



*The Columbia University Exhibition of  
Chinese Archaic Jades, Ritual Bronzes, Weapons  
and Related Eurasian Bronze Art*

FROM THE SACKLER COLLECTIONS

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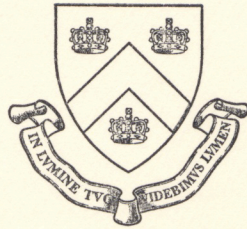
CHRONOLOGY

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*The Columbia University Exhibition of  
Chinese Archaic Jades, Ritual Bronzes, Weapons  
and Related Eurasian Bronze Art  
from  
The Sackler Collections*

A PART OF  
THE PROGRAM OF ADVANCED STUDIES AT THE GRADUATE FACULTIES  
COLUMBIA UNIVERSITY  
NEW YORK



*This exhibition marks the inauguration at*  
COLUMBIA UNIVERSITY  
*of expanded activities in the fields*  
*of Chinese and Eurasian*  
*Art, Archaeology, History and Linguistics*

THE ROTUNDA  
THE LOW MEMORIAL LIBRARY  
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## *Foreword*

The fundamental approach to the scientific reconstruction of man's early history is that of controlled excavation. Nevertheless, a great deal of material has come down from the past with little or no indication of place of origin or circumstance of discovery. With respect to these objects, an accumulation of a sufficiently large corpus of artifacts and the development of suitable techniques may cast additional light on the technological practices, the locales at which the objects were made and the approximate dating of these early works of art and artisanship.

The objects in this exhibition represent typical selections from each category in the Columbia Study Collections. Their numbers are such as to permit the application of physical techniques which in turn should help to lay the basis of new scientific studies of the achievements of ancient man.

Archaeological field work in these areas is, in the main, restricted for the time being to Chinese and Soviet investigators. We have to do our "digging" by the employment of other techniques such as metallurgical analysis, x-ray spectrography and crystallography. The correlation of the results of these investigations with those obtained from stylistic analysis and literary sources is a major objective of both the Collections and the establishment of "The Funds for Eurasian Studies." They should serve to integrate studies in these and related fields at Columbia University: to fuse a modern interdisciplinary spirit with the efforts of specialists in many different departments. We should all learn from these associations and joint efforts.

A.M.S.

In view of the basic orientation of these studies, attributions, conjectures as to use, and datings of all the objects are provisional. Though limited and inadequate, they are presented as current points of reference with the conviction that the years to come will see them more suitably founded, more precise and more helpful in our attempts to understand and relate the art, archaeology, linguistics and history of the times, the regions, and the peoples which these collections represent.

## *Archaic Chinese Jades*



Among the earliest extant archaic Chinese jades are those of the Shang period. The artistic and technical level of these Shang jades presupposes a long period of development, probably extending to the premetal age. In China, jade has long been held in almost religious awe, representing “the quintessence of heaven and earth.” According to Chinese tradition, an age of jade preceded the metal ages. Though some of the larger pieces in the form of weapons and tools apparently imitate metal prototypes, the working of jade reflects an earlier tradition, showing connections with neolithic jade and stone tools found in Siberia and East Turkistan. The portion of East Turkistan in the vicinity of Khotan and Yaqand has long been a source of nephrite.<sup>1</sup> More recently nephrite was also obtained from the Lake Baikal region. Large quantities of worked jade showing a highly developed technique and extending back into the second millennium B.C. have been uncovered by Soviet archaeologists in the last few years.

THE JADES<sup>1</sup> IN THE EXHIBITION are virtually all "archaic," that is, they belong to the Pre-Christian Era. They have been selected from the collection available for Columbia study material as a small but representative group to demonstrate differences in:

- I. PERIOD—Shang, Chou, Han and post-Han
- II. PROVENANCE (attributed)—An-yang, Hsing-Hsiang, Loyang
- III. JADE MATERIAL<sup>2</sup>—  
color (green, black, brown, "ivory," white),  
translucency, "patina," cinnabar traces
- IV OBJECTS
  - Ceremonial—  
*ritual symbols of heaven and of earth,*  
*emblems of rank and authority*
  - Ornamental—  
*fittings for swords and sheaths, plaques, buckles,*  
*rings, knot openers, musical picks*  
*pendants, amulets and charms, including:*  
*deer, birds, fish, water buffalo, pigs,*  
*goose, rabbit, beaver, cicadas, silk worms*

The smaller pieces in the exhibit are arranged in approximately chronological order, from Shang and Early (Western) Chou (on the upper left), ending with Late (Eastern) Chou, Han and post-Han (on the lower right). Attention is directed to the quality of workmanship and finish exhibited by the Chin-Ts'un pieces, characterized by the highly polished surface. This type is named for an excavation site, the style is dated in 5th to 3rd centuries B.C.

