred vessels, tangible symbols of heaven-bestowed royal power and the supreme right of their royal possessor to worship heaven, the spirits and the royal and clan ancestors on the nation's behalf. According to legend, Yu 禹 of Xia 夏 cast 9 *ding* 九鼎, which symbolized the mandate to rule which heaven bestowed upon him and his dynastic successors. Ancient Chinese chronicles record that when the Xia 夏 became morally corrupt and lost heaven's favour, these 9 *ding* 九鼎 were taken by the conquering Shang 商. Several hundreds of years later, when the Shang 商, in turn, showed themselves lacking in virtue or "*de*" 德, the chronicles say, these 9 *ding* 九鼎 were taken by the royal house of Zhou 周, with whom they remained until they were carried off by the First Emperor, Qin Shi Huang 秦始皇 around 221 B.C..

Thus, in ancient China, the possession and public ritual use of these sacred bronze vessels had, for rulers, the two-fold purpose of reminding the people of their ruler's heaven-bestowed absolute right to rule, and also of facilitating the ruler's contact with the heavenly and natural powers, which he hoped to supplicate on his own, his dynasty's and his people's behalf, thereby receiving heaven's, the spirits' and the ancestors' help in controlling the natural elements and thus ensuring within his kingdom the success of agriculture, the avoidance of destructive natural disasters and the peaceful, uninterrupted continuity of his rule and dynasty.

The Role of Decorative Elements on Ancient Ritual Bronzes

In ancient China and especially in the early dynasties, which were obsessed with worship of heaven, the spirits and the ancestors, as well as with divination to predict the auspiciousness or inauspiciousness of all important planned activities, the decorative patterns on bronze ritual vessels were believed to be instilled, in themselves, with the power to offset inauspicious forces, whether of the spirit world or of nature, and not only facilitate the worshipping ruler's contact with the spirit world, but also when used properly in the worship of heaven, the spirits and the ancestors, to endow the ruler with power to overcome and control evil and harmful elements and promote auspiciousness.

The decor on these sacred vessels also produced a certain visual impact which helped transform the atmosphere at the worship site and thus enhanced the solemnity of such worship ceremonies, awed onlookers and deeply impressed on their minds the power and majesty of the rituals' royal celebrants and of the spirits and/or august ancestors to whom the ritual worship was being directed.

Remnants of Ancient Beliefs in Today's Greater China

The belief among the ancient ancestors of today's Chinese in the efficacy of certain decorative elements to protect and ward off evil, has lasted throughout the ages up to the present moment among the general Chinese population, albeit in somewhat different forms from those found on early period bronze vessels.

The placing of stone and bronze tigers, lions, tortoises and mythological chimera at the doorways of homes, temples, etc. and the hanging of woodblock prints of spirit guardians, ogre faces, etc. on doorways throughout the villages and towns of China to ward off evil influences and foster auspiciousness was, until the 1950s, an ubiquitous sight and is, even now, making a comeback in villages and towns on the mainland as well as in Hong Kong, Taiwan and other areas throughout the world which have large ethnic Chinese populations.

The Taotie 饕餮 or Animal Mask 獸面



The *taotie* 饕餮, the most important and most common motif of the ancient Chinese decorative repertoire, is easily recognized, in spite of its undergoing with time many variations and modifications. For whatever its size or proportions, the *taotie* 饕餮 always appears as a mythical creature's face, cast with large eyes, and a nose of some sort, but no lower jaw, to which may be added a pair of powerful horns and sometimes triangular ears. The *taotie* 饕餮 mask is very often composed of two stylized confronting *kui* 夔 dragons shown in profile. (*See pages 111-112*.)

Possible Origins of the Original Taotie 饕餮 Mask

According to an ancient Chinese myth, a being called *taotie* 饕餮 was the son of the God Jinyun 神人縉雲氏. A good-for-nothing, fear-inspiring,

Detail of *fangyi* shown on page 35.



 \overline{He} , Shang dynasty, Erligang period (circa $17^{th}/16^{th}$ – circa 14^{th} centuries B.C.) Height: 23 cm – Meiyintang Collection n° 20.





Taotie mask, Shang dynasty, Yinxu period (circa 14th/12th – 11th centuries B.C.).



a - Late Erligang period / early Yinxu period



b - Yinxu period



 $\overline{\text{Confronted dragons shown in profile forming the$ *taotie*mask, detail of the*liding* $shown page 69, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.).}$



avaricious and gluttonous creature, *taotie* 饕餮 had an insatiable appetite for human beings. He eventually became so gluttonous that he was unable to digest all that he devoured, until one day a human victim got caught in his throat and he choked, with the result that his lower body gradually disappeared, leaving only his big greedy face, a fierce reminder to all of the ill, self-harming effects of avarice, gluttony and wastefulness.

Interestingly enough, the individual definitions of the two Chinese characters that make up the name of the mythological creature *taotie* $\frac{1}{2}$ $\frac{1}{2}$ are, in themselves, quite indicative of the multi-faceted meaning behind this ancient decorative element. The character *tao* $\frac{1}{2}$ which is formed of the radical *shi* $\frac{1}{2}$ or 'eat' superimposed with the character *hao* $\frac{1}{3}$, meaning by itself 'crying out' or roaring like the wind, has a double meaning, the first being violent, wild, raging, ferocious and the second, especially when used in combination with *tie* $\frac{1}{2}$, being 'greedy', both as regards food and possessions. The second character in the phrase *tie* $\frac{1}{2}$, is also composed of the radical *shi* $\frac{1}{2}$ 'eat' but is superimposed by the character $\frac{1}{2}$ *tian*, 'annihilate, exterminate' and means 'eat greedily' or 'annihilate by eating'.

Thus, the combined meanings of the two characters *tao* $\frac{1}{8}$ and *tie* $\frac{2}{8}$ suggest a violent, fear-inspiring creature with a voracious, self-harming appetite! And the *taotie* $\frac{1}{8}$ motif's prominence on the sacred ritual vessels used to worship the spirits and ancestors served not only to dispel bad luck and scare off inauspicious spirits that might interfere with the efficacy of the ritual being performed, but also to warn all participants, and especially the nobility of the Shang dynasty, of the ill-effects of gluttony and wastefulness and the political consequences of such behavior, since the Shang's own claim to heaven-granted legitimacy rested on the correctness of its role in overthrowing the previous Xia $\overline{\mathbb{Q}}$ dynasty because of the profligacy and wasteful extravagance of Jie \mathfrak{R} , the cruel and despotic final ruler of the ill-fated dynasty.

Taotie 饕餮, An All-encompassing Term

From the Song 帝 dynasty (960 – 1279 A.D.) up to recently, the term *taotie* 饕餮 has been used indiscriminately to describe almost all animal

Jia, Erligang period (circa 17th/16th – circa 14th centuries B.C.) Height: 34 cm – Meiyintang Collection n° 167.

faces appearing in the decorative motifs of bronze vessels. However, the suitability of using the word *taotie* 饕餮 to describe the ogre masks found on the décor of many ancient bronzes has been the subject of much discussion and debate in recent years, with some archeologists and scholars preferring to use the term *shoumian* 獣面 (beast face) and others calling this mask 動物面 *dongwu mian* (animal face) and still others preferring to use the term "animal mask". However the term *taotie* 饕餮 has been used for such a long period of time and by so many scholars that there is no really suitable alternative.

Pre-Bronze Age Origins of the Taotie 饕餮

Strange motifs quite similar to the *taotie* 饕餮 can be seen on neolithic Liangzhu culture 良渚文化 (circa 3400 – 2250 B.C.) *cong* 琮 and *yue* axe 鉞 jades from the Yangtze River Delta 長江下游, with its centre in present-day Hangzhou 杭州 in Zhejiang 浙江 province. Like the *taotie* 饕餮 found on Xia 夏 and later bronzes, these motifs most often have two eyes, a nose and a hint of a mouth, and vary in shape and make-up from the simple to the very complex.

In the Xia $\overline{\mathbb{Q}}$ dynasty cultural strata at Erlitou $\Box \pm \overline{\mathbb{Q}}$ dating from the 18th to 17th/16th centuries B.C., archeologists found bronze plaques entirely set with a turquoise decorative pattern featuring two large, bulging, oval eyes, possibly an early form in the development of the *taotie* 饕餮 mask (*See photo on page 117*).

During the Erligang $\Box \blacksquare \ddot{\bowtie}$ period (circa $17^{th}/16^{th} - 14^{th}$ centuries B.C.) at the beginning of the Shang $\ddot{\bowtie}$ dynasty, a primitive version of the *taotie* 饕餮 appeared on bronze vessels, first simply as a pair of large eyes, and then gradually as a mask.

During the Anyang 安陽 period, usually known as the Yinxu period 殷 墟 $(14^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.), of the Shang 商 dynasty, the *taotie* 饕餮 often appears as a particular animal, such as a buffalo or a deer (as on the two *fangding* 方鼎 or square *ding* excavated from tomb HPKM 1004 at Anyang 安陽 in 1934), or other horned animal, a tiger, a mythological beast, and sometimes even as a human face (as on the *He Da fang ding* 禾大方鼎 excavated in Ningxiang 寧鄉, Hunan



Bronze plaque inlaid with turquoises, Xia dynasty, Erlitou culture (circa $19^{th} - 17^{th}/16^{th}$ centuries B.C.), length: 14.7 cm – Meiyintang Collection n° 1.

湖南 province, in 1959). At Anyang 安陽 the *taotie* 饕餮 is cast as a mask with two eyes, two eyebrows, two horns, a nose, and sometimes also with two ears and an upper jaw. It is often formed by joining two confronting *kui* 夔 dragons shown in profile and, in some rare cases, two animal bodies. Thus the *taotie* 饕餮 does not necessarily represent any one particular animal and its form is in a continual state of change, with only its eyes remaining constant throughout.

With the Zhou 周 dynasty, the *taotie* 饕餮 mask gradually becomes less important as a motif on ritual bronzes and gradually disappears as a major decorative motif.

The Dragon Motif 龍紋

The dragon 龍 is, after the *taotie* 饕餮, the most common motif appearing on Shang dynasty bronze vessels.

The dragon is the subject of many ancient Chinese myths and, according to Ma Cheng-Yuan 馬承源, the late curator of the Shanghai Museum, and other eminent Chinese scholars, the dragon is, in reality, a deified version of the snake whose shape and movements are based on those of the snake found in nature.

A creature that lives on the earth, in the water and even in the heavens, the dragon is, for the Chinese, the symbol par excellence of power.



Godly, Imperial Dragons and Water

A hint of the dragon's imperial and godly grandeur and the respect it inspires in the Chinese people, often being used as the symbol of the Emperor and imperial power itself, can be gained from a reading of one of the earliest Chinese legends concerning the dragon.

When King Yu 禹 of Xia 夏, so the legend says, was struggling to control the floods and drain the arable land submerged by the overflowing rivers, a sacred, god-like dragon, moved by Yu's virtue and tenacity, suddenly appeared and fanned the flood waters so forcefully with its tail that the waters receded, leaving the land dry enough to cultivate once more.

This and other such legends highlight the connection between the dragon and water and reflect the fact that in ancient China, in addition to its other roles, the dragon was regarded as the god of water, the source of life and the sine qua non of agriculture, the foundation of Chinese society.



The Various Forms of the Dragon on Bronze Vessels

In *jiagu wen* 甲骨文, or oracle bone writing, the earliest known form of Chinese writing, the dragon is depicted with a long, rising, snake-like body with a large triangular or rectangular whiskered head topped by a high mushroom-like horned headdress.



On bronze vessels, the dragon is most generally depicted as a stylized long-bodied creature shown in profile, in which case it is called a *kui* $\frac{1}{2}$ dragon. We have seen above that the *taotie* $\frac{1}{2}$ motif on many Shang and Zhou bronze ritual vessels is formed of a pair of such interfacing *kui* $\frac{1}{2}$ dragons (*See page 113*). When used as a minor decorative element on bronze vessels, the dragon also appears in a number of other stylized forms, as a snake-like creature with either a bird's head and beak or sometimes with a long tail and a bird's high crest or even with an elephant's trunk.



