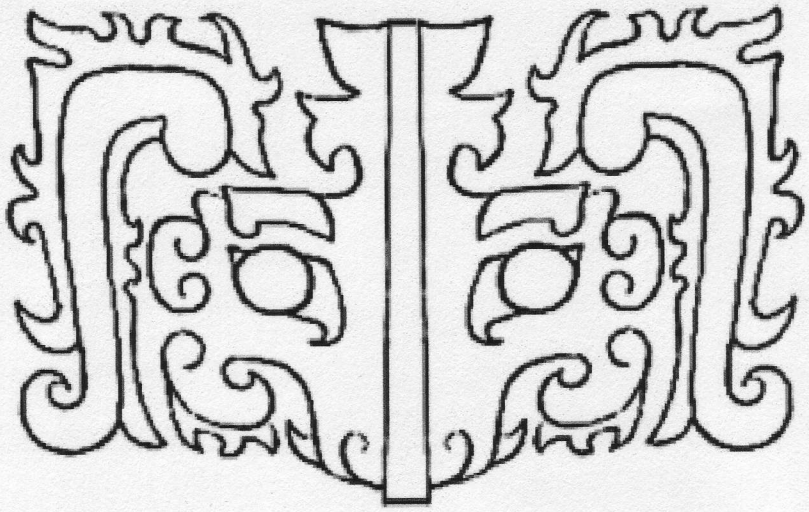
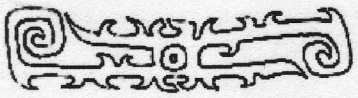


Chinese Ritual Bronzes:

The perplexity of vessel ornamentation



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ANTH 445-010:
Technology of Cultural
Materials – Metals
Prof. C. Reedy
10 December 2002

> *One of the great artistic achievements of the makers of ancient Chinese bronzes was the feat of bringing together the shape of a vessel, which the artisan was not free to choose, and an abstract animal form, which was governed by its symbolic, perhaps even magic significance...without subjecting one element to the uncompromising expressiveness of the other.*[1]

Thus begins a 1965 essay by Eleanor von Erdberg. In this statement, she has summated the entire world of Chinese bronze ritual vessels, calling attention to both the strict parameters of vessel form and the mystery of vessel ornamentation. Through much study it has been found that, in ancient China, vessel form was restricted by functionality. The study of their ornamentation, however, has been, since the beginnings of research of Chinese bronze, a perplexing question burning in the minds of those concerned with the significance of these bronzes in China's vast history. Therefore the question of the intrinsic value and implications of the ornamentation of Chinese ritual bronze vessels in ancient Chinese society shall be the focus of this paper.

Origins and development of bronze in China[2]

The origins and meanings of the ornamentation on Chinese bronze ritual vessels have been speculated about at least since the Song Dynasty; however, the origins of bronze metallurgy in China have only recently begun to be understood. It has been theorized for many years that bronze-working technology in China had been introduced from an outside culture such as Siberia or West or Southern Asia. Recent evidence and study, though, has created a much stronger argument for the independent development of this technology in the fairly isolated Huanghe Basin. The earliest example of metal use in China has come in the form of two copper pendants. These were discovered in 1955, and have been attributed to the Longshan Culture of present-day Hunan Province, dating to about 4000 years ago. Both are unadorned, have a hole at one end and were most likely worn as ornaments.

Also from about the same time, there existed a culture, termed the Qijia Culture, in present-day Gansu Province. There have been quite a few small metal objects excavated from the burial sites of this culture. The objects that have been found are mostly tools and ornaments and analysis of the objects has revealed a higher tin content in many of them than occurs naturally. This observation is important in the argument for the isolated origins and development

theory in that bronze used in ancient Chinese pieces, unlike their contemporary bronze metallurgy societies, has a very high tin content. Analysis has revealed both forging and single mold casting as the production methods for these pieces. Also of note are the ornamentation patterns on a limited number of the pieces, which reappear in later Chinese bronze pieces. In light of the above-mentioned evidence, the Qijia Culture has been termed by some scholars as the possible transitional stage between copper and bronze in China.