A number of the smaller pieces are copies or somewhat modified copies of the larger pieces, the examples of the Ko, or dagger-axe in particular. These seem to be burial pieces in imitation of ceremonial weapons. Among the others are decorative pieces which could have been attached to clothing, accessories, and weapons and sheaths.

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1. The designation "jade" is properly given to two distinct materials which differ in chemical composition and physical structure, nephrite and jadeite. The former, the "true jade" of ancient China, is a lime-magnesia amphibole, the latter, commonly employed for carving since the 18th century, is a soda-alumina pyroxene. Both nephrite and jadeite are silicates.

The words nephrite and jadeite have a common origin, jade from French *le jade*, from Spanish *ijade*, from Latin *ilia*, "the loins", "flank", "colon" As the "*pedra de ijade*" it was known to the conquistadores as a cure for renal disorders. The term nephrite is taken from Latin *lapis nephriticus*, from Greek, *nephros* (kidney).

The earliest systematic use of jade seems to have been by the neolithic lake-dwellers of Europe who employed celts of nephrite, jadeite and chloromelanite. The last is a jadeite rich in iron and varies from dark green to almost black in color.

2. Nephrite and jadeite are extremely hard and intractable materials. No available metal tools could cut them. Thus all work was by abrasion. Quartz sand and crushed garnet with Mohs hardness indices of 7 and 7.5 respectively were used in the early period. Since nephrite has a hardness of approximately 6.5 and jadeite 6.75, considerable quantities of abrasive must have been used to fashion one of the larger pieces. Rotating instruments were used in cutting and drilling.



## *Chinese Ritual Vessels*

The ritual vessels of the Shang dynasty are the most distinctive relics of the first historic period. They were regarded as rare treasures when they were cast in bronze over 3,000 years ago, and they have been held in awe and reverence throughout the centuries. The first great illustrated catalogue of antiques was compiled c. 1092 A.D. in which they were named and described. According to tradition that pre-dates history, they were used by the ruler whose duty it was to maintain harmony between heaven and earth. In monthly observances he made offerings of grain, meat and libations that were appropriate to the changing seasons, thereby invoking the aid of heaven to insure good crops, a bountiful harvest, and freedom from floods and other disasters. By the faultless performance of ritual he sought to keep peace throughout his realm.

Members of the nobility made offerings on a lesser scale to regional deities. As a sign of favor, bronze vessels, weapons and chariots were bestowed upon them by the ruler. The gifts might then be dedicated to the spirits of departed ancestors, and placed in family tombs. Long burial in different areas of China, where soil and moisture vary, has resulted in distinctive patina on the bronze alloys.

Many of the shapes were derived from prehistoric pottery. Among these are the Li (cooking vessel with 3 hollow legs); the Ting (round or square cauldron with 3 or 4 solid legs); Tsun (vase or jar for liquid, which might be round, square, or based on zoomorphic forms); Ku (tall beaker); Chih (a smaller beaker); Ho (a pot with a spout); Hu (a jar for liquids with a contracted shoulder). Utilitarian shapes developed in the bronze age consisted of bowls, such as the Kuei; storage jars, such as the Lei or Fang-i; covered wine buckets with handles of bronze, cord, or thong (Yu); the pouring vessel Kuang; cups on blade-shaped legs (the Chüeh and Chia). Music set the tempo of solemn invocation and dedication as jade stones, drums, bells, and gongs were struck by the musicians.

The decoration in Shang times consisted primarily of animal figures. Some were stylized composites, such as the t'ao-t'ieh masks, dragons, birds, serpents and human forms. Horns of rams, water buffalo and deer were joined to the magical abstractions. Other motifs were realistically drawn, including elephants, tigers, hares, cicadas, birds, fish and serpents. Some wine vessels modelled in the natural shapes of animals have no surface decoration. The cosmic elements of wind, cloud and thunder are suggested by whorls, spirals and frets. We cannot as yet interpret the symbolic meanings of the motifs, but the designers dealt with patterns that had evolved in pottery, wood and bone in earlier periods. Shang art is sophisticated in form and technique. It suggests grandeur and mystery, and has been a never-ending source of inspiration to succeeding generations of Chinese artists.