Dragon motif, detail of the *pan*, Shang dynasty, Yinxu period (circa 14th- 12th/11th centuries B.C.) Meiyintang Collection n° 180





The Cicada Motif 蟬紋

The cicada 蟬 first appeared as a decorative motif in ancient China in the form of jade. The earliest presently known jade cicada belong to the Liangzhu cultural period 良渚文化 (circa 3400 - 2250 B.C.) of the Yangtze River Delta 長江下游. By the late Shang period the cicada began appearing on bronze ritual vessels and continued to be prominent in the repertoire of decorative motifs throughout the Zhou dynasty.



For the ancient Chinese, the cicada c signified purity, righteousness and incorruptibility for, after remaining hidden for many years in damp, muddied earth, cicada emerge pure and unsallied from the mud to be transformed into wing-borne creatures that rise high among the trees of the forest. There, the ancient Chinese believed they partook of the morning dew and other superior forms of nourishment. Their very act of physical transformation also made them, for the ancient Chinese, a tangible symbol of rejuvenation as well as a symbol of a return to life after death and also, it was believed, endowed them with the ability to serve as intermediaries between the world of humans and the denizens of the netherworld.

Some modern Chinese scholars feel that the appearance of the cicada motif on ancient ritual bronzes was also meant to signify to the participants in ritual worship ceremonies, not only the purity and high quality of the vessels' food or beverage contents, but also the sacred character of the cicada as an intermediary between the worshippers and the spirits and ancestors being worshipped. This latter role of the cicada was later reflected in the late Eastern Zhou and Han periods' custom of placing a jade cicada on the tongue of the deceased before burial and their entry into the realm of the ancestors.

Cicada motif, detail of the *ding*, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) – Meiyintang Collection n° 69.

The Owl Motif

Archaeological discoveries made in China in the past 80 or so years suggest that the owl or *chixiao* 鴟鴞 was endowed with a special reverence and religious significance in ancient China from as early as the Neolithic period, and that this esteem for the owl continued throughout the Xia $\overline{2}$ and Shang 商 dynasties until at least the early part of the Zhou 周 dynasty.

In 1975 a remarkably attractive Yangshao Culture 仰韶文化 (circa 5500 – 3500 B.C.) ceramic tripod owl-shaped vessel was excavated by archaeologists in Hua county 華縣 in Shaanxi 陝西province and in the past 30 or so years a considerable number of owl-shaped jade pendants belonging to the Hongshan Culture 紅山文化 (circa 4000 – 3500 B.C.) have been unearthed from the tombs of Shamans and tribal leaders in China's northeastern provinces, suggesting that the owl was endowed with a special religious significance in these early pre-Xia 夏前 cultural periods.

In the 1930s archaeologists excavating the tomb of King Wuding 武丁王 of the Shang 商 in present-day Henan 河南 province discovered several standing owl sculptures positioned near the entrance to the tomb and the burial chamber, suggesting that the owl was believed by the people of the Shang 商 to be efficacious in warding off evil or inauspicious forces and thus to be endowed with unusual protective powers. Then again in 1976, archaeologists excavating the nearby tomb of Fuhao 婦好, consort of King Wuding 武丁王 discovered a magnificent pair of owl-shaped bronze vessels and several other ritual bronze vessels embellished with owl motifs.

Possible Reasons Why the Owl Was So Esteemed

According to early Chinese chronicles, the Shang 商 people worshipped a special form of mystical bird 玄鳥 called a *chixiao* 鴟鴞 or owl, from whom they believed their primal ancestor Qi 契 was descended, since his mother Jian Di 簡狄 was purported to have conceived him after swallowing a *chixiao*'s 鴟鴞 egg. Thus, though in later periods in China, the owl or *chixiao* 鴟鴞 was generally regarded by the population as a harbinger of misfortune and even death, for the people of the Shang

Owl-shaped *fangjia*, Shang dynasty, Yinxu period (circa 14th – 12th/11th centuries B.C.) Height: 24.5 cm, length: 17 cm – Meiyintang Collection nº 174.





商, the owl was revered as a sacred bird. This seems to be confirmed by the above-mentioned archaeological work done at Shang sites in China since the 1930s, which have uncovered a fairly large number of important marble owl sculptures as well as ritual bronzes decorated with owl motifs.

It seems that for the earliest Chinese, and especially the people of the Shang, the owl's large, deep-set, penetrating eyes, in a head which can be turned sharply from one side to the other without necessitating bodily movement, its strange, lugubrious shriek, its nocturnal habits and its prowess in swooping down suddenly on its prey, all suggested to its beholders a unique bird endowed with extraordinary mystical powers, a creature that could serve as a medium between the world of men and the world of the spirits, as well as between the world of the living and the world of the dead, the inhabitants of the netherworld.

It was most likely for all of these reasons that the owl or *chixiao* 鴟鴞 motif featured so prominently on the motifs employed to decorate the religiously significant bronze ritual vessels of the Shang 商 dynasty and early Western Zhou 西周, vessels employed not only in the worship of the spirits and clan ancestors inside the ancestral temple, but also in the burial chambers of deceased kings, members of the royal family and other members of the nobility.





Owl motif, detail of the *fanggui*, Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.) Meiyintang Collection n° 65.

The Snake Motif 蛇紋

The snake is another frequently seen decorative motif on bronze vessels from the Shang \hat{P} and later dynasties.

Able to live both in the water and on land, hibernating in winter in colder climates and changing its skin in spring, the snake was for the ancient Chinese a symbol of transformation and re-birth and was linked to the world of spirits and the deceased, as well as to that of the living.

In oracle bone inscriptions, *jiaguwen* 甲骨文, the snake appears among the group of pictograms relating either to illness or to death by sacrifice. Even in modern Chinese fortune-telling, the snake enjoys a mixed reputation, sometimes regarded as auspicious and, at other times, as quite inauspicious. Whereas seeing a snake in a dream is usually considered a bad omen foretelling imminent disaster, for a merchant, the same dream is considered a good omen foretelling the dreamer's imminent accumulation of great wealth!



The Elephant Motif 象紋

Oracle bone inscriptions, *jiaguwen* 甲骨文 excavated at the Shang Royal Tombs at Yinxu 殷墟 (Anyang 安陽), tell us that during the Shang 商 dynasty (circa 17th/16th – 12th/11th centuries B.C.) and especially during the Yinxu 殷墟 period, wild elephants were not only hunted and captured by kings and nobles, but were also domesticated and bred for various uses. This is not surprising since other information gathered from oracle bone inscriptions, *jiaguwen* 甲骨文, indicates that temperatures in northern China were much milder during the Shang 商 dynasty, and thus much more suitable for elephants than in the present age.

The *Lushi Chunqiu Annals* 呂氏春秋 written in the 3rd century B.C. by Lu Buwei 呂不偉, the Counsellor-in-Chief of the Kingdom of Qin 秦 and his myriad retainers, also record that the Shang 商, during their many and frequent battles with the 'Eastern Barbarians' 東夷, put into service a cavalry of elephants, which struck terror into the hearts of the Shang's enemies.

More recently, in the 1930s and 40s, while carrying out excavation work at the Shang Royal Tombs in Yinxu 殷墟 (Anyang 安陽) in Henan 河南 province, archaeologists found the remains of elephants in the sacrificial pits, while in the burial chambers of members of the royal family, they found items of ivory jewellery and elephant tusks. In 1978 still other archaeologists working at another sacrificial pit in the same area unearthed the remains of a small domesticated elephant with a bronze bell tied round its neck, adding credibility to the claims of ancient records such as the *Lushi Chunqiu Annals* 呂氏春秋 that elephants were common in northern areas of China during the Xia 夏, Shang 商 and Zhou 周 periods.

In 1959 a late Shang 商代後期 *nao* 鐃 bell with its upper band cast with standing elephant motifs was discovered farther south at Ningxiang 寧 鄉 in Hunan 湖南 province (*See photo on page 94*). Then again in 1983 in a nearby area of Ningxiang 寧鄉, another large late Shang dynasty 商 代後期 *nao* 鐃 bell was discovered. Interestingly, this one is decorated at the centre of its top band on each of its two sides with a magnificent pair of confronting elephants touching their raised trunks together as if in salutation, seeming to suggest that the animals had been trained in captivity.

Thus it seems that for the kings and nobles of the Shang $\overline{\alpha}$, the elephant was esteemed for its strength, impressive size and noble bearing and its ivory was regarded as an especially valued commodity. In fact, it is stated by Sarah Allan that even one of the Shang's ancestors was called Xiang \hat{x} 'Elephant'.

The elephant motif is one of the rarest and most treasured patterns in the decorative corpus of bronze vessels of the Shang 商 dynasty. Only a very few bronze vessels of this period decorated with an elephant motif are recorded: a *gui* 簋 in the Köln (Cologne) Museum (Germany), a *gu* 觚 in the Idemitsu Museum (Japan), two *gong* 觥, one in the Royal Ontario Museum, Toronto (Canada) and the second one in the Asian Art Museum – Avery Brundage Collection, San Francisco (USA).

Complete three-dimensional bronze vessels in the shape of a standing elephant, known under the name of *xiangzun* 象尊 (elephant *zun*) are extremely rare. A famous one is now in the Freer Gallery of Washington D.C., but the most exceptional one, of a very large size (H: 64 cm) and from the Camondo Collection, is now in the Guimet Museum, Paris, France.

During the early Western Zhou 西周 dynasty, some vessels were decorated with an elephant's head with a long trunk, all cast in the round, but by the last half of the dynasty, the elephant all but disappeared from the repertoire of decorative motifs employed on bronze vessels.







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The Rhinoceros Motif 犀牛紋

From archaeological discoveries, we now know that, like the elephant, the rhinoceros lived in ancient times in many parts of central and southern China, including present-day Jiangsu 江蘇, Zhejiang 浙江, Hubei 湖北, Hunan 湖南, Guizhou 貴州, Guangdong 廣東 and Guangxi 廣西 provinces, but with time the population became increasingly smaller through hunting, as a result of death from climate change, etc. until by the Tang 唐 dynasty very few rhinoceros survived within China.

In the last century, rhinoceros bones, horns etc. were unearthed from the Shang royal tombs at Yinxu 殷墟 (Anyang 安陽) and at even earlier sites, such as the Stone Age Hemudu 河姆渡文化 cultural site (circa 5000 – 4000 B.C.) excavated near Hangzhou 杭州, Zheijiang 浙江 province in the 1970s.

Oracle bone inscriptions, *jiaguwen* 甲骨文, record that during the Shang 商 dynasty the kings and nobles enjoyed hunting rhinoceros and sometimes received such animals as tribute from the rulers of other kingdoms, especially those of the south.

During the Shang 商, Zhou 周 and later periods, hard, thick, durable rhinoceros skin was especially valued as a covering for armour and shields. In the *Kaogongji*考工記 section of the *Zhouli* 周禮 (completed between the end of the Spring and Autumn 春秋 and the early Warring States 戰國 periods, circa the 5th century B.C.) it is written that armour made with the skin of a male rhinoceros 'could last 100 years' 犀甲壽 百年! The horn of the rhinoceros was valued for its medicinal value in 'cooling hot blood' and its aphrodisiacal qualities and one of the most prized bronze drinking vessels of the Shang 商 and early Western Zhou 西周 was the *sigong* 兕觥 which, strictly speaking, was meant to be shaped like the horn of a 'female rhinoceros'!

During the late Shang 商 and early Zhou 周 dynasties, the handles of bronze vessels were often decorated or cast in the round in the shape of rhinoceros heads and we know from ancient chronicles that rhinoceros horns were held in high esteem and deemed precious enough to be presented to kings and high nobles as tribute. An exceptional vessel cast in the shape of a full-bodied rhinoceros from the Avery Brundage Collection is now in the Asian Art Museum – Avery Brundage Collection, San Francisco (USA).



Rhinoceros motif, detail of the *jiao*, early Western Zhou dynasty (circa 11th century B.C.) Meiyintang Collection n° 12.