The next notable culture in China is the one known as the Erlitou Culture. The Erlitou were spread over the banks along the midsection of the Huanghe, western Hunan and southern Shanxi, areas that, according to ancient texts, were inhabited by the people of the Xia Dynasty. The sites that have been excavated have typically been split into both early and late site components, or occupation periods. The later site components have been dated to the Xia and very early Shang Dynasties. In this context, a substantial variety of bronze objects has been found – including tools, weapons, jewelry and vessels. The pieces show a wide spread use of bronze and high production rates of expendable tools, such as arrowheads, as well as the introduction of inlay work. These developments were made possible by improvement in casting techniques, as Chinese bronze metallurgy became more sophisticated.

Some of the archaeological evidence is supported by Chinese texts, such as *Yue Jue Shu*, *Shi Ben* and *Shi Ji*, that contain accounts of the legends that place bronze ritual vessels in a prominent role in history. The first bronzes were said to be nine vessels in the *ting*[*] form. They were produced in about the 21st century BCE during the early part of the Xia Dynasty. The ancient texts say that they were commissioned by either King Yu or his son Qi, the first two kings of the Xia Dynasty. This set of nine *ting* became the "symbol of central authority of ancient China[,]...whoever possessed them would have supreme power over the nation."[3] As such they were passed from ruling house to ruling house through both the Shang and Chou Dynasties.[4]

Chinese bronze ritual vessel form classification

Among the containers excavated at the dig sites of the Erlitou Culture, the most common form was the *chüeh*. The term *chüeh*, like the above-mentioned *ting,* is one of many terms used

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[*] Whenever possible I try to use the most common pronunciation of the Chinese characters for the vessels forms.

to describe the form of Chinese bronze vessels. These terms come from Chinese characters found in inscriptions on some of the vessels themselves. These terms, while describing form, also provide one with information about other aspects of pieces being examined, mainly about the function of the vessel and some clues as to the most likely type of ornamentation that will be found on the vessel.

After investigation of the, sometimes lengthy, inscriptions on a fair number of Chinese ritual bronzes, the vessels are most commonly thought to have played a part in the practices of the ancestor worship that was prevalent during China's prehistory and early dynastic time. There are "numerous brief inscriptions [that] designate [a] vessel for use in sacrifice to an ancestor and are sufficient proof that the veneration of ancestors was not confined to royalty."[5] Believed to hold sway over the lives and events in the living world, it was the goal of ancestor worship to appease and consult with those spirits of one's family who have passed on. If the ancestors were kept happy, they brought good fortune to the living members of their family and would provide guidance to those family members seeking their help.

As such, each different function was assigned a vessel form, most associated with the offering of food and drink to the ancestors. According to strong evidence uncovered at archaeological digs like those of the Erlitou Culture, the bronze forms seem to have evolved, and some even copied directly, from earlier clay vessels. The functionality of the bronze vessel forms can be split into three broad categories based on what materials they were made to contain – food, wine or water. Each of these broader categories can be split in two depending on what role they played in the use of the materials they were meant to contain.

The first of the broader categories, those vessels to be used with food, can be subdivided as to a vessel's use in either preparation or holding of food. The names of the forms used in preparation are *ting*, *li* and *hien*.* *Ting* is the most common form of vessel found among this type and was most likely used for cooking meat. Most often it consists of a rounded bowl form supported by three straight legs with two handles, or ears, and may or may not have a lid (Fig.

* Other various forms for each of the categories that will be discussed have been identified according to different authors. I, however, have chosen to only include the most common, widely accepted forms since the ultimate goal of this paper is to present theories about the meaning behind their ornamentation.

1a). There also exists a fairly common modification of the *ting* consisting of a rectangular form supported by four legs (Fig. 1b). These are referred to by either a hybrid name, such as *fang-ting*, or by descriptive phrase, such as rectangular *ting*. *Li* are similar to the round *ting* except that they bulge slightly above hollow legs and most often have no ears, but may also come in a rectangular modification (Fig. 1c). This form was most likely used for cooking dishes with liquids as the hollow legs allow the liquid to have more exposure to the heat of the fire. *Hien* are steamers whose form consists of a *li* with a bowl, the bottom of which is perforated, that fits above (Fig. 1d). The most common form of the vessels used to hold food is the *kuei*. This form consists of a bowl raised on a stand, either circular or rectangular, and may have up to four ears with the most common number being two (Fig. 1e).