Shang culture was centered in the Yellow River basin and the great Central Plain. Recent discoveries indicate that the Huang Ho ranks in importance with the Indus Valley, Mesopotamia, and the Nile country. The most advanced culture is associated with the last capital, An-yang, which was founded c. 1384 B.C. and fell to the Chou conquerors some 300 years later

Early Chou bronzes resemble the Shang in many ways; the Chou kings continued practices of their predecessors, and ritual remained the chief means of imitating cosmic order on earth. With the advent of the Chou longer inscriptions were used, and new shapes were introduced. By mid-Chou the old dynamic decorations yielded to graceful linear decor, or to blank monotony. After c. 700 B.C., central authority declined and the great lords began a power struggle for supremacy. There were regional divisions in art, as well as in politics. The border states expanded into barbarian territories as a means of increasing their military potential. This led to the incorporation of many local barbarian elements in the nature of utensils and their decor

Then, about the time of Warring States, mirrors, gongs and belthooks were produced in increasing quantities, many of them to be used as gifts to gain favor or to cement alliances, even as the nomadic barbarians were exerting pressure on the borders. In regional styles one may note different linear rhythms, and the influence of textile patterns. With developing skills the technique of inlay became popular. Gold, silver, jade, turquoise and glass paste were embedded in the bronze.

The trend toward delicacy and lightness continued in the Ch'in and Han periods. Ritual vessels, weapons and other gear were designed to please the nomadic tribes of Central Asia as Chinese silk passed through their territory on its way to the Roman world.

In later centuries Chinese art was modified by that of India, Persia, and the migrating hordes of Turks, Mongols and Manchus. The basic arts associated with ritual and the ruling house continued, however, in spite of changes of regime; men of foreign blood assumed the duties of the King as Son of Heaven, and attended to the ceremonial observances. The ancient vessels were copied in porcelain or revived in bronze and other metals. For China and her neighbors they have been a legacy of beauty and power unrivalled in the Eastern Asia sphere.

# *Shang and Chou Ritual Bronzes*

THE RITUAL BRONZES IN THIS EXHIBITION were chosen to illustrate:

- I. CLASSIC FORMS OF RITUAL VESSELS  
Ku, Chüeh, Hu, Yu, Kuang, Li, Ting, I, Tsun, Kuei
- II. DIFFERENCES IN BRONZE COMPOSITION  
varying proportions of the copper, tin, silver  
and other elements of the alloy
- III. VARIATIONS UPON A GIVEN FORM  
in Ku, Chüeh, Ting and Yu
- IV. QUALITATIVE DIFFERENCES IN CASTINGS  
high and low relief, openwork, inlay
- V. STYLISTIC ELEMENTS IN DECOR  
T'ao T'ieh (masked, bodied, bovine, deformed, "dragonized," dissolved)  
Dragons (vertical, trunked, beaked, jawed, feathered, winged, deformed)  
Cicada, Bird, Snake, Blade, Whorls, Bands, Vertical Ribs
- VI. REPRESENTATIVE PATINATIONS  
Malachite, Azurite, Cuprite, Silvery, "Water"
- VII. PREPARATION OF RITUAL BRONZE FOR BURIAL

## *Chinese Bronze Weapons*

The millennia that have passed have in no way changed one fundamental principle, that is, that man harnesses his technology in his fight for survival.

In archaic China the technology of bronze casting was applied to the fabrication of weapons. These weapons were first suited for use by infantry and chariotry. They were hand weapons, designed for a pole (or long handle). The preferred method of Chinese hafting was the tang. The classical weapons of this group were the dagger-axe (ko) and the tanged axe. Though some shaft-hole weapons appear at a relatively early period, possibly Shang or early Chou, their design and decor indicates a foreign element. Furthermore, the course of the shaft-hole axe in China appears to occur in a limited period of time. Shafted weapons comprise the spear-head, socketed axes, and celts. The line of development of typical Chinese weapons is in accord with native tradition: tang hafting.

Later evolution of weapons may be related to new military techniques. In the 5th century B.C., the feudal states of North China began to employ cavalry which became increasingly important as a military arm. This required another type of close combat weapon—the sword.

As a consequence, the Chou sword becomes the predominant weapon in the succeeding period. Historically, this transition in weaponry, which marked a new stage in Chinese history, was epitomized by the founder of the Han dynasty who said, "With a three chih ("foot")\* sword, I pacified the world."

THE WEAPONS SELECTED FOR THIS EXHIBITION cover the period from Shang to Han. They demonstrate the characteristic features of their class.