The Silk Worm Motif 蠶紋

Since remote antiquity, China has been renowned throughout the world for sericulture. According to Chinese legend, Lei Zu 嫘姐 the consort of China's first of the five prehistoric period rulers, the 'Yellow Emperor 黃帝' (26th century B.C.), herself initiated silkworm breeding and mulberry growing in China. In 1926 while undertaking excavation work at a Yangshao culture site 仰韶文化 (circa 5500 – 3500 B.C.) in Xia County 夏縣, Shanxi 山西 province, the world's first ethnic Chinese archaeologist in the modern sense of the word, Beijing Qinghua University 清華大學 Lecturer, Li Ji 李濟 unearthed a spinning wheel and a partially fossilized remnant of a silkworm, which scientific analysis later confirmed to be part of the cocoon of a domestically bred silkworm. Amazingly enough, these items were discovered in the hinterland of the Yellow River Valley 黄河, the legendary home of the mythical Empress Lei Zu 嫘姐.

In addition to the silkworm's economic importance in ancient China, the silkworm itself was for the people of the Xia $\overline{\mathbb{Z}}$, Shang $\overline{\mathbb{B}}$, Zhou $\overline{\mathbb{B}}$ and even earlier periods, a fabulous, semi-mystical and auspicious insect, which, in its cicada-like life-cycle remained alive while seeming to be dead to the world and gradually took on another form, a form in which it produced silk, a fabulous commodity unequalled in strength, beauty and fineness to any cloth produced by humans, before it returned to 'life'.





Silk worm motif *fang zuo gui*, early or middle Zhou dynasty (circa 10th century B.C.) Meiyintang Collection n° 101

The Tortoise or Turtle Motif 龜紋

For the Chinese people, from early antiquity up to the present moment, the tortoise or turtle is the symbol of longevity and auspiciousness. It is recorded that in the Xia $\overline{\mathbb{Q}}$, Shang $\overline{\mathbb{m}}$, Zhou $\overline{\mathbb{H}}$ and even later periods, the tortoise was considered so precious and sacred that only the King Emperor and his Princes and Dukes were permitted to keep tortoises in captivity and that in the Royal Temple a special chamber was reserved for tortoises, which like the *ding* $\overline{\mathbb{H}}$, were considered national treasures as well as sacred creatures invested with god-like powers.

In ancient times and even among modern practitioners of *feng shui* \mathbb{A} , the tortoise was and is still considered a mystical creature endowed with the ability to help man predict the future, to serve as a mediator between man and the world of gods, spirits and the dead and, perhaps most importantly, to transform harmful, inauspicious forces into beneficial, auspicious ones, ill-luck into good fortune, enemies into supporters.

It is not by chance then that the ancient ancestors of the Chinese, the people of the Shang 商, made use of the tortoise's shell as well as other creatures' bones, when carrying out oracle bone, *jiaguwen* 甲 骨文 (Tortoise Shell and Bone Writing), divinations to seek the help of the spirits and ancestors in determining the auspiciousness or inauspiciousness of any important planned undertaking, including making war, forming alliances, marrying, attempting to recover escaped slaves, commencing agricultural work, etc.

As early as the Erligang $\equiv \boxplus \boxtimes$ period (circa $17^{\text{th}}/16^{\text{th}} - 14^{\text{th}}$ centuries B.C.) of the Shang \textcircledadda dynasty, the turtle, like the dragon and the fish, was very often used as a decorative motif inside the large deep-dish-shaped *pan* \textcircledadsubset bronze vessels used for ritual libations, suggesting the tortoise's auspicious relationship with water and the netherworld.









The Fish Motif 魚紋

In ancient Chinese mythology numerous tales describe fish being transformed into dragons. This potential of the fish to transform itself into a royal, imperial dragon and the fact that the Chinese character for fish \oplus is pronounced the same as the character \oplus *yu*, meaning a 'superabundance', a 'surplus', etc. may account for the lasting popularity of the fish as a decorative device in all forms of Chinese art since the earliest periods up to the present.

In the 1930s archaeologists working at the Shang Royal Tombs at Yinxu 殷墟 (Anyang 安陽) found many small, finely carved jade fish in the tomb of King Wuding 武丁王. In 1976 other archaeologists unearthed similar jade fish in the tomb of Wuding's consort Fuhao 婦好.

During the Shang \bar{m} and Western Zhou $\bar{m}\bar{m}$, the fish appeared on bronze vessels as a secondary decor and most often inside and on the inner and outer sides of the large deep-dish-shaped *pan* \underline{m} water vessels.

During the stylistically innovative Warring States period (circa 475 – 221 B.C.), realistically cast fish sometimes also appeared on the sides of tall bronze vessels used to hold water or fermented beverages, along with figures of ducks or other animals. A particularly fine example of such a bronze vase-shaped vessel is conserved in the Dong Bozhai \bar{R} \bar{w} Collection which was exhibited at le Musée du Président Jacques Chirac at Sarran in 2011 (*See photo on page 92*).

Complete vessels cast in the shape of a fish are extremely rare, but in 1988 at Baoji 寶鷄 in Shaanxi 陝西 province a *zun*尊 vessel in the shape of a sacred carp supported on human-shaped legs was unearthed and is now kept in the Baoji Museum.





Fish motif, detail of the *pan*, Shang dynasty, Erligang period (circa $17^{th}/16^{th}$ – circa 14^{th} centuries B.C.) shown on page 73.

The Fabulous Bird or 'Phoenix' Motif 神鳥鳳凰紋

During the Shang 商 dynasty, birds were very often used as a secondary motif on ritual bronze vessels and appeared in the form of a small bird with either a long or a short tail, a long or short crest, etc.

During the Western Zhou 西周 dynasty (circa 12th/11th centuries – 771 B.C.), however, bird motifs became far more prominent and large on ritual vessels, and especially so during the reigns of King Mu 穆 Ξ (circa 976 – 922 B.C.) and King Gong 共王 (circa 922 – 900 B.C.), when they became the principal decorative element on many vessels, effectively replacing the *taotie* 饕餮 mask in importance. This large bird or 'phoenix' motif was characteristic of this period of transition when changes occurred in the role of bronze vessels, which, although still used in spirit and ancestor worship ceremonies, also became objects cast to commemorate special events in the lives of the dukes or others members of the aristocracy by whom they were commissioned, events such as the bestowal of a special honour, title, gift, etc. on him by the Zhou King, a family marriage, a victory in battle, etc.



For the ancient Chinese, the mythological *feng huang* 鳳凰 or phoenix was a fabulous, sacred bird, the harbinger of auspiciousness and a mediary between the mystical world and the world of men. The marvellously beautiful, graceful, richly plumed, long-tailed bird eventually came to be regarded as the symbol of the royal queen, the empress, of the wife and the female ideal. Even today, in all areas touched by Chinese culture, the dragon and phoenix symbol appears on wedding announcements, decorations, etc. as symbols of the couple, be they royal or of more humble backgrounds.



Bird motif, detail of the of the *you*, early Western Zhou dynasty (circa 11th - 10th centuries B.C.) Meiyintang Collection n° 31.


According to the variously translated 'five-elements', 'five phases', 'five movements' or 'five processes' 五行 theory upon which much of ancient Chinese philosophy, geomancy or *feng shui* 風水, medicine etc. are based, the 'Vermilion Bird' 朱雀, which many believe refers to the phoenix 鳳凰, is the heavenly guardian of the southern direction, the embodiment of the element 'fire', the hot season of summer and the processes of blossoming and fruition, all phenomena which take place in early-mid summer.

During the Shang 商 and early Zhou 周早期 periods, a very few vessels were cast in the round in the shape of phoenixes standing on their legs. Some fine examples of such bronze vessels are now conserved in the Yale University Art Gallery, in the Victoria and Albert Museum in London, and in the Minneapolis Institute of Art.



Bird motifs, *zun*, Middle Western Zhou dynasty (circa $10^{th} - 8^{th}$ centuries B.C.) Meiyintang Collection n° 193.

The Deer Motif 鹿紋

The deer's elegant shape, the gracefulness of its movements and especially the handsome set of antlers that grace the head of the male of the species, together with the stag's seemingly magical, uncanny ability to shed these antlers in spring and grow a new set in replacement, distinguished the deer from other wild animals and, for the ancient Chinese, endowed the deer and especially its horns with a mystical, supernatural character and made it a symbol of auspiciousness. The sacredness, the otherworldliness, attached to the deer and its horns may account for deer antlers being used, along with tortoise shells and water buffalo bones, in oracle bone divinations $\Box \models$. It may also be the reason why the *taotie* 饕餮 masks on many Shang \breve{B} and early Western Zhou Ξ bronzes are embellished with deers' antlers.



The fact that the Chinese character for deer lu \mathbb{R} is pronounced exactly the same as the character lu \mathbb{R} meaning 'salary of a government official', 'an emolument' also made the deer a symbol of political power, of a high, respected position in the government together with the enviable salary attached to such high office, one of the three prerequisites of an ideal life, the others being 'good fortune' \mathbb{R} and 'longevity' \mathbb{R} .

The Water Buffalo Motif 水牛紋

As the Chinese writer and scholar Zhang Zhijie 張之杰 forcefully argues in a recent article, in the ancient oracle bone inscriptions, *jiaguwen* 甲骨文, the earliest known form of Chinese writing, the character *niu* 牛, usually translated 'cattle' or 'ox' refers to the domesticated 'water buffalo' and not to any form of wild cattle or other beast hunted by the



Deer motif, Shang dynasty, Yinxu period $(14^{th} - 12^{th}/11^{th}$ centuries B.C.) Royal tomb n° 1004, Anyang, Henan Province.



Shang. Thus, by the Xia $\overline{\mathbb{R}}$ and Shang $\overline{\mathbb{R}}$ periods, the domesticated water buffalo was already playing an important role in the agricultural life of the Chinese people and was regarded as a sign of wealth, a strong, gentle animal that by its labours contributed to the general well-being and prosperity of the kingdom and its people.



When describing the Shang 商 dynasty, chronicles written during the Eastern Zhou 東周 and Han 漢 periods emphasize that, for the Shang rulers, two activities were of prime importance: 國之大事, 惟祀與戎, 'the nation's important undertakings (were) only sacrificial rites and war'. Oracle bone inscriptions, *jiaguwen* 甲骨文, record that water buffalo were among the main animals slaughtered and offered to the spirits and ancestors during the Shang's frequently held sacrificial rites, so much so that even the ancient phrase for 'beast slaughtered for sacrifice' '*Xisheng*' 犧牲 is composed of the 'buffalo' radical ‡ (standing radical form of \pm) and characters indicating the sounds *xi* and *sheng* ($\ddagger +$ $\stackrel{*}{=} = Xi$ $\stackrel{*}{=} Sheng$ $\stackrel{*}{=}$), with the second character of the phrase, i.e. *sheng* $\stackrel{*}{=}$, meaning 'domestic animal' when used alone.

The connection between sacrificial rites and the water buffalo may account for the frequent appearance of buffalo heads on bronze ritual vessels and especially *jue* 爵, *jia* 斝 and *gui* 簋 of the Shang 商 and Western Zhou 西周 dynasties.

In a few rare cases, complete vessels were cast in the form of water buffalo. One such 'buffalo *zun*' or *niuzun* 牛尊, was excavated in 1977 at Hengyang 衡陽 in Hunan 湖南 province and is now conserved in the Hunan Provincial Museum (*See photo on page 146*).

Buffalo *zun* or *niuzun*, Shang dynasty $(14^{th} - 12^{th}/11^{th}$ centuries B.C.) Height: 14 cm, Length: 19 cm – Henan Provincial Museum.

The Ram, Sheep or Goat Motif 羊紋

For the Chinese, in common with the people of many other ancient cultures, the sheep, ram or goat (for the Chinese character *yang* \neq alone can be used to refer to all three of these), has, perhaps because of its corpulence and the quality of its fur, always been a symbol of well-being and prosperity.

For the ancient Chinese, the animal signified even more. It is recorded in ancient Chinese chronicles that the great statesman and the 'Father of the Chinese Justice System' Gao Yao &M/&M, who served under three kings of the Xia \bar{g} dynasty, Yao \bar{a} , Shun # and Yu \equiv praised the sheep, ram or goat as a paragon of filial piety \neq \ddot{u} , since the lamb or kid kneels respectfully when nursing and suckles gently from its mother's breasts.