Those vessels used for wine can be partitioned into those used to contain wine and those used as goblets. Of those used as containers, the most common forms are *fang-yi*, *tsun*, *yu*, *lei* and *hu*. *Fang-yi* are architectonic forms based on ancient Chinese buildings – rectangular in nature with knobbed roof-like lids (Fig. 1f). The term *tsun* is used by many ancient cataloguers to denote pieces that do not easily fit in other categories but has subjectively been used in modern terminology to refer to a wide vase-like form with a large mouth (Fig. 1g). *Yu*, *lei* and *hu* are all urn-shaped. *Yu* are distinguishable by the presence of a lid and a "swinging handle" (Fig. 1h).[6] *Lei* are generally more slender with a higher belly and a smaller mouth, do not have lids and have two ears (Fig 1i). *Hu* are very similar in form to the *yu* but have no lids and in place of the handle has two tubular ears through which rope could be threaded for carrying (Fig. 1j).

The two most common forms by far of the wine goblets are *chüeh* and *ku*. *Chüeh* is described by William Watson as a:

> ...[flat-based] cup on three splayed and pointed legs of triangular section. The handle on the side...stands over one of these legs. The projecting parts of the lip are at right angles to the handle. To the left of the handle is a spout with a rounded channel and opposite to it the lip extends outwards and rises to a point. From both sides of the lip at the junction of the spout rise two short columns which...have stems...surmounted by caps.[7]

The Chinese character for this form also has a variable meaning as a small bird or sparrow. Therefore these vessels are often seen as zoomorphic forms, based on the image of a bird (Fig.

1k). *Ku* is a tall, slender vase form with an hourglass shape that is ordinarily wider at the mouth than at the base and normally with a small bulge in the center of its form (Fig. 1l).

In the last broad category, those meant for use with water, there are only two noteworthy forms: *kuang*, used for pouring, and *p'an*, used for holding. *Kuang* are distinguished by their resemblance to gravy- or sauce-boats. Many are accompanied by lids, which give the container a zoomorphic form roughly based on the tiger (Fig. 1m). *P'an* are shallow bowls with circular ring stands and generally two ears (Fig. 1n). These two vessels are recorded to have been used as cleansing tools in ritual. *Kuang* were used to pour the water into the *p'an*, which was then used to clean the hands.

There have been many pieces found that are not easily placed into these defined terms. These are variably assigned hybrid names or form descriptive phrases depending on the researcher or cataloguer. Besides their historic use in ritual, it has been found through inscriptions that vessels also played an important social function by the end of the Shang Dynasty. During the Chou Dynasty they began to play a prominent role in the functioning of the feudal system as gifts from lord to subject. In later times they were taken away from their ancestral worship use and were used in Confucian ceremonies as well as hospitality and contract rituals.[8]

Chinese Bronze Ornamentation Terminology

As stated above, knowing the name of the form of a vessel can give one clues as to what type of ornamentation can be expected. The research of this ornamentation, however, is the most controversial aspect in the study of Chinese ritual bronzes. The reason for this is twofold, a lack of a unified terminology and a struggle over uncovering the meaning behind the ornamentation. Historically, each author and cataloguer has chosen his own set of terms and their meanings. While some terms have overlapped among the many researchers, the meanings behind them have not. Even among Chinese scholars, where the same ideographs have been used throughout much of the history of the study of the bronzes, each has chosen to apply them in different ways.

The impediment caused by this lack of uniform terminology has been recognized by quite a few Western scholars. Because of this, several have offered their own systems of identification. Of these, von Erdberg has proposed the most efficient, comprehensive system thus far. Von Erdberg, when creating her nomenclature, took into account many factors including traditional Chinese terms, Western art study conventions, need for a terminology that will not evoke irrelevant images or connections and the need for an open-ended system that can be modified to suit new research. Her terminology breaks the ornamentation into three major categories: Demons, Symbolical animals and Abstract symbols.