- I. A GROUP OF DAGGERS (attributed provenance, Anyang) reflect both the rarity of this weapon in that period and the beauty of its style. The points of similarity with Karasuk (Eurasian) daggers are striking.
- II. THE KO (tanged dagger-axe)  
The characteristic Chinese tang hafted weapon is more fully represented than other types. It ranged from the Shang to Han. A number of the weapon specimens reflect the unique workmanship, including turquoise inlay and the characteristic casting of the Shang period.
- III. SPEARHEADS (socketed weapons) are represented by specimens ranging from Shang to Warring States.
- IV. TANGED AXES are illustrated by typical specimens.
- V. SOCKETED, OVAL-SHAPED AXES AND SHAFT-HOLE AXES are shown because of their relationship to western Asiatic types.
- VI. CHOU swords are presented. Note the excellence of workmanship and functional design. On some, jade was used as a guard and as ornament for pommel and belt slide. See Archaic Jade.

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\*A chih, then, was equivalent to about nine inches today.

## *Chinese Bronze Implements, Fittings and Buckles*

In Shang times the chariot functioned, in war, as a moving command post and, in peace, as a ceremonial vehicle. As such, its importance is reflected in the attention paid to its bronze fittings. These fittings include wheel hubs and axle caps. Despite a critical change in military technique, the chariot held its important position through Han times. The styles of chariot fittings thus reflect three epochs.

Beginning about the 5th century B.C., there was a shift from the use of infantry as a primary striking force to cavalry as a decisive arm in warfare. This development resulted in a necessary change in dress toward fitted clothing and the elaboration of belt buckles and related fastenings. The belt buckle became as characteristic of the late Chou and Han periods as the ko dagger-axe was of the Shang.\* Chinese bronze belt buckles of the Chou period reflect stylistic characteristics of the Warring States. Later, in the Han period, they show the full flowering of technology of Han inlay, utilizing gold, silver and semi-precious stones.

About the time when bronze buckles gained in importance, another object becomes increasingly prominent in Chinese bronze casting—the mirror. Here, again, the stylistic characteristics of the period are reflected in decor.

THE BRONZES EXHIBITED in this section have been selected to illustrate:

- I. STYLISTIC DIFFERENCES of treatment of the different periods
- II. REPRESENTATIVE COMMON FORMS of the different classes of objects:
  - Pole tops
  - Axle hubs, axle caps, and other ornaments
  - Shaft hole picks and socketed celts
  - Buckles and fastenings
  - Mirrors
- III. TECHNIQUES OF EXECUTION such as use of gold, silver and turquoise inlays, the gilding of bronze, and the use of iron

Attention is directed to the massive hippopotamus buckle. It is of interest not only because of the strength of design and inlay technique, but also because it may be related to a specific site, a western Han grave excavated in Ssu-ch'üan and reported in Kaogu Xuebao, #2, 1958, pp. 88 and 90. The virtual duplicate of this buckle (the one excavated and published) has been described as of Warring States style by the author, Mai Yin-Hao.

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\*The prominence of belt buckles and fastenings reflects the importance of horses in China, in the military sphere. In Eurasia, with its herding and hunting societies, buckles, fastenings and harness trimmings became the primary objects of Eurasian bronze art.

## *Eurasian Animal Style Bronze Art*

Spanning a millennium in time, and stretching across the greater part of two continents, are the characteristic bronze creations of diverse people\*—the Eurasian Animal Style Bronzes.

It was at the beginning of the 18th century that the first finds of what we now designate as Animal Style Art excited Peter the Great. Through the 19th and 20th centuries, Russian chance finds and archaeological investigations in the south (Kuban and other Caucasian areas), Siberia (Minusinsk), the Urals (Ananino and Perm), the Altai (Pazyryk and Katanda), and Northern Mongolia (Noin-Ula), brought to light materials suggesting interrelationships which reached across the “steppe-belt,” establishing contact with China in the east, and Mycenae (later Greece), possibly Egypt and Italy, and the Hallstatt culture area in the west.

It is in our century, and more particularly in the past thirty or forty years, that we have become cognizant of the bronzes of the Ordos area bordering on China, and of the Luristan discoveries in Iran. Unfortunately, aside from the organized archaeological investigations in Russia and those of central and western Europe, most of our finds of animal style art have been uncovered by grave robbers and through circumstances which have lifted them out of their context both in space and time. In view of this and in the absence of adequate recorded history or social continuity of the people themselves, most of this material confronts us as art—enigmatic in its origin and use—and poses serious problems for archaeological reconstruction.