For the ancient Chinese, the sheep, ram or goat was also considered a pure and noble enough animal to be offered in sacrifice to the spirits and the ancestors and was regarded as especially auspicious, as confirmed by the fact that the most ancient form of the character *yang* 羊 or sheep, ram or goat as found in oracle bone inscriptions *jiaguwen* 甲骨文, was also used interchangeably to represent the character *xiang* 祥 (示 radical + 羊 sheep) meaning 'auspicious', 'propitious'. Even in

Ram motif, detail of the *fangding*, Shang dynasty, Yinxu period (circa $14^{\text{th}} - 12^{\text{th}}/11^{\text{th}}$ centuries B.C.) – Meiyintang n° 178 (*See photo on page 33*).



our modern age, the phrase *San Yang Kai Tai* 三羊開泰 (Three Sheep/ Rams/Goats Usher in Prosperity and Renewal) frequently appears in calligraphic scrolls placed over doorways and on the walls of offices and the parlours of family homes, especially during the Chinese Year of the Sheep, Ram or Goat.

During the Shang 商 and early Western Zhou 西周早期 dynasties, the ram motif usually appeared on bronze vessels as secondary ornamentation. In rarer instances, the ram was also cast in the round with protruding horns as the central motif of a vessel. But perhaps the most spectacular use of the ram motif can be seen on vessels on which the animal, or its front and top part, is cast in the round as part of a vessel, such as is the case with a big square *zun* 尊, 58.5 cm high, excavated in 1938 at Huangcai 黃材, Ningxian county 寧鄉縣, Hunan 湖南 province, which is cast with four rams back-to-back with their protruding heads in the round surmounted with elegant coiled horns and their powerful chests and front legs cast in high relief below.

A large bronze vessel now in the British Museum, is cast in the shape of the front halves of a pair of two outwardly facing rams with powerful coiled horned heads and extended chests standing on their two front legs supporting a high vessel between them.

The Tiger Motif 虎紋

Inordinately strong and intelligent, fast-moving, courageous, fearless and majestic in appearance, the tiger has always been for the Chinese a symbol of both physical and metaphysical power, a creature that, it was believed, could communicate directly with heaven and the denizens of the netherworld and serve as an intermediary between them and mankind, as well as a creature that could dispel evil forces and protect human beings. Making use of various tiger motifs, China's rulers and warriors attempted to adopt as their own the tiger's fearinspiring grandeur and prestige, while the common people employed tiger motifs as powerful talismans to ward off inauspiciousness from their homes and invoke divine protection for the bodies of themselves and their young offspring. During the Shang 商 dynasty, the tiger motif sometimes appeared on bronze ritual vessels and especially as part of the design on *gong* 觥 or on the handles of *ding* 鼎, such as those excavated at Qingjiang 清江 in Jiangxi 江西 province between 1973 and 1975 and the famous "*Si Mu Wu fang ding*" 司母戊方鼎, where the animal appears on the handles cast in the round.



During the Shang 商, a very few ritual vases were cast in the form of a complete tiger. The most amazing and famous of these are two *you* 卣, each cast in the form of a large tiger seated on its hind legs with a human figure emerging from its widely opened mouth. One of these magnificent vessels is now in the Cernuschi Museum in Paris and the other is in the Sumitomo Collection in Japan. In 1989, an amazingly lively, full-bodied, running tiger was excavated from a Shang tomb at Xingang 新干 Dayangzhou 大洋洲 in Jiangxi 江西 province.



The Horse Motif 馬紋

During the Xia $\overline{\mathbb{Q}}$, Shang $\overline{\mathbb{B}}$ and Western Zhou $\overline{\mathbb{B}}$ dynasties, the horse native to China was not as elegant or beautifully built as the horses imported into China in the Qin $\overline{\mathbb{A}}$, Han $\underline{\mathbb{X}}$ and later periods, but was a rather short, thick-necked creature with large ears. Nevertheless, the horse, because of its speed, strength and stamina as well as its importance in war, was highly valued by the Chinese, often compared in vitality with the dragon.

The horse motif was not particularly common on the bronze vessels of the earliest periods, but several bronze horse vessels in the round dating from the Shang 商 and Western Zhou 西周 dynasties have been unearthed in China over the past 80 or so years. In 1955, one such vessel, a mid Western Zhou 西周中期 horse-shaped *zun* 馬尊 with a very long inscription, was unearthed at Mei county 眉縣, Shaanxi 陝西 province and is conserved in the National History Museum in Beijing.

The Hare or Rabbit Motif 免紋

Because of its gentle nature, its nimble movements and its ability to reproduce prolifically, the hare or rabbit was, for the ancient Chinese, an auspicious symbol of gentility, grace and fertility.



Though not commonly seen, the hare or rabbit sometimes appeared as a secondary decorative motif on the bronze ritual vessels of the Shang 商 and Western Zhou 西周 dynasties. One particularly charming example is an early Western Zhou 西周早期 *zhi* 觶 drinking vessel unearthed in 1971 at Luoyang 洛陽 in Henan 河南 province, which is decorated in its centre with a band of lively rabbits depicted in profile in high relief.

Horse motif, detail of a *pang* (bow fitting), Shang dynasty, Yinxu period (circa $14^{th} - 12^{th}/11^{th}$ centuries B.C.).

A very few full-bodied hare or rabbit bronze vessels are also known, one being a realistically cast Western Zhou 西周 rabbit *zun*尊 excavated in 1992 from the tomb of the Duke of Jin 晉侯 at Quwo 曲沃, Shanxi 山西 province.

The Principal Geometric Motifs 幾何紋 of the Shang 商 and Zhou 周 Periods

The Thunder or *Leiwen* Motif 雷紋

The *leiwen*, literally 'thunder' motif 雷紋, is the most common secondary motif found on bronze vessels from the Shang 商 to Western Zhou 西周 periods. Cast in the form of round or square spirals tightly packed with finger-print-like swirls, *leiwen* 雷紋 usually served to fill in the spaces behind and around the primary motifs featured in the vessel's decor (*See photo on page 109*).



The Jiongwen or "Revolving Flame" Motif 冏紋

The *jiongwen*, literally 'flame' 火光 motif, is also called the 'wowen' $渦 \dot{\alpha}$ or 'vortex' motif and was a common motif on bronze vessels from the Erligang 二里崗 period of the early Shang 商 dynasty, up to and throughout the Western Zhou 西周 period. According to the late eminent scholar and specialist in ancient Chinese bronze vessels, Ma Chengyuan 馬承源, the *jiongwen* or "flame motif" 冏紋 was the symbol of the god of fire, one of the most important gods in the ancient Chinese pantheon, who was widely worshipped during the Xia 夏, Shang 商 and Zhou 周 dynasties as the source of fire, one of nature's greatest gifts to mankind.

Jiongwen "Revolving flame" motif on *jia*, Shang dynasty, late Erligang, early Yinxu period (circa 14th – 13th centuries B.C.) – Meiyintang Collection n° 170.





The term *jiongwen* 冏紋 to describe this motif is found in the *Kaogongji* 考工記 of the *Zhouli* 周禮, completed sometime in the 5th century B.C. between the end of the Spring and Autumn 春秋末 and the beginning of the Warring States 戰國初 periods, where *jiongwen* 冏紋 is defined as a 'round, vortex-shaped flame'.

The Qiequ Motif 竊曲紋



The term *qiequ* 竊曲 or literally, the 'stolen curve', was used to describe this motif in Chinese historical records as early as the Spring and Autumn 春秋 period (circa 770 – 476 B.C.). It is shaped a bit like a fallen-over reclining "S", with its central inner section round like an eye or a sort of sun with rays.

Some scholars believe that the qiequ is $mathrmath{\mathbb{H}}$ evolved over time from ancient stylized bird or dragon motifs.

The "Repeated Link and Circles" or Chonghuan Motif 重環紋



Almost as popular as the *qiequ* motif 竊曲紋 on bronze vessels of the Western Zhou 西周, the *chonghuan* motif 重環紋 is composed of long, link-like, double-bordered motifs separated by smaller, semi-oval-shaped, double-bordered motifs.

Chonghuan "Repeated Links and Circles" motif on *gui*, late Western Zhou dynasty (circa $9^{th} - 8^{th}$ centuries B.C.) – Meiyintang Collection n° 106.

The *chonghuan* motif 重環紋 was mostly used to decorate the borders of vessels and their covers.

The "Waves and Curves" *Boquwen* 波曲紋 or "Bands of Links" *Huandaiwen* Motif 環帶紋



This rather abstract motif was very popular during the Western Zhou 西周 dynasty (circa $12^{th}/11^{th}$ centuries BC – 771 B.C.) where it was often employed as the central motif on large *ding* 鼎. Its combination of highly rising and lowering undulating curves filled with smaller, curving, hooked motifs made it ideal for the decoration of the whole body or a large section of a vessel.

The "Coiling Snake" or Panhui Motif 蟠虺紋



In Chinese, the word *hui* 虺 is used to refer to a 'poisonous snake', but it is difficult to say now whether or not the designers of this motif in ancient times meant for the small snake in this pattern to represent a poisonous variety of the serpent.

At any rate, the 'coiling snake' *panhui* 蟠虺 motif consists of tightly packed, wriggling, small, stylized, snake-like patterns repeated over and over again, a technique made possible by the impression of molds covered with this intricate design.

Boquwen "Waves and curves" motif on fangyan, late Western Zhou dynasty or early Spring and Autumn period (circa 9th – 8th centuries B.C.) – Meiyintang Collection n° 194.





The "Coiling Hornless Dragon" or Panchi Motif 蟠螭紋



This motif is composed of repeated pairs of interlacing coiling *chi* 螭 or 'hornless dragons' with the backs of their beads touching and their tails interlocking to form a promontory-like upward protuberance, or some similar pattern.

This motif was very commonly used to decorate large areas of the bodies of bronze vessels from the beginning of the Warring States 戰國 period (circa 475 – 221 B.C.) onwards.

The "Down or Feather " Yuwen Motif 羽紋



This motif which, according to many modern-day scholars, is composed of small, interwoven, down feathers, was very popular during the Warring States $R \equiv 0$ (circa 475 – 221 B.C.). Other scholars believe that the motif was made up of small, breaking wave tips or even of small, interlocking dragons with only their stylised paws and heads visible.



Studies of archaic Chinese bronze ritual vessels

 \overline{Jue} , Shang dynasty, Erligang period (circa 17th/16th – circa 14th centuries B.C.) Height: 15,5 cm – Meiyintang Collection n° 163.



Studies of archaic Chinese bronze ritual vessels

From as early as the Western Han dynasty (circa 206 B.C. – 24 A.D.), Chinese classical books and official historical annals comment on the great interest shown by Chinese intellectuals in the study of ancient ritual bronze vessels from the Xia \overline{g} and Shang \overline{m} dynasties and especially from the Zhou \overline{m} dynasty. This keen interest was, most probably, aroused primarily by the respect for the Zhou \overline{m} , its form of governance and political philosophy that was fostered by Confucianism, the state-sanctioned philosophy of the Han Empire and later Chinese dynasties. Such interest was also strengthened by the unintentional unearthing, from the Han $\underline{\ddot{g}}$ dynasty onwards, of a number of archaic bronze vessels by floods, earthquakes and mudslides, as well as during the construction of new tombs, temples or other buildings or the digging of wells.

Discoveries of ancient bronzes were regarded as so important that they were recorded and discussed in the Hanshu 漢書 (Official Han Annals). The first such documented discovery was that of a large *ding* 鼎 unearthed in 116 B.C., an event considered so important and auspicious that the Emperor of the time, Wu Di 武帝 (140 - 87 B.C.) changed his reign name to Yuanding 元鼎 or "First or Original Ding" between the years 116 and 111 B.C.. The rightness of his decision and his belief that the unearthing of the ancient, sacred *ding* 鼎 showed heaven's pleasure and favour toward him, were deemed confirmed when in the 6th month of the 4th year of Yuanding 元鼎四年六月 (113 B.C.), what was believed to be yet another large Zhou *ding* was discovered in Fenyin 汾 陰 County, Hedong Prefecture, in present-day Baoding 寶鼎 ('Precious Ding'), southwest of Wanrong 萬榮, Shanxi 山西 province, an event which was also considered important enough to be recorded in the Hanshu 漢書. During the following centuries, certain events, many natural, continued to bring to light a number of archaic ritual bronze vessels and such discoveries were always considered auspicious and signs of heaven's favour towards the ruling house of the time.