The term demon can be applied to "all of the motifs of the animal style which are not a portrayal of an actual animal, but are composites of different animal features and stylized animals." [9] Under this heading, she suggests five main terms including *T'ao-t'ieh*, Reduced mask, Animal head, Dragon and Snake. [10] The most important of these terms is the *t'ao-t'ieh*, described by von Erdberg as denoting "mask-like animal faces in frontal view, with or without bodies, which lie flat on the surface of the vessel," as it is a figure that appears prevalently among the vessel ornaments. [11] From here, modifiers to the term *t'ao-t'ieh* can denote variable modifications on this basic definition. These modifiers include such terms as dragonized, mask, ram and buffalo. The use of these is determined by examination of aspects of the *t'ao-t'ieh*, especially presence or lack of body and horn form. *T'ao-t'ieh* is an example of a term chosen based on its historic use in the study of Chinese bronze ornamentation. While the original meaning of the Chinese character is glutton, it has been so much associated with the ornamentation that the ideograph has all but lost its original meaning. Thus von Erdberg is able to use a conventional term, giving it defined barriers for use and being confident that it will not draw unwanted associations in the mind of a reader.

The next heading, Symbolical animals, contains those ornaments that depict animals following "shapes created by nature without adding features taken from another species or omitting important parts of the animal's body." [12] When compared to the vast variety of fauna in ancient China, the number of animals depicted on the ritual vessels is severely limited. This limited group is comprised of Elephants, Tigers, Buffalo, Deer/Stags, Birds, Tortoise, Frogs,

Snakes, Fish, Cicadas, Scorpions, and Human beings. [13] Most of these are represented in a realistic manner although there are a few stylized exceptions. Of all the terms, birds and cicadas are the ones most often found in the bulk of bronze ornamentation.

While the birds are realistically recognizable as such, distinction between differing species is for the most part impossible. It seems as if they were generally based on a model of a bird of prey, owl or pheasant but show no real distinction that would allow for definitive classification. Von Erdberg does not suggest the use of a modifier system, as is used with *t'ao-t'ieh*, but instead propounds accompanying descriptions of certain features – namely "the shape of the beak, of the horn or crest, of the wing and of the tail-feathers" – when describing a bird ornament. [14] The cicadas, the only insect depicted on Chinese bronzes, generally adorn bands and blades on bronze vessels and provide a good example of the aforementioned stylization of some of the animal motifs. This stylized form is termed a Reduced cicada by von Erdberg and most often appears in triangular blade areas. The reduced cicada can be recognized by the total reduction of the body to a triangle whose sides become inward spiraling lines.

The last of the broad headings that von Erdberg introduces is Abstract symbols. Under this heading belong the terms: *Lei-wen*, Whorl circle, Lozenge, Boss, Circle band, Bowstring, Reeding, Flange and Monoculi. [15] While all of the elements that are described by the terms under this heading are important and frequent in bronze ornamentation, two warrant further discussion – *lei-wen* and lozenge. *Lei-wen*, or thunder-pattern, is a term that has been used for many years. The term refers to the ubiquitous angular and rounded spiraling pattern found both as background and figure covering. She suggests three different sub-groups for further distinction of *lei-wen*: hooked band, zigzag band and lozenge-band. These are based on both their relative appearance and use in the overall design of the ornamentation. The term lozenge refers to the well-defined geometric diamond-like pattern that can be found either in bands or as a repeat design covering most of the decorated surface of a vessel. Each pattern unit commonly consists of well-defined diamond-shaped area in which there is an amount of *lei-wen* patterning and a central circlet that is most often raised. Unlike the *lei-wen*, lozenges are not an independent pattern.

The debate over the meaning of ornamentation*

As asserted earlier, the second reason that the study of Chinese bronze ornamentation is such a controversial topic is the strife over the meaning behind it. It has been argued by some researchers, such as Max Loehr and Robert Bagley, that the imagery of the Shang Dynasty bronzes was strictly ornamental in nature. Their argument was based in the stylistic and technological data of the bronzes themselves rather than a holistic approach that includes contextual material. The main focus of their argument is that the bronze ornamentation lacks a consistent chronologically represented image.