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\*Uralic, Altaic, Indo-European and others.

## *Eurasian Animal Style Bronze Plaques*

Typically, Eurasian animal style plaques contain either a single animal, an animal group "in combat," or a "non-combat" standing group. They could have had a functional use as buckles, an ornamental use as decor, or a symbolic use either in ritual or as amulets, or as insignia of rank. Their great prototypes in gold are identified with the Scythians. A large body of these plaques, in bronze and gilt bronze, constitute an important class of animal style art which reaches from Minusinsk through the Caucasian areas to the west. As a group, the plaques have several characteristics in common. The animals, whether rendered in motion or at rest, are usually executed with a full artistic understanding both of their anatomy and their behavior in action. Even when stylized, the rendition differs markedly from the semi-abstract and fanciful animal interpretation of the sophisticated Chinese to the east, and the crude, primitive rendition of the Hallstatt mining people far to the west. The plaques often have vertical loops at the back and many of them a protuberance at the front, which have suggested to some observers their functional application as buckles. As a class of bronze art, they are distinctive; as a group, differences within the group may be related to different areas.

THE PLAQUES IN THIS EXHIBIT were selected to illustrate a number of characteristics of the Animal Style. The appearance of a given subject in several plaques should be noted.

### I. ANIMALS IN COMBAT

As a group these usually depict attacks of canine and feline carnivores on ungulates. Other animal combat groups include the bird and feline and a stallion pair.

An intricate plaque in high relief with multiple birds' heads worked into its design is presented to demonstrate similarity to an excavated Tagar piece from Minusinsk.

A bird-feline combat group is of interest because of its strong resemblance to a similar gold buckle plaque from a controlled excavation in Siberia.

Plaques of two horses in combat show close similarity to a published pair, one of which (with the greater degree of open work) is described as Ordos, and the other (with less open work and less elegance) is reported as excavated from a Tagar site. This group has been described as "horses at play" and as "combat between rutting stallions."

### II. ANIMALS STANDING

The plaques of deer, in pairs and also in a group of three, demonstrate differences in intricacy of detail and design. In one, the simplification of stylistic representation is marked.

Other animals are illustrated in a gilt plaque of confronting rams, a group of ibex plaques, a group of large horned bovines, a group of plaques of horses, and another of geese and other birds.

A number of feline plaques are characterized by "holes in paws," attributed to Siberian style.

Note the massive and skilled execution of the large gilt tiger plaque.

## *Eurasian Animal Style Bronze Appliques, Pendants, Buckles and Fastenings*

These constitute the most numerous class of Eurasian bronze materials. They consist of small, plaque-like objects of entire individual animals, or animal heads. Their ornamental characteristics are self-evident but they may well have been used as amulets, in the manner of religious medals. A wide variety of artistic interpretations are evident, yet certain stylistic distinctions may be identified for particular areas or groups.

The subject matter of these small bronzes undoubtedly reflects the concern of their makers with the importance of the represented animals in their economy and their beliefs. Horse, deer, sheep, ibex, boar, ox, tiger, panther, bear and bird of prey are prominent. Dog, rabbit, and ass are also represented.

As would be expected with nomadic peoples among whom horses played an important role, hooks and fastenings would be strongly represented. Scythian costume, as depicted on the Kul Oba electrum vase, consisted of fitted tunics and trousers tucked into boots in contrast to the loose garments of the Chinese. Buckles, hooks or fastenings would thus be necessary though they also serve an ornamental purpose. Creative ingenuity is reflected in the range of animals, similar to those on the appliques and pendants.

THE EURASIAN BRONZES IN THIS EXHIBIT were selected to illustrate a number of elements:

- I. THE MOST COMMON SPECIES depicted in animal style art are seen here (from left to right by group)—horse, deer, sheep, ibex, boar, bear, bovine, carnivorous feline, rabbit, canine and bird of prey.
- II. THE TREATMENT OF ANIMAL FORMS varies over a wide range, yet conforms to certain conventions. They represent unique adaptations showing full appreciation of the inherent characteristics of the creatures depicted.
- III. CHARACTERISTICS OF SEVERAL REGIONAL STYLES are here illustrated or reflected: Siberian, Caucasian and Chinese borderlands.