Taotie mask, detail of the ding shown on page 25.

possible reason was that during the Tang 唐, many of the sites chosen for new tombs were located in areas where ancient cemeteries had previously been made and these were often inadvertently disturbed and their contents brought to light.

During the late Qing 清 dynasty (1644 – 1911 A.D.), the building of the railway lines also led to the accidental unearthing of quite a number of tombs and caches containing ancient bronze vessels. But perhaps the most important discovery from the point of view of ancient bronze vessels, their inscriptions, etc. was made during the reign of Guangxu 光 绪 (1875 – 1909 A.D.) in the late 19th century when a massive mudslide led to the discovery of the Shang 商 royal tombs, in Xiaotun 小屯 near present-day Anyang 安陽 in Henan 河南 province. This was followed in the early 20th century by fifteen scientific excavations organized by the Academia Sinica 國立中央研究院 from 1928 until 1937, when all archaeological work on the sites was interrupted by the Japanese invasion.

1. Earliest systematic studies on ancient bronze vessels

In ancient texts from as early as the Zhou 周 dynasty (circa 12th/11th centuries – 256 B.C.), such as the *Zhouli* 周禮 (*The Rites of the Zhou*) the *Yili* 儀禮 (*The Book of Rites and Ceremonies*) and the *Liji* 禮記 (*Classic of Rites of the Zhou*), we can find references to ritual bronze vessels and detailed descriptions of their uses.

During the Han 漢 dynasty (circa 206 B.C. – 24 A.D.), the *Shuowen jiezi* 說文解字 and the *Erya* 爾雅 both included numerous references to bronze ritual vessels.

The *Erya* 爾雅, which is China's earliest-known dictionary cum encyclopedia, was most probably compiled in the 3rd century B.C., from the end of the Qin 秦 dynasty (circa 221 – 206 B.C.) to the beginning of the Western Han. The *Erya* 爾雅 is divided into nineteen sections, the first of which discusses synonyms, while the second deals with words grouped together by the closeness of their meanings and the third section concerns terms grouped together by theme; the *Erya*'s 爾雅 sixth section discusses daily utensils, food, clothing, etc. and contains a plethora of references to ancient

ritual bronze vessels.

The Shuowen jiezi 說文解字, a dictionary cum encyclopedia written by Xu Shen 許慎 (died 146 B.C.) in the Han 漢 dynasty, features descriptions of shapes and types of ritual vessels and explanations of their uses. This extremely important book, with its wealth of valuable information, is even today considered to be the foundation upon which all subsequent studies of ancient Chinese bronze vessels is based.

During the 5th century, the poet, statesman and historian Shen Yue 沈 約 (441 - 513 A.D.) in the *Furui Zhi* 符瑞誌 (*The Book of Auspicious Omens*), included later in the *Songshu* 宋書 (*Annals of the Kingdom of Song [420 - 479 A.D.] / Song Kingdom of the post-Han, pre-Tang period*) mentioned fifteen discoveries, in which a total of forty-one ancient bronze ritual vessels were unearthed.

2. Song π studies

It was, however, during the Song \Re dynasty (960 – 1279 A.D.), when interest in collecting and studying ancient objects and inscriptions reached its zenith, that Chinese antiquarians carried out the first systematic scientific studies of ancient Chinese bronzes. After initially making a complete inventory of all the ancient bronze vessels discovered up to that time, several Song \Re dynasty scholars compiled treatises which included drawings, descriptions, measurements, etc. of each known vessel as well as its inscription, if there was one, together with an interpretion of the inscription. Perhaps ever more importantly, they scoured the ancient Chinese classics and historical annals in an attempt to correctly name and classify the vessels according to their original use.

Among the thirty or so surviving books written during the Song \oplus dynasty on the subject of ancient bronze ritual vessels and their inscriptions, the most important are:

■ the Xian Qin Guqi Tu 先秦古器圖, which was probably the first book to publish drawings of ancient ritual vessels. It was written by the Northern Song 北宋 academician Liu Chang 劉敞 (1019 – 1068)

A.D.) who collected and studied a great number of ancient bronze vessels near the site of *Gao* 鎬, the ancient capital of the Western Zhou 西周, southwest of present-day Xian 西安 in Shaanxi 陝西 province, together with Ouyang Xiu 歐陽修 (1007 – 1072 A.D.) one of the greatest writers, poets, statesmen and historians of the Song dynasty.

- The Jigulu Bawei 集古錄跋尾, edited and published by Ouyang Xiu 歐陽修 (1007 1072 A.D.), is regarded by scholars as the first specialized study of the inscriptions cast on nineteen inscribed ritual bronze vessels known at that time. The book contains information about the place of discovery of each bronze, its shape and size and a transcription and translation of its inscription, if there was one. Ouyang Xiu's book was greatly influenced by the work of Liu Chang 劉敞.
- The *Kaogu Tu* 考古圖, written by the Northern Song scholar Lü Dalin 呂大臨 (1040 1092 A.D.) and published in 1092, is probably the oldest and most important compilation produced during the Song 宋 period. It includes a description and a drawing of two hundred and ten bronze vessels and objects, as well as thirteen jade objects, dating from the Shang 商 dynasty up to the Han 漢 dynasty, all of which were held in either the Imperial Collections or in ten private famous collections of the period.

Of the two hundred and ten bronzes treated in the book, one hundred and forty-eight were considered to date from the Shang 商 and Zhou 周 dynasties. Lü arranged these according to their shape, then meticulously recorded their sizes, weights, inscriptions, etc. and indicated, wherever possible, the area where they had been discovered as well as other details of their provenance. He also searched through ancient classics such as the *Lushi Chunqiu Annals* 呂氏春秋, the *Zhouli* 周禮, the *Erya* 爾雅, etc., etc. to determine the correct names by which such vessels and their motifs should be called, as well as their use in antiquity. Lü's extremely important work was the pioneer in its field and is the book upon which all further works and studies of ancient Chinese bronze vessels, their morphology, etc. are based.

■ The Xuan He Bogu Tu 宣和博古圖 was compiled, revised and then

expanded between the years 1107 and 1123 or 1125 A.D. by the Northern Song Prime Minister Wang Fu 王黼 (1079 – 1126 A.D.) and a group of scholars working under him, on the instructions of Emperor Huizong 徽宗 (1101 – 1125 A.D.). In this extremely important 30-volume work, Wang Fu 王黼 and his assistants not only recorded and arranged according to their shapes, all of the eight hundred and thirty-nine bronze ritual vessels then held in the Song \Re Imperial Collections, but also described and included drawings of each piece as well as drawings or rubbings of the inscriptions on all the inscribed pieces. Perhaps even more importantly, after making a thorough search for the names of ancient ritual vessels in all the classical and historical texts then known, as well as in earlier works on bronzes, Wang Fu 王黼 standardized the terminology used to describe ancient bronze vessel shapes and their decorative motifs.

Unfortunately some of the ritual bronzes published in the *Xuan He Bogu Tu* 宣和博古圖 are now considered to be later copies of ancient ritual bronzes.

It is generally agreed that the work carried out by the Song $\hat{\pi}$ antiquarians, all without exception men of great erudition, was very meticulous and well-researched and thus the books they produced were well-written, factual studies. Apart from a few errors, sometimes extremely slight, the Song $\hat{\pi}$ antiquarians' method of classifying bronzes and the terminology which they either established or standardized, constitute the basis of our modern classifications and terminology. Thus, the Song antiquarians found in the ancient texts and then standardized names for ritual vessels like *ding* $\hat{\mathbb{H}}$, *li* $\hat{\mathbb{R}}$, *jue* $\hat{\mathbb{B}}$, *jia* $\hat{\mathbb{F}}$, *pan* $\hat{\mathbb{B}}$, etc., and terms like *leiwen* $\hat{\mathbb{T}}$ and *taotie* $\hat{\mathbb{T}}$ mask to refer respectively to a motif composed of finger-print-like spirals, and the animal mask motif, all of which names and terms are still used by scholars today.

3. Ming 明 studies

During the Ming in dynasty (1368 – 1644 A.D.), on the other hand, antiquarians and scholars seem to have been less attracted by the study of ancient bronze vessels, and when they did set their hand to the study

of this subject, their work was much less rigorous and accurate than that of the Song \Re dynasty antiquarians. Some scholars think that one reason for this lack of interest and attention to details was the paucity of suitable bronze vessels to study firsthand, since during the Southern Song $\Re \Re$ dynasty (960 – 1127 A.D.) as well as during the Ming \mathfrak{H} dynasty (1368 – 1644 A.D.) itself, the government carried out, at various intervals, the melting down of ancient bronze vessels, Buddhist statues, etc. in order to obtain raw material for the manufacture of weapons and coins, especially at times when the survival of the central government of the empire was under serious threat from invading nomadic groups from the north.

4. Qing 清 studies and the first collectors

■ The Xiqing Sijian 西清四鑒, or the "Four Books of Appreciation and Appraisal of the Xiqing Study" were compiled on the command of the great antiquarian, connoisseur and collector, Emperor Qianlong 乾隆 (1736 – 1796), between the years 1749 and 1779 in an attempt to emulate the Northern Song 北宋 Emperor Huizong's 徽宗 renowned classic, the Xuan He Bogu Tu 宣和博古圖.

The term *xiqing or* 'Western Purity' in the title of this set of books was derived from the name of the Study/Private Library located in the southern part of the Qing Imperial Palace 清宮南書房 where the books were compiled. The final word in the Chinese title, i.e. *jian* 鑒 literally means an 'appreciation' 鑒賞 or an 'appraisal' 鑒定, or both together.

In the 4 multi-volumed books that make up the *Xiqing Sijian* 西清 四鑒, each of the 4074 Shang 商, Zhou 周, etc. up to Tang 唐 period bronzes in the Qing Imperial Collection was numbered, sketched and described in detail, and its measurements, weight, etc. as well as, in the case of inscribed vessels, a sketch of its inscription and a translation were provided.

The complete 96-volume *Xiqing Sijian* 西清四鑒 is composed of the following books:

- The *Xiqing Gujian* 西清古鑒, which consists of 40 volumes in which were listed among other antiquities, 1,529 bronze vessels from the Shang 商 to Tang 唐 dynasties conserved in the Imperial Collections in the Beijing Imperial Palace 北京皇宮. The book was compiled between 1749 and 1755 A.D. by the scholar, calligrapher and member of the Hanlin 翰林 or Imperial Academy, Liang Shizheng 梁詩正 (1697 1763) and other scholars on Emperor Qianlong's 乾隆 instructions. Unfortunately, half or more of these pieces are today considered to be later reproductions, many of them produced in the Song 宋 dynasty.
- Almost 38 years later, in 1793, the first sequels to the *Xiging Gujian* 西清古鑒, two 20-volume works entitled respectively the Xiging Xujian Jiabian 西清續鑒甲篇 and the Xiging Xujian Yibian 西清 續鑒乙篇 or 'Sequels A & B to the Xiging Gujian' were completed by the scholar and high government official Wang Jie王杰 (1725-1805 A.D.) and others on the command of the Emperor Qianlong 乾隆. In the 20-volume Sequel A, 944 additional unrecorded bronzes purported to be from the Shang 商 and Zhou 周 to Tang 唐 periods and kept in the Beijing Imperial Palace 北京皇宮 were recorded, sketched, described, etc. as had been done in the original *Xiqing Gujian* 两清古鑒 compiled by Liang Shizheng 梁詩正 some 38 years earlier. In Sequel B, Wang Jie 王杰 and his assistants recorded, sketched, described, etc. yet another 900 bronzes from the Imperial Collections, but which were housed in the Mukden Imperial Palace 盛京(奉天)皇宮/盛京行宮 in present-day Shenyang 瀋陽 in Liaoning 遼寧 province, north-eastern China.
- The final 16-volume book of the series, which was called the *Ningshou Gujian* 寧壽古鑒 and which was compiled at about the same time as Sequels A and B ,recorded, sketched, described, etc. a total of 701 purportedly Shang 商, Zhou 周, etc. up to Tang 唐 previously unrecorded bronzes from the Imperial Collections

which were housed in the Ningshou Palace 寧壽宮 within the Beijing Imperial Palace 北京皇宮.