Most researchers, however, believe that the ornamentation of the bronzes is "both aesthetically and representationally significant." [16] There has been much information amassed that disproves the main focus, the core, of Loehr and Bagley's argument. The most significant of the images used to disprove their theory is the *t'ao-t'ieh*. "During the Shang [Dynasty, the *t'ao-t'ieh*]... appears to be a powerful symbol signifying access to ancestor spirits," and has been shown to pre-date its use on bronze vessels. [17]

Standardized or formalized *t'ao-t'ieh* have been found on artifacts, mostly ritually significant jade pieces, dating from c. 3500 to 1500 BCE. The ornamentation on these jades "signify a form of religious representation indigenous to early China." [18] This form then appears on the earliest known bronze vessels. The early examples of this form on bronzes manifests in the small bands of ornamentation. Their rough representation during this period is due to the fairly experimental nature of bronze vessel casting at the beginning of the tradition, a situation to later be rectified as casting technology becomes more elaborate. As the technology developed, *t'ao-t'ieh* started to cover larger ornamentation areas on the bronze vessels. This example not only disproves Loehr and Bagely's argument but also demonstrates a transfer from the prehistoric to the historic of religious beliefs.

This transfer of images, however, is not the only support given by proponents of theories stating a religious or magical meaning behind the bronze ornamentation. The largest of these other supports is the presence of an acutely limited set of animals represented in the

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* It should be noted that most of the recovered bronzes have been attributed to the Shang Dynasty. As such, this search

ornamentation. After all, there must be some reason for limiting this number and this limitation is unlikely to be due to aesthetic factors. In an essay delivered in 1966, von Erdberg suggests this limitation is owing to the importance of hunting culture in providing sacrificial animals. This comes from the fact that, while sacrificial animals could be domestic, the ones found on the ritual vessels are only wild, thus needing to be hunted or captured. More recently, however, Elizabeth Childs-Johnson has introduced the theory of ritual bronze ornamentation based on the concept of the royal sacrificial hunt.

Childs-Johnson draws attention to the prevalence of four main animals: the tiger, buffalo, stag/deer and the Argali ram. She recognizes both a realistic (Symbolical animal) form as well as an abstracted (*T'ao-t'ieh*) form of all four of the animals. Each of the four animals, regardless of which form it appears in, is recognized and distinguished by distinctive ear and/or horn form. The tiger is characterized by C- or T-shaped ears, realistically representative of a tiger's ear. "Slightly inward curving, trihedral" horns with cross-wrinkles designate the representations of the buffalo. [19] The stag is delineated by pedicel horns or tined horns. There were four types of deer in ancient China – Muntjak, Sika, Mi and Water – all of which were known to be hunted and used as sacrificial animals. The Sika, moreover, is believed to have been the most hunted of the four types and is generally distinguished in its *t'ao-t'ieh* form by S-shaped or hooked/spiked horizontal horns. The last animal, the Argali ram, is easily identified by its outward curling ram-like horns.

Representations of these animals are not only restricted to the bronze vessels. They are also represented both pictorially and ideographically on recovered stone, wood, bone and ivory carvings. It is the survival of images and inscriptions on oracle bones and trophy skulls and bones of sacrificed animals that have provided Childs-Johnson with the evidence for her theory. Because of the pictorial quality of the early Chinese ideographs, reference to specific animals is readily identified. From these inscriptions, it is found that the aforementioned animals were hunted by a royal hunting party, headed by the king, in celebration of an event or for use in a cycle of royal rites having to do with ancestor worship. It is also found from these inscriptions that

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for the meaning of bronze ornamentation will focus on these pieces and time period.

these four are the main animals used in sacrifice to the royal ancestors. This alone still does not offer explanation as to their appearance as part of vessel ornamentation though.

To this, Childs-Johnson offers a theory concerning the basis for these images in their use by the king in a metamorphosis ritual strongly based in spirit invocation and the transformative power of masking. This metamorphosis, she explains, is achieved "theoretically through human identification with the hunted animal...whose power the human assumes to magically communicate with spirits."[20] According to oracle bone inscriptions, this power of spirit communication was exclusive to the king and would thus warrant the use of the images of the animals of the royal sacrificial hunt on the ritual vessels.