IV. THE OBJECTS HAVE BEEN GROUPED BY SPECIES AND BY TYPE OF FITTING to bring out a number of points of interest as they relate to design and function:

*Horse (also wild ass)*

These are represented in appliques and plaques: either a single animal, or two animals, one above the other; a pair joined back to back; several animals in characteristic animal plaque style. The plaques of caparisoned horses suggest in headdress the western Asiatic practice, while their full rumps reflect the style of the geometrically bordered plaques of the Caucasian area.

*Deer (buck and doe)*

This series may have been associated with fertility beliefs. This is illustrated by the two appliques of coupled male and female deer. The treatment of antlered deer in many of these specimens brings to mind the classic Scythian plaque style. This series also reflects a number of other features:

- A. Seven different types of fastenings of these deer plaques and pendants illustrate the ingenuity of the designers of the animal style.
  1. A simple squared-off handle formed between the knee and hoof of a small doe.
  2. A small hook on the reverse of another for use as an applique.
  3. A wide back bracket on a third which permits of use as a slide on a belt.
  - 4.&5. As pendants, suspension from above and below.
  6. As a slide, a deer in the round in which antlers, body and legs each form a separate part.
  - 7 A simple hole for fastening.
- B. One of the antlered deer appliques is interesting in that the heads of two small does have taken the place of the traditionally folded legs.
- C. Parallel with this group (at top, right) deer are shown in a series of three, designed as fasteners or buckles, two with regardant heads. These buckles are placed in proximity to related doe appliques.
- D. A group of deer plaques, small in size, composed of a single, a pair and groups of three and four animals show another variation in design.

*Sheep, Ram and Ibex*

This group is of interest because of a number of elements:

- A. A pair of flat plaques depict a horned sheep and a ewe.
- B. A group of horned sheep heads may be of particular significance because they incorporate the three elements which Karlgren has identified as reflecting the influence of animal style art on Eastern Chou art. The horned ram appliques suggest that the characteristic "circle," "pear," and hatched "comma" may, in effect, be eye, ear and ram's horn. In this group, an example of the modification of animal shaped to function, as buckle and applique, may be noted.

### *Boar*

This group demonstrates single animals and pairs, used as appliques for the greater part, and two as pendants. One of the pendants is of interest in that an inverted doe's head has been used functionally to provide a hidden loop for suspension (compare with pendant parallel to it).

### *Bovine Heads*

Some may have been used as appliques, with the perforations through the eye serving as means of attachment. In juxtaposition is a small buckle of similar design. One of the bovine-like heads may be of interest as an illustration of Pazyryk style.

### *Bear, Panther and Tiger*

Holes in the paws of the small panthers and tigers (as in the large plaques) suggest Siberian style.

## V. "ROLLED" ANIMAL PLAQUES

- A. These are illustrated by a number of hemispherical, button-like appliques composed of coiled, horned ram, coiled feline, coiled doe and a bear in circular composition. The beautiful adaptation of animal form to the curvilinear area brings to mind the Altamira Cave paintings in which normal shapes were modified to conform to the natural rock protuberances of the roof.
- B. A number of fasteners consisting of coiled animals reflect the change from applique to buckle.

VI. A SERIES OF BUCKLES demonstrates the use of animals, panther and boar, doe (naturalistic and stylized), and related geometric forms which constitute the body of the buckle.

VII. S-SHAPED AND CIRCULAR APPLIQUES comprised basically of bird heads, eye and beak, deer, horse, panther or tiger, either regardant or addorsed, are presented in a series. Also shown are a few related, stylized treatments of bird heads.

VIII. A MOST INTERESTING BUCKLE was created as a composite of several animals (sides and front are addorsed felines, back consists of confronting felines and a doe's head, its tongue-like protuberance is a bird's head). Attention is called to the use of multiple species in a single buckle, and its suggestive relationship to some of the square addorsed and confronting animals of the Luristan type (see specimens).

IX. THE USE OF SERPENTS in the form of buckles. The only related plaque with serpent decor in this collection is not Eurasian, but is Chinese.

## X. TWO BUCKLES COMMAND PARTICULAR ATTENTION:

- A. Two powerful realistic bucking rams of strong sculptural quality and animal style are combined in a typical Chinese buckle form.
- B. A typical "modern style" belt buckle with moveable tongue in which the horseshoe-shaped body consists of doe's head and ears, and the moveable tongue attached to a crossbar, is a combination of a bird and doe head.