Amongst the antiquarians of the Qing 清 dynasty, who collected, researched and published with scientific rigour, the most famous were:

- Qian Daxin 錢大昕 (1728 1804), a polymath who was one of the most prominent poets, epigraphists, historians and linguists of the Qianlong 乾隆 and later periods. Qian had a special interest in phonetics, etymology and epigraphy. An expert in ancient inscriptions, he amassed a collection of more than two thousand rubbings of inscriptions on bronze and stone. He wrote many books, one of which, the *Jinshi Wenzi Mulu* 金石文字目錄, a dictionary of bronze and stone inscriptions, is still consulted to this day.
- Zhu Yun 朱筠 (1729 1780), a great scholar, collector of antique books and connoisseur of ancient styles of calligraphy. Zhu considered himself to be the first bronze inscription specialist and worked closely with Ruan Yuan 阮元.
- Qian Dian 錢坫 (1741 1806), the nephew of the Qing polymath and expert in ancient inscriptions, Qian Daxin 錢大昕 (1728 1804) and an eminent Qing dynasty scholar of the *Shuowen* 說文 and a great calligraphist in his own right, as well as an avid collector of ancient bronze vessels. His collection of 49 bronzes was published in 1796 under the title *Shiliu Changle Tang Guqi Kuanshi Kao* 十六長樂堂 古器款識考 in which he included drawings and measurements of each of the 49 vessels, together with transcriptions and translations of inscriptions.
- Wu Dongfa 吳東發 (1747 1803), who is well-known today not only for his paintings and calligraphy, but also as a great expert in textology and on ancient stone and bronze inscriptions. He wrote the Shang Zhou Wenzi Shiyi 商周文字拾遺 (Compendium of Surviving Shang and Zhou Writing).
- Kong Guangsen 孔廣森 (1752 1786), a seventieth generation descendant of Confucius and a great scholar, especially on the *Chunqiu* 春秋 period (circa 770 476 B.C.) and on the *Da Dai Liji* 大戴禮記. In his books *Chunqiu Gongyang Tongyi* 春秋公羊經傳

通義 and *Da Dai Liji bu shu* 大戴禮記補注 he made frequent use of bronze inscriptions to support and prove his theses.

- Ruan Yuan 阮元 (1764 1849), the most famous scholar of the Qing 清 dynasty. In his book the *Jiguzhai Zhongding Yiqi Kuanshi* 積古齋鐘鼎彝器款識, with its preface dated 1804, he recorded and commented on five hundred and fifty inscriptions, providing translations and notes, some of which were contributed by other contemporary scholars like Wu Dongfa 吳東發, Zhu Yun 朱筠, etc.
- Xu Tongbo 徐同柏 (1775 1854), a great Qing dynasty scholar and collector of bronzes. His collection included many archaic vessels, but because of the chaotic conditions created by the outbreak of the Opium War 鴉片戰爭(1840 1842 A.D.) and then the Taiping Rebellion 太平天國 (1851 1864 A.D.), a book on the bronzes and inscriptions in his collection was published only in 1906, long after his death, under the name *Conggutang Kuanshixue* 從古堂款識學.
- Wu Shifen 吳式芬 (1796 1856), who prepared a compilation of one thousand, three hundred and thirty-four inscriptions entitled the *Jungu Lu Jinwen* 攈古錄金文, which was not published until 1895, after his death, also because of the chaotic conditions caused by the Opium War 鴉片戰爭 (1840 1842 A.D.) and Taiping Rebellion 太平天國 (1851 1864 A.D.).
- Fang Junyi 方濬益 (died 1899), who wrote a book entitled *Zhuiyi Zhai Yiqi Kuanshi Kaoshi* 綴遺齋彝器款識考釋 in which one thousand, three hundred and eighty-two inscriptions were recorded, but the book was not published until 1935.
- Chen Jieqi 陳介祺 (1813 1884), one of the greatest bronze vessel collectors of the Qing 清 dynasty, who personally owned about 130 to 140 vessels. He wrote a catalogue entitled *Fuzhai Jijinlu* 簠齋 集金錄 which included one hundred and eighty-eight inscriptions, but which was published only in 1918.
- Pan Zuyin 潘祖蔭 (1830 1890), a famous official from the Qing Court, calligrapher and avid collector of archaic bronze vessels. Pan had in his collection several hundred archaic bronzes. His catalogue of fifty of the bronzes in his collection, entitled *Pangulou*

Yiqi Kuanshi 攀古樓彝器款識, was published in 1972.

- Wu Dacheng 吳大澂 (1835 1902), a very high-ranking official at the Qing Court, who collected ancient bronze vessels as well as jade. One thousand and forty-eight inscriptions from Shang 商 and Zhou 周 dynasty ritual vessels are recorded in his *Kezhai Jigulu* 愙 齋集古錄, which was published only in 1916.
- Duan Fang 端方 (1861 1911), a member of the Qing 清 Manchu aristocracy 滿州正白旗人, a high government official, far-sighted statesman, scholar, epigraphist and avid collector of ancient bronze vessels, seals, etc. His book, the *Taozhai Jijinlu* 陶齋吉 金錄, published in 1908, was the first in China in which rubbings of ancient bronze inscriptions were published using the then new technique of 'gravura reproduction'.

5. Modern studies

The discovery of *Jiaguwen* 甲骨文, oracle bone writing

At the end of the 19th century an extraordinary discovery deeply influenced and changed the course of all studies of ancient Chinese bronze inscriptions. In the late 1890s, what were called in ignorance "dragon bones" began making their appearance in a number of shops selling traditional Chinese herbal medicine, where they were pounded into powder and made into medicine. Many of these 'dragon bones' bore very unusual and, at the time, largely ignored inscriptions etched in the earliest form of Chinese writing. This writing was later termed jiaquwen 甲骨文 'tortoise shell and bone writing' in Chinese, since all these inscriptions were written either on tortoise shells or on animal bones, and 'oracle bone writing' in English, since the contents of the inscriptions dealt almost exclusively with questions asked of oracle spirits by wu 巫, shamans or sorcerers of the Shang 商 (circa 17th/16th – 12th/11th centuries B.C.) and Western Zhou 西周 dynasties (circa 12th/11th centuries – 771 B.C.) concerning the possible auspiciousness or inauspiciousness of most activities planned by the Kings and ruling classes of the time.

In 1899 the 'dragon bones' for sale in the medicine shops drew the

attention of Wang Yirong Ξ 懿榮 (1840 – 1900) a famous antiquarian and epigraphist, who recognized that the markings on the 'dragon bones' were, in fact, inscriptions. He and other scholars, including Liu E 劉鶚 and Sun Yirang 孫詒讓 immediately understood that there was a relationship between these 'oracle bone' inscriptions and the inscriptions on Shang 商 and Zhou 周 dynasty bronze ritual vessels.

The search for yet more 'oracle bones'

Some years later in the decade between 1928 and 1937, after the overthrow of the Qing 清 dynasty and the establishment of the Republic of China 中華民國, the Archaeological Department of the National Research Institute of History and Philology of the Academia Sinica 國立中央研究院歷史語言研究所 decided to organize 15 scientific excavation expeditions under the direction of the archaeologists Dong Zuobin 董作賓, Li Ji 李濟 and others to the Anyang 安陽 area of Henan 河南 province, the reported origin of these 'dragon bones' and the site of the ancient city of Yin 殷, the last capital of the Shang 商 dynasty. Thanks to these expeditions, a further 24918 inscribed oracle bones were unearthed.

Spurred on both by the impact of the discovery of what are now termed 'oracle bones' and by further important discoveries made by the Academia Sinica expeditions in Henan province, a number of Chinese and foreign scholars of the last century continued to make great contributions to the study of ancient bronze vessels and their inscriptions. Several of the most prominent of these were:

Luo Zhenyu 羅振玉 (1868 – 1940), who was one of the first to take up the study of the newly discovered *jiaguwen* 甲骨文 'oracle bone inscriptions'. He subsequently published three collections of oracle-bone inscriptions, the *Yinxu Shuqi Qianbian* 殷墟書契前 編, the *Yinxu Shuqi Jinghua* 殷墟書契菁華 and the *Yinxu Shuqi Houbian* 殷墟書契後編. Luo also carried out extensive studies on bronze vessel inscriptions. The most important publication which resulted from his research is his *Sandai Jijin Wencun* 三代吉金文 存 (Collection of Surviving Bronze Inscriptions from Three Reigns) published in 1937, in which he recorded 4831 inscriptions, the largest collection of its kind recorded even up to the present. This book remains to this day a primary reference for all specialists.

- Wang Guowei 王國維 (1877 1927), who became intensely interested in bronze inscriptions after a trip to Japan with his mentor, Luo Zhenyu 羅振玉. Wang was the first to attempt to use material from bronze inscriptions to throw fresh light on the history of the Shang 商 and Zhou 周 dynasties. Among other things, he successfully showed that the origins of the Shang dynasty date 1,000 years earlier than had been believed by scholars before the publication of his research. Wang also did much to further scholars' understanding of Western Zhou 西周 (circa 12th/11th centuries 771 B.C.) history, geography, ritual, etc. and especially the Western Zhou calendrical system, which made possible a more accurate dating of ancient royal reigns, bronze inscriptions and the vessels upon which they were inscribed, etc.
- Guo Moruo 郭沫若 (1892 1978), who studied archaeology and, while adopting a Marxist view of class structure in ancient Chinese society, made use of material on ancient bronzes to argue that Western Zhou 西周 society was slave-based. In spite of this bias, Guo did extensive valuable and meaningful research on oracle bone inscriptions, bronze vessel inscriptions, etc. and was the first to carry out a systematic historical analysis and synthesis of the names of persons, the styles of writing, the shapes and decorations, etc. on ancient bronze vessels, which also made it possible to assign a certain chronology to the vessels studied. An extremely prolific writer, Guo published many books in his lifetime.
- Chen Mengjia 陳夢家 (1911 1966), who, following in the footsteps of Guo Moruo 郭沫若, advanced further in developing a sound methodology, based on certain criteria, for grouping bronze vessels into related sets, including the many bronzes which were archaeologically excavated between the end of WWII and the early 1950s. Chen not only placed the modern research of ancient bronzes on a sound basis, but also especially contributed through his research to a better understanding of Western Zhou 西周 society, government, geography and territorial expansion during that dynasty.

One of the earliest victims of the Cultural Revolution 文化大革 命 (1966 – 1976), Chen Mengjia 陳夢家 took his own life in early September, 1966, tragically cutting short a career in which he had

made an extraordinary contribution to the study of ancient Chinese bronzes and their inscriptions.

Rong Geng 容庚 (1894 – 1983), who was interested in the study of ancient Chinese characters from childhood, and at an early age became a student of the eminent epigraphist Luo Zhenyu 羅振玉. After graduating from Peking University in 1926, Rong taught at a number of universities in China. His masterwork, *Jinwen Bian* 金文編 published in 1925 has been regarded for many years as the authoritive work on ancient bronze inscriptions, but perhaps Rong's most important contribution to the field of bronze inscription studies was his *Shang Zhou Qingtongqi Yiqi Tongkao* 商周青銅器 彝器通考 in two volumes, one of text and one of illustrations.