Besides their use in the context of metamorphosis ritual, the images of these four animals were also considered symbols of royal power and authority whose use is seen well into later periods. The use of the ram image as a power figure is plainly associated from its natural capacity: "The fact that ram horns in nature function defensively...may have been the impetus for using the ram head with massive horns as a feared, and by extension an auspicious, protective, apotropaic symbol."[21] Overall, when combined with the Chinese legends concerning the royal origins of the bronze vessel, Childs-Johnson's theory about the meaning behind Chinese bronze ornamentation seems to be the most complete and supported one thus far.

Questions, such as those about the origins of religious beliefs and ancestor cults in China, those about the date and origin of the aforementioned images that made their way into the ornamentation of the ritual bronze vessels and the story behind the other ornamental elements that exist, still persist. When faced with these questions, it should be kept in mind that:

> [w]hen word and writing were still unpolished tools, pictures were the most effective means of communication. Yet it was not an easy task to demonstrate the idea of an underlying cosmic power and of the change wrought by it. Abstract concepts needed a pictorial language of abstractions. This could not be made to order, at short notice, but it could be based on older images, vehicles of magic, which were transformed into symbols. The immediate impact of the picture worked faster than the absorption of words...[It is to this time], when words were inadequate and pictures essential,...[that] the ritual bronzes [belong].[22]

Although these many questions are still left unanswered, several large strides in this area of research have been made over recent years. Thus with each new theory, we come closer to

solving the puzzle for which we lack an instruction manual, documents contemporary to the bronzes themselves that describe the ritual practices of their owners. Ultimately, it is only the dedicated application of more time and effort that will produce the conclusive answers for which we seek.

Figure 1

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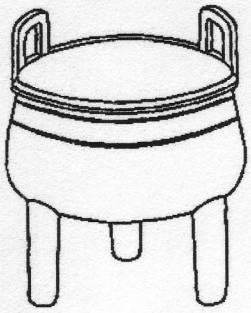

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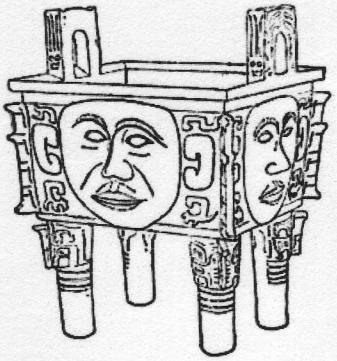

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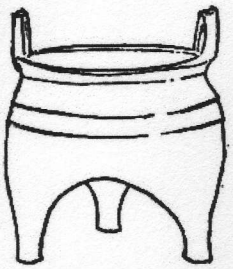

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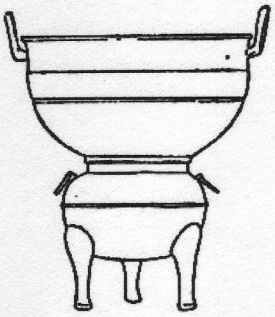

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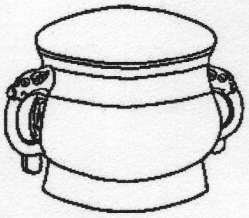

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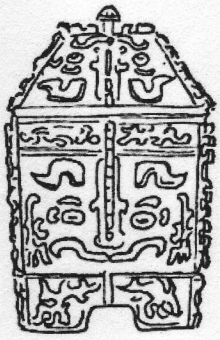

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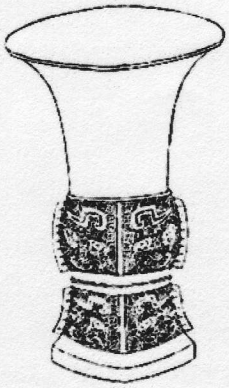

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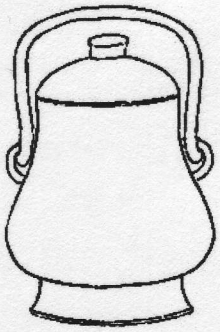

Figure 1 (cont'd)

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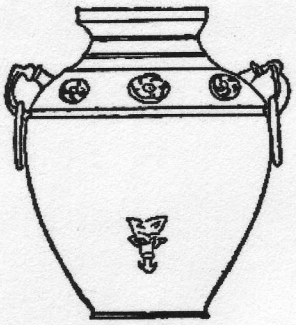