## *Eurasian Bronze Knives and Daggers*

There are distinct differences in the daggers and knives used by various Eurasian peoples. While they undoubtedly influenced each other in many ways, independent groups tended to maintain certain characteristic features in their weapons. The duration of the influence, and the time element involved, still are undetermined. The makers of the Shang dynasty knives (see Chinese Weapons section) may have inspired similar forms that were adopted by the nomads in their animal style. Later, in the Chou period, the nomadic animal style had a profound influence on China. The common nature of their function in relation to food and to battle may well be the basis for their widespread appearance. The early use of knives for barter may account for one of the earliest forms of monetary exchange in China—knife coins.

In the handling of these implements it is apparent that function usually played a primary role, but decor and ritual symbolism would seem to have participated in the fashioning of their design.

EURASIAN BRONZE KNIVES AND DAGGERS OF TWO TYPES are exhibited in this group: knives with curved and straight blades and straight bladed daggers. They are grouped in approximately chronological order

#### I. KARASUK STYLE

Implements in the left row resemble those uncovered in Karasuk burials in the Minusinsk region. The Karasuk culture is dated c. 1200 to c. 700 B.C.

A. The *knives* are varied in form of blade and relative length of blade and grip.

On some, animal heads are a prominent feature. These grow out of the handle in an organic fashion.

Loops on handles may be combined either with an animal head or may be simple and undecorated.

The animal head knives closely resemble their Shang contemporaries except that the Shang blades tend to be somewhat wider.

B. The *daggers* usually have hollow handles and their hilt suggests a tanged blade prototype. Of the group of daggers (on the lower left), two have rattles similar to those on some Shang knives.

#### II. TAGAR STYLE

Implements in the next row resemble the forms found in Tagar burials of the Minusinsk region. The Tagar culture is dated c. 700 to c. 200 B.C.

A. The *Knives* in this group

All (in this collection) have loop-ended handles.

The zoomorphic form, when present, is attached to (rather than evolved from) the end of the grip.

The fashioning of the blade is more perfunctory than in the usual Karasuk type.

B. The *daggers* in this group represent a development which bears some similarity to the Karasuk type and, on the other hand, present a sequence which leads to the Akinakes type.

#### III. IMPLEMENTS OF INTERMEDIATE OR "COMPOSITE" CHARACTER

The *daggers* and *knives* in the third row, center front do not fit precisely into currently defined groups.

The *knives* show Minusinsk and Tagar features. One may be Chinese, middle Chou.

The *daggers* show some features of the Proto-Akinakes type, two with clearly Chinese features.

#### IV IMPLEMENTS in the fourth strip present the following forms:

The *knives* (in the first horizontal group) are characterized by animal decor on the grip. Some in the center, vertical group, have a handle terminating in an animal figure.

The *daggers* (in a vertical row) consist of "Akinakes" forms.

The knives at the extreme lower right form a group with the bird's head at the terminus of the grip as a common feature.

## *Eurasian Animal Style Bronze Sculpture, Implements and Fittings*

As scholars of today seek to reconstruct the life and history of archaic Eurasian societies and to define the interchange, interrelationships and influences between the many different peoples who constituted these societies, both in the time and space of this era, they find themselves dependent upon surviving artifacts. Bronzes, by virtue of durability, are prominent among the materials available to us for these studies. The most cursory examination of two large groups of bronzes, the Eurasian and the Chinese, reflect the differences not only in the sophistication or cultural level of the two groups, but also the differences in their way of life—in daily living, in peace and in war. The Eurasian bronzes present themselves as the creations of a nomadic people constantly exposed to animals and dependent on an economy based on them—the horse, the ass, the deer, the cow and the goat. As a result, certain objects become more important, as reflected in their numbers and attention to execution. Animal sculpture in the round becomes a prominent feature of Eurasian bronze art, used for such implements as pole tops, and flails. The doe—characteristically with ears alerted and legs folded under—and less frequently the horse or ass, are treated with importance. In addition to the small appliques, pendants and fastenings, bronze spoons are prominently represented. That they were designed for daily use is indicated by the fact that virtually every specimen available to us has been fabricated with a loop for suspension, suggesting their probable daily use and carriage (probably suspended from a belt). This implement would also seem to reflect a difference in dietary habits between the nomadic people and their reliance on such foods as stews and gruels in contradistinction to those of the Chinese, whose distinctive cuisine is associated with an entirely different type of eating implement.

One of the challenging aspects of Eurasian animal style art is its relationship to the great sedentary civilizations bordering its large central core area. Thus no consideration of this material would be complete without a reference to Luristan bronzes. Prominent in the bronze creations of these people are such functional implements as weapons, horse bits and cheek pieces, spears, knives and daggers, and such decorative objects as “wands” and “standards” with symbolic and/or funerary significance. Of particular interest is the power of their treatment of animals, and the appearance of the anthropomorphic figure in relationship to specific animal types.