Among western scholars, three merit special mention:

- Léon Wieger (Georges Frédéric Léon Wieger 1856 1933), born in Strasbourg Alsace-Lorraine in 1856, Wieger was a medical doctor and Jesuit priest who spent most of his adult life in China. He wrote a number of books on Chinese language, Chinese folklore, Buddhism, Daoism, etc. and a well-received book on Chinese characters entitled 'Caractères chinois' which was later published in English as 'Chinese characters: Their Origin, Etymology, History, Classification and Signification'.
- Bernhard Karlgren (1889 1978) was a Swedish sinologist and linguist who pioneered the study of Chinese historical phonology using modern comparative methods and who for many years was the director of the Museum of Far Eastern Antiquities in Stockholm, Sweden. In his attempts to classify ancient bronze vessels according to the style of the calligraphy in which their inscriptions are written and their decor, Karlgren made a great contribution to the study of ancient Chinese bronzes.
- Max Loehr (1903 1988), a renowned specialist in bronzes, jades and Chinese painting and a former professor of Chinese Art at Harvard University and Curator of Harvard's Fogg Museum. Prof. Loehr was the most eminent non-Asian Chinese Art Historian of his generation. In 1953 he published a major article on Shang bronzes in which he divided and dated them according to a stylistic analysis

of their decorative motifs.

According to his theory, the five distinctive, consecutive chronological styles into which all Shang bronzes can be divided are:

- Style I: characterized by thin relief lines and simple forms which give the whole a light, airy effect.
- Style II: characterized by wider, ribbon-like bands in relief, producing a harsher, heavier form, with the designs having an incised appearance.
- Style III: characterized by dense, fluent, more curvilinear figurations evolving from the proceeding style.
- Style IV: characterized by the first clear separation of major motifs from spirals, which now become small and function as ground patterns, but the motifs and spirals are flush.
- Style V: characterized by the first appearance of motifs in higher relief: the motifs rise above the background spirals, which are sometimes absent altogether.
- The validity of this chronological evolution of the decor on Shang 商 bronzes first set forth by Professor Loehr was later confirmed by archaeological discoveries.

In Japan, two modern-day scholars have made an especially meaningful contribution to the study of ancient Chinese bronze vessels and their inscriptions:

- Umehara Sueji 梅原末治 (1893 1983). Deeply knowledgeable in the archaeology of Japan and Korea as well as that of China, and specializing in the study of ancient bronzes, Professor Umehara taught in the department of archaeology of Kyoto University 京都大學 from 1933 to 1956. His studies and numerous publications on the bronze vessels of the Shang 商 and Zhou 周, the bronze mirrors of the Warring States 戰國, the Han 漢 and post-Han 漢 之後 periods, as well as his studies on Han dynasty lacquerware are remarkable for the wealth of information and important detail contained therein, much of it gathered on the spot by Professor Umehara during his extensive visits to China in the 1920s and 30s.
- Shirakawa Shizuka 白川静 (1910 2006) was one of the best known and most respected modern-day Japanese scholars, who dedicated most of his long life to the study of Chinese characters and inscriptions on ancient bronzes as well as to their relevance to the

social history of ancient China, Japan, etc. In his 'Kimbun Tsushaku' 金文通釋 (Bronze Inscriptions Explained) and 'Kimbun Seikai' 金 文世界 (The World of Bronze Inscriptions), Professor Shirakawa discusses the development of the study of bronze inscriptions, the latest archaeological discoveries, advances in the study of bronze inscriptions, and almost everything known concerning ancient Chinese bronze inscriptions.

In addition to his work on Chinese bronze inscriptions, Chinese history, writing, etc., Professor Shirakawa also authored scores of publications in Japanese on the origin, history, meaning, etc. of the Kanji 漢字 (Chinese characters) used in the Japanese language and on the impact of Chinese characters on the Japanese language, society, etc.



Fakes Chinese bronzes throughout the ages

Fake *zhi*, made by Wang Deshan in Beijing in the 1920-1940.



As always in the world of art, as soon as a category of objects becomes popular and monetarily valuable, fakes, some often very well-made, appear on the market.

The earliest fakes

In the world of Chinese bronze ritual vessels, the history of fakemaking and fakes starts at least as far back as the Spring and Autumn 春秋 period (circa 770 – 476 B.C.). In Volume II of the Shuo Lin 說林 下 section of his famous work *Han Fei Zi* 韓非子, the anti-Confucian legalist philosopher Han Fei 韓非 (circa 280 – 233 B.C.) recounts the story of the Duke of Lu 魯君 who unsuccessfully attempted to safeguard his famous *chan ding* 讒鼎 from the invading army of the neighbouring kingdom of Qi 齊 by trying to pass off a reproduction in its stead. The ruse was discovered, however, when the Oi State 齊國 envoy began having doubts while inspecting the proffered *ding* and demanded, in spite of the Duke of Lu's 魯君 protestations, that Yue Zheng Zi Chun 樂 正子春, a Confucianist and a minister of the State of Lu 魯國 renowned for his honesty, be called in to appraise the *ding*. Unable to lie, Yue Zheng Zi Chun 樂正子春 declared the proffered *ding* to be a copy, whereupon the Duke of Lu 魯君 was forced to part with his beloved genuine chan ding 讒鼎.

In the case of the Duke of Lu 魯君 of the Spring and Autumn 春秋 period, the fake bronze in question was not made in the hope of financial gain, but rather because the owner of a cherished genuine bronze wished to protect it from confiscation by a more powerful, marauding neighbour.

In another famous case from antiquity involving the production of a fake bronze vessel, the perpetrator Xin Yuanping 新垣平 hoped to gain the favour of the Western Han 西漢 Emperor Wendi 文帝 (reigned 179 – 156 B.C.). Xin 新 almost succeeded, or, at least, partly succeeded in his ruse. One reason for this was, as mentioned at the beginning of the chapter on 'Studies of archaic Chinese bronze ritual vessels' (*See page 165*), the Confucian rulers and literati of the Han 漢 and later dynasties had a great reverence for ancient ritual vessels and especially for bronze ritual vessels dating from the revered Zhou 周 dynasty and the sudden reappearance of such vessels was regarded as an especially auspicious sign of Heaven's favour towards the current ruler and his dynasty.

Fake *Ding*, made in early 20th century

In the Xiaowen benji 孝文本記 and Fengshen shu 封神書 sections of his famous Shiji 史記 or 'Records of the Grand Historian', Sima Qian 司馬遷 (circa 145 or 135 – 86 B.C.) relates the dishonest shenanigans of the sorcerer-like geomancer, fengshui 風水 master and government official Xin Yuanping 新垣平, who attempted to increase his wealth and political power by taking advantage of the superstitious nature and credulity of the Western Han 西漢 Emperor Wendi 文帝 (ruled circa 179 – 156 B.C.). It is recorded by Sima Qian 司馬遷 that Xin 新 had artisans secretly produce two types of fakes that would be likely to gain favour with Emperor Wendi 文帝, who craved auspicious signs from heaven that he would be blessed with a long life and a prosperous reign. One of these fakes was an archaic-style jade wine cup bearing the inscription 'The Lifespan of the Ruler of Men Will Be Extended' 人主 延壽; the other was a large bronze Zhou ding 周鼎 which Xin 新 had buried near Fenyin 汾陰.

Xin Yuanping 新垣平 successfully presented the inscribed jade cup to the elated Emperor Wendi 文帝, who, as a sign of his gratitude, immediately promoted the charlatan. However, unfortunately for Xin Yuanping 新垣平, the hapless Emperor was later convinced by two faithful ministers, Zhang Cang 張蒼 and Zhang Shi Zhi 張釋之 that he had been duped by the charlatan Xin 新.

History records that Xin Yuanping 新垣平 and his whole family, including his wife's family, were eventually executed for his crimes. However, according to Sima Qian 司馬遷, Xin Yuanping's 新垣平 bogus *Zhou ding* 周鼎 remained undiscovered, only to be unearthed at Fenyin 汾陰 several decades later in the sixth month of the fourth year of Yuanding 元鼎四年六月 during the reign of Emperor Wudi 武帝 (reigned 140 – 86 B.C.), at which time its discovery was hailed as an auspicious sign of heaven's blessings and pleasure and duly recorded in the *Hanshu* 漢書!

Fakes of the Song π period

At the request of the Emperors and Literati of the period, who were fervent Confucianists and admirers of antiquity and especially of the Zhou \square dynasty, the artisans of the Song \Re produced numerous reproductions of ancient ritual bronzes. These were of two types:

reproductions modeled closely in detail on actual ancient Shang $\overline{\alpha}$ and Zhou $\overline{\alpha}$ period bronzes and then other copies, which, while following the general shape of ancient bronzes, deliberately added then-fashionable design motifs or other innovations to suit Song $\overline{\pi}$ dynasty taste. Copies of this second type which were stylistically influenced by the art of the Song $\overline{\pi}$, are often embellished with gold and /or silver inlay.

Song \Re copies of both categories of bronze vessels are usually heavier, their metal darker, their finish rougher, and their decorative motifs less deeply cast than those on genuine Shang $\check{\Pi}$ and Zhou \exists archaic bronzes. Their patina, which is usually stuck onto the vessel with glue or other adhesive, is often composed of a base of turquoise powder and touches of red and blue rust. The inscriptions, when there are any, are fairly faithful copies of real inscriptions, but they are less deeply cast into the metal than those on ancient vessels.

Fakes of the Yuan $\overline{\pi}$ dynasty

During the Yuan π dynasty, progress was made in the art of copying. Certain artisans of Henan $\forall \exists a$, Shandong $\sqcup \ddagger$ and Shanxi $\sqcup ם$ provinces become renowned for the quality of their work. A number of their reproduced pieces were inadvertently included in the Qing Imperial Collections formed by the Qing Emperors and are today conserved in the Imperial Palace Museum in Beijing. In spite of the improvements made in the Yuan π dynasty, these copies are, nevertheless, of poor quality when compared to the genuine masterpieces of the Shang \ddot{a} and Zhou \exists . Their forms look clumsy, their decorative motifs are less sharply cast and their patina is of mediocre quality. Quite often, purely Yuan π period characteristics appear in the vessels' decor, telltale signs of their being reproductions and not genuine ancient period bronzes.

Fakes of the Ming 明 dynasty

Fakes produced in the Ming 明 dynasty are most usually very artificially archaic in style and immediately betray their inauthenticity by the baroque quality of their decoration, which is often enhanced with gold and/or silver inlay. These pieces are beautifully cast and of a

high quality, but the majority of their decorative motifs are complete fabrications, unlike anything that existed during the Shang 商 or Zhou 周 dynasties. They were not conceived with the purpose of fooling the uninitiated, but are, instead, artistic creations inspired by a respect for ancient objects. This may explain the popularity of certain artisans of the Ming 明 period, including Hu Wenming 胡文明, and Zhang Mingqi 張鳴歧, and Shi Sou 石叟, whose creations have always been greatly appreciated and researched, even up to the present day.

Fakes of the Qing 清 period

Fakes of the Republican period 中華民國

It is really after the commencement of the Republican period $\pm \pm R$ after 1911 that the age of fakes meant to deceive buyers, be they collectors, antiquarians, or even specialists and university scholars, began in earnest. The golden age of such fake-making was between 1920 and 1938. At that time, reproductions become almost perfect, many with false inscriptions.

These fakes were often produced from molds made from genuine archaic bronzes but their decoration is often less sharp and blurred and weak, especially the background *leiwen* 雷紋 motifs in which the spirals are less deep and sharp than they should be, or are even missing in places. The weight of these fakes is different from that of antique pieces of corresponding design, being either too heavy or much too light. Even the alloy of the metal is different and very often the surface of these vessels is covered with many minute air-bubble holes, particularly so in areas covered by *leiwen* 雷紋 patterns. Such bubble holes are easily detected with the use of a simple magnifying glass. The

surface of these vessels, often a very dark black, is covered in places with a fake patina whose artificiality is very easy to detect.

One point that deserves special note is that the molds produced from ancient vessels contain all the faults of the original vessel such as worn-down decor, cracks, surface damage, etc. as well as faults in the patination of the original vessel such as incrustation that dulls the sharpness of, or completely obliterates certain sections of the vessel's design, etc. Moreover, the fake patina used to cover the new vessel is usually uniform in thickness, colour and texture all over, a phenomenon that does not happen in a naturally patinated genuine bronze.