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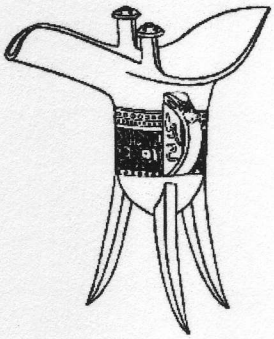

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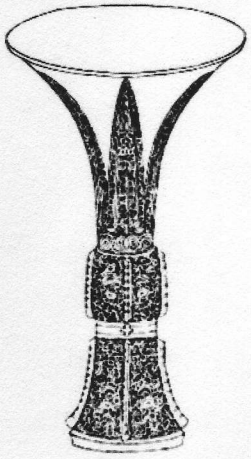

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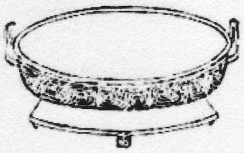

a) rounded *ting*; b) rectangular *ting*; c) *li*; d) *hien*; e) *kuei*; f) *fang-yi*; g) *tsun*; h) *yu*; i) *lei*; j) *hu*; k) *chüeh*; l) *ku*; m) *kuang*; n) *p'an*

Notes

1. Eleanor von Erdberg, *Ancient Chinese Bronzes: Terminology and Iconography* (Alte Schule, Sienberg-Verlag, 1993), 155.

2. L. Xueqin, *The Wonder of Chinese Bronzes* (Beijing: Foreign Languages Press, 1980), 1-7. *Much of the following account has been constructed from information taken from this text, as it offers the most complete and comprehensive view of the origins of bronze in China. Most of the earlier books lack information in this area as it has only recently come under serious study.*

3. ibid, 2.

4. ibid, 2-3. *While most texts contain information about this matter, Xueqin provides a fuller summation.*

5. William Watson, *Ancient Chinese Bronzes* (London: Faber and Faber Limited, 1962), 23.

6. ibid, 33.

7. ibid, 31.

8. ibid, 23-38. *While many authors allude to these later functions, Watson provides a more concrete context and supporting evidence.*

9. von Erdberg, 20.

10. ibid, 21-81. *Full descriptions of each of these terms can be found in these pages.*

11. ibid, 23.

12. ibid, 82. *The author of this text is of the opinion that the ornamentation on Chinese ritual bronze vessels has some sort of religious/magical meaning behind it. Thus, the term Symbolical animals is used instead of simply Animals. The theories behind the significance of the ornamentation will be discussed later in this paper.*

13. ibid, 82-108. *Full descriptions of each of these terms can be found in these pages.*

14. ibid, 92.

15. ibid, 109-125. *Full descriptions of each of these terms can be found in these pages.*

16. Elizabeth Childs-Johnson, "The Metamorphic Image: A Predominant Theme in the Ritual Art of Shang China" *Bulletin, The Museum of Far Eastern Antiquities* 70 (1998), 18.

17. ibid, 15. *Although Childs-Johnson disagrees with the use of the term* t'ao-t'ieh *because of its creation and connotation in the Warring States Period and Han Dynasty, I have chosen to use it based on my previous presentation of von Erdberg's comprehensive terminology. In place of* t'ao-t'ieh, *Childs-Johnson uses the phrase: "animal mask without jaw."*

18. ibid, 19.

19. ibid, 23.

20. ibid, 57.

21. ibid, 30.

22. von Erdberg, 161.

Image Sources

Cover page

Bernhard Karlgren and Jan Wirgin, *Chinese Bronzes: The Natanael Wessén Collection* (Sweden: Strängnäs Tryckeri ab, 1969), 25. *The* T'ao-T'ieh *has undergone some slight alteration.*

Figure 1

a) Bernhard Karlgren and Jan Wirgin, *Chinese Bronzes: The Natanael Wessén Collection* (Sweden: Strängnäs Tryckeri ab, 1969), 20.

b) L. Xueqin, *The Wonder of Chinese Bronzes* (Beijing: Foreign Languages Press, 1980), 9.

c) ibid, 9.

d) ibid, 9.

e) Karlgren, 20.

f) Xueqin, 16.

g) Karlgren, 21.

h) ibid, 20.

i) Xueqin, 17.

j) ibid, 17.

k) Karlgren, 21.

l) ibid, 21.

m) Xueqin, 14.

n) Karlgren, 20.

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