THE ANIMAL STYLE BRONZES in this section of the exhibit illustrate a number of aspects of Eurasian art in its relationship to implements and sculpture:

### I. SCULPTURE IN THE ROUND

Represented here are a typical group of resting does. Attention is called to one of this group whose head and body are separately cast so that the head can be placed in a forward or regardant position. This is not too dissimilar to some Han ceramic horses in which the body and head were separate but fitted units.

Wild ass, horse and a massive ram constitute another group of the hollow cast, sculptured animals.

A group of horses represents small solid cast bronze sculptures.

### II. IMPLEMENTS AND FITTINGS

A. *Pole Tops*: These are represented in different forms and sizes. Attention is called to the massive, powerful figures of the horned sheep and the bovine. A number of small pole tops feature horned sheep and also a wild ass. The pole top design of mating pigs, realistic and integrated in its composition, could be related to fertility rites or beliefs.

B. *Spoons*: These constitute numerically the largest number of units in this group. As has been noted, virtually each spoon has arrangements for suspension. The decor in most instances is geometric but one group has the handle evolve into an equine head in a style and manner not dissimilar to some of the Karasuk knives which have been presented. The larger spoons could well have served an adult, approximating tablespoon size. Some of the small spoons, of teaspoon size, could have been used for infant feeding. The function of the very small spoons, of which a series are displayed, may be as a funerary piece, as toys, or possibly as a "measure" for very special ingredients. The design of the small spoons seems to feature birds and birds' heads. Two objects in the exhibit suggest a composite familiar to us as a pocketknife; this is a combination of knife and spoon with a provision for carriage (suspension).

C. *Harness Jingle*: This object is of interest both in design and because of its probable function as a harness fitting. The design of two confronted felines whose tails become long necked birds, has been previously illustrated in a pendant and an applique. Here the same combination of fixed stylistic animals is adapted to another purpose, that of a harness jingle. Also of interest are the two pendant hollow-cage spheres, with small stone enclosed, which serve as a jingle. Similar jingles may be noted in other implements in the exhibit, one of which is an awl.

# *Chronology of China*

## SHANG-YIN DYNASTY

Traditional dating  
c. 1766-1122 B.C.

Revised dating  
c. 1500-c. 1000 B.C.

## SITES

Basin of the Huang-Ho or Yellow River, extensive finds in recent years; at sites including Erh-li-Kang

Liu-Li-Ko

Last capital, An-yang (Hsiao-t'un)

## CHOU DYNASTY

c. 1000-255 B.C.

## EARLY WESTERN CHOU

c. 1000-771 B.C.

Scattered sites from Jehol Province in the northeast to Kuangtung Province on the southeast coast.

## LATE EASTERN CHOU

c. 771-223 B.C.

Includes Period of Warring States  
481-221 B. C.

Centers in Yellow River Valley, the Huai Valley and Hunan Province, south of the Yangtze River.

Hsin Ts'un

Hsin-chêng

Li-yü

Chin Tsun

Shou Chou

Ch'ang-sha

## CH'IN DYNASTY

221-205 B.C.

Hsienyang (near modern Sian)

## HAN DYNASTY

205 B.C.-220 A.D.

Capitals at Ch'ang-an and Loyang. West of China gifts and export trade articles were found in graves of barbarians and in cities along the caravan routes to the Mediterranean. In the north from Korea, through conquered territories south of China's present borders, innumerable sites of archaeological importance have been discovered.

THE COLUMBIA UNIVERSITY EXHIBITION OF CHINESE ARCHAIC JADES, RITUAL BRONZES, WEAPONS AND RELATED EURASIAN BRONZE ART marks the opening of a program of study, research and publication devoted to Central Asia and related areas. It is an interdepartmental project administered by a Committee appointed by President Kirk.

Committee for the Exhibition:

Jane Gaston Mahler, Associate Professor  
Art History and Archaeology

William Samolin, Assistant Professor  
of Altaic Studies

The catalogue was prepared with the participation of, and under the supervision of that Committee, assisted by Dr. Edith Porada, Associate Professor, Art History and Archaeology.

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The Columbia University Exhibition of  
Chinese Archaic Jades, Ritual Bronzes, Weapons  
and Related Eurasian Bronze Art  
was selected from study materials  
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