The most difficult to detect fakes of the 1920s and 30s are those that were made with metal obtained by melting down genuine broken vessels or parts of broken vessels of the Shang \bar{m} and Zhou \bar{m} dynasties. Many such vessels, made with the correct metal alloy, were buried before and during the Chinese Civil War of the late 1940s and have recently been reappearing on the market via Hong Kong and Macao. These masterpieces were made between 1920 and 1938 by the most skilled of fake-makers in co-operation with antique dealers and other experts in Shanghai $\pm \ddot{\mu}$, Beijing $\pm \bar{n}$, Xian $\pm \bar{n}$, Suzhou $\pm m$, Weixian $\pm m$, and even Japan $\pm \bar{n}$, especially in Osaka $\pm m$.

All such first class copies of the 1920s and 30s are exact reproductions in form, design, decor, etc. of the archaic bronzes of the Shang \ddot{m} and Zhou \exists dynasties and are categorized by specialists according to their areas of origin.

Fakes of Suzhou 蘇州

Bronze copies produced in Suzhou 蘇州, Jiangsu 江蘇 province. Several eminent bronze casters, including Zhou Meigu 周梅谷, Liu Junqing 劉俊卿 and Jin Runsheng 金潤生, specialized principally in the reproduction of archaic bronzes unearthed in the area of presentday Anyang 安陽, in Henan 河南 province, the site of the ancient Shang 商 capital of Yin 殷墟. Their workmanship surpassed that of reproductions made at Beijing 北京.

Fakes of Weixian 維縣

Bronzes produced in Weixian 濰縣, Shandong 山東 province. This region became a centre of bronze reproduction-making almost 400 years ago, and became especially famous during the Qing 清 dynasty (1644 – 1911 A.D.) when local artisans began specializing in the production of bronze mirrors, basing their copies on the pieces illustrated in the Qing antiquarians' manual, the *Xiqing Gujian* (西清古鑒). Produced from wax molds, these mirrors contain a number of faults in décor and their fake patina, produced through the use of chloric acid, cannot deceive a specialist's eye.

Fakes of Xian 西安

Bronzes produced in Xian 西安, Shaanxi 陝西 province. After being given a light, fine patina, the bronze reproductions of this area were buried for from ten to twenty years to age them. Another specialty of this area was the adding of false inscriptions onto authentic uninscribed archaic bronzes.

Fakes of Beijing 北京





Zhou 周 dynasties. From the beginning of the Republican period 中華 民國 (1911 – 1949 A.D.), the city's most eminent reproducer of archaic bronzes and the biggest supplier of antique dealers there, Zhang Taien 張泰恩, nicknamed Gu Tong Zhang or 'Old Bronze Zhang' 古銅張, mentored a dozen apprentices, of whom several eventually became renowned in their own right as masters of fake-making. One of Zhang's former apprentices, Wang Deshan 王德山, produced a series of superb zhi 鱓 vessels (See photo on page 180), copied from an original zhi 鱓 vessel unearthed at the ancient Shang site of Yinxu 殷墟 (Anyang 安 陽). Perfectly cast and embodying all the details of the original vessel's decoration, each zhi 鱓 in the group has a two-character inscription. (See drawing page 188). Almost completely perfect, these vessels have only two major defects: the decoration, though perfectly copied, is a bit too stiff. Secondly, the vessel's patina has a lacquer base. Both of these faults are typical of the fakes produced in Beijing 北京 at the time, which were usually copied exactly from genuine archaic bronzes and then patinated with a material made from a mixture of alcohol and lacquer.

Fakes of Shanghai 上海

Fakes sold in Shanghai 上海. A good number of extremely well-made fakes were sold in Shanghai during the Republican period 中華民國 (1911 – 1949 A.D.). Among these, perhaps the most famous were a gong 觥 and a you 卣 made by the master copier Liu Junging 劉俊卿 in a workshop that he opened in Soochow 蘇州 together with Ye Shuzhong 葉叔重, the nephew of the Shanghainese dealer Wu Qizhou 吳啟周 who together with the famous T.C. Loo of Paris and New York opened an antique shop in the U.S. The two fakes which were reproductions of pieces excavated at the Shang 商 dynasty tombs at Yinxu 殷墟 at Anyang 安陽 in Henan 河南 province were so masterfully made that in 1937 the elderly Wu Qizhou吳啟周 purchased them in Shanghai 上 海 for the then astronomical price of US\$50000, not realizing that they were reproductions produced by his own nephew's partner, Liu Junging 劉俊卿! Wu 吳 is said to have been so embarrassed when he discovered his blunder that he vowed never to deal in ancient bronze vessels again!

The latest fakes

In the past ten years, a great quantity of fakes has flooded the market. Coming mostly from Taiwan and mainland China, they are often of the highest quality, some reaching such a level of technical perfection that they completely fool many collectors and dealers. Genuine specialists are, fortunately, still able to detect them since they are often too heavy, their artificial patina can be detached from their surfaces rather easily, their inscriptions may not paleographically match the authentic writing of the period from which the object is supposed to date and/or may not be cast deeply enough, and especially because no corrosion can be detected actually coming from inside the object's metal, since the false patina, such as there is, has merely been applied artificially to the vessel's surface. No matter how skillful the copier, a true specialist will be able to see through the hoax, since for him or her the copy always lacks 'life', the vital energy that only a genuine antiquity possesses. The ability to sense this 'vital energy' is essential for anyone attempting to make an appraisal.

Techniques used in producing fakes

Despite all the skills which those producing reproductions possess, a person with a sharp eye and knowledge of the techniques used by reproduction-makers can distinguish between fakes and the genuine article.

Reproduction-makers employ a number of methods to produce pieces that are meant to dupe unsuspecting buyers. Among these are:

- Reconstructing an incomplete authentic vessel by recasting its missing pieces.
- Constructing a previously non-existent 'fantasy' vessel by joining pieces from several authentic, archaic vessels, sometimes even authentic pieces from different historical periods.
- Changing the form of an authentic vessel into the form of another, rarer and more valuable vessel, by perhaps soldering legs onto a cover to produce a separate vessel, adding handles to a handleless yu 盂 to make it into a gui 簋, etc.

- Adding decoration to an authentic undecorated, plain vessel; in most such cases, the newly added decoration is incised into the surface of the vessel. Such decoration often appears stiffer than that on vessels originally bearing decoration and mistakes are often made by the forgers in matching the style of the decoration with the period to which the originally undecorated archaic vessel belongs. Moreover, in such cases, the patina inside the incision marks of the newly applied decoration is either artificial or completely absent. Inscriptions, if added, are also usually badly formed and the style of the calligraphy may be inaccurate.
- Adding to the decoration of an already partially decorated piece. The added decoration is rather stiff and sometimes it is possible to see chiselling marks. As in the case of originally plain pieces that have been wholly redecorated, the patina inside the incisions of the added decoration is either artificial or completely absent.
- Soldering or otherwise attaching a new decoration onto an authentic piece.
- Casting a new piece from a mold made from an authentic piece. Usually the resulting vessel is slightly larger than the original and numerous casting faults are visible on its surface. The patina is artificial.
- Creating a reproduction based on photos found in publications picturing original pieces. Most often mistakes in shape, design, decor, etc. will be made in reproducing areas of the original vessel that are not visible in the photo that is being used.

As mentioned above, a careful inspection of the patination of a vessel can play an essential, determining role in the detection of a reproduction. Authentic patina is the product of a chemical reaction that takes place over a long period of time inside the metal of the vessel when the vessel comes into contact with diverse mineral salts present in the soil in which the vessel has been buried and these chemical reactions give the surface of the bronze a certain appearance which can be granular, smooth or covered with miniscule crystals and a colour, which can be maroon (cuprite or monoxide), green (basic carbonate

of copper), commonly called malachite, or blue (carbonate of copper), called azurite.

Fake Patinas

The artificial patinas applied to bronze reproductions are produced using the following materials and techniques:

Acids

The earliest method used, and the most widely-used and easy, is soaking the bronze object in chlorohydric acid. A second related technique consists of soaking the vessel in a mixture of acid, lime, salt and colours. The object is subsequently buried to a depth of about a meter for a period of from three to four years. That allows a chemical reaction to take place, which creates a patina which is, in many ways, very similar to that on an authentic archaic bronze vessel. A third method is the use of a mixture of sulfuric acid and ammonia. After being kept in a very humid place for from three to five days, the emerged vessel will be covered by a green patina, which is difficult to remove. The famous fake-maker Wang Deshan 王德山 made extensive use of this method at the beginning of the last century.

■ Lacquer

Certain other types of artificial patina are produced by applying to the bronze a mixture of lacquer and colours, to which alcohol is sometimes added.

Paint

The surface of the vessel is covered with paint imitating the colours of an ancient patina.

• Artificial application of authentic patina

Particles of genuine ancient patina are lifted from damaged or broken authentic archaic bronzes and then attached to fake bronzes. Sometimes these particles of authentic patina are pounded into powder and mixed with small fragments of bronze and powdered turquoise. The resulting paste is then applied to a modern vessel, which is often then covered with a coating of wax.



Methods of detecting fake patina

Whatever the method employed by the artisans, all of these artificial patinas can be detected by an experienced person. Most of these artificial patinas are unable to resist a quick test carried out with a piece of cotton soaked in alcohol, acetone, or any other nitrogenous product. It is also possible for an experienced person with a sharp eye and armed with a magnifying glass to detect the hand of the forger in such patina.

Fakely patinated genuine vessels

It is important to note, however, that the presence of artificial patina on a vessel does not absolutely prove that the vessel in question is an outright fake. Many authentic archaic vessels have been heavily restored and have been repatinated, which was an especially common practice at the beginning of the twentieth century.

Inscriptions

As is the case with the patina on a vessel, an inscription, when there is one, can provide us with some useful clues as to the vessel's authenticity or possible inauthenticity. At the beginning of the twentieth century, makers of bronze reproductions took a keen interest in inscriptions because, at that time, the selling prices of inscribed archaic bronzes and inscribed oracle bones increased according to the number of characters contained in the inscriptions. Thus in order to increase the selling price of an object, inscriptions were added, even to originally uninscribed archaic bronzes, either by copying characters from books or copying complete inscriptions. As mentioned above, the adding of such inscriptions was the speciality of artisans in Xian $\Xi \oplus$ between 1920 and 1938.

In many cases these false, added inscriptions are recognizable by:

• Errors in the style of the characters or the type of text used, i.e. using a calligraphic or literary style that differed from that used at the time that the archaic bronze vessel was produced.

- Incoherence of the added text as a result of its being riddled with grammatical or orthographical errors. This was often caused by faults in the text copied or by casting faults on the inscribed bronzes from which the inscriptions were copied.
- Misplaced or missing characters
- Poor placing or overlength of the inscription out of greed for the increasing profit that longer inscriptions brought.



Fake *jue* made in early 20th century.

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Zuozhuan 左傳 or Commentary of Zuo.

Notes	

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W ore scholar and researcher than dealer, Christian Deydier studied Chinese archaeology and specialized in jiaguwen, the earliest known form of Chinese writing that was etched into oracle bones and tortoise shells in the Shang dynasty from the 13th to 12th centuries B.C. In scholarly circles, and most particularly among Chinese archaeologists, Christian Deydier especially owes his renown to the work which he has carried out on Chinese bronzes and goldware and his many scholarly publications. including *Les Bronzes Archaïques Chinois / Archaic Chinese Bronzes – I – Xia Shang* (Paris 1995), *Ancient Chinese Gold (Paris 2010), Chinese Bronzes from the Meiyintang Collection* (Hong Kong 2013). Since 1985, Christian Deydier has annually organized exhibitions on themes such as archaic bronzes of the Shang and Zhou dynasties, Chinese gold and silverware, etc.

The present book on ancient Chinese bronzes is divided into four main sections:

- The first on the early origins of ritual Chinese bronze vessels and their religious, cultural and social importance, as well as their morphological evolution over the ages.
- The second on the various motifs appearing on ancient Chinese bronzes and their meanings in the context of Chinese cultural and religious beliefs and practices.
- The third on the various scholarly studies carried out on ancient Chinese bronzes from antiquity to the present day.
- The fourth on fakes: their producers, methods of production, etc. from antiquity and especially from the Song dynasty (circa 12th century A.D.) up to the 1940s.