A Comprehensive Handbook of Chinese Archaic Jades

Authentication, Appreciation & Appraisal

By Mitchell Chen



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This book is dedicated to

My wife

Sulan Chen

For her warmest support which

makes this book possible

Foreword

The Chinese are a people that have shown a great appreciation on jade. The jade history in China can be traced back as long as eight thousand years. Jade collection, therefore, is not just a hobby. Today, jade authentication, jade appreciation, and jade appraisal have become an interdisciplinary subject in many universities in Taiwan.

Professor Mitchell Chen had five years of teaching experiences at the Center of General Education, JinWen University of Science and Technology. The courses he lectured include Antique Jade Authentication and Appraisal, Oriental Arts and Craftsmanship. Professor Chen was not only a teacher, but also a collector. In every class he lectured, he used his own collection as the teaching material. In addition to obtaining the knowledge, all the students in his class benefited a lot by examining real objects.

Now Professor Chen is sharing his expertise on the Chinese archaic jade with all the readers in the world by publishing this book. I believe all the jade lovers will enjoy reading this book and obtain the knowledge of Chinese archaic jade authentication, appreciation, and appraisal.

Yung-Fu Cheng, Ph.D. Professor & President JinWen University of Science and Technology

Foreword

Chinese archaic jades have brought Prof. Mitchell Chen to me for almost two decades when I was working as Associate Researcher, Institute of Earth Science, Academia Sinica. The scientific authentication of Chinese archaic jades Prof. Chen applying is one of the research areas I was working at the Academia Sinica and the graduate schools I was teaching in Taiwan. In addition, I have applied the same methodology to a case administered by Taipei municipal government.

Many items of Hongshan Culture and Qijia Culture of Prof. Chen's collection have been tested by using a Raman spectrometer by my research assistants at the universities I taught. The Raman spectrometer test only identify the phase of the object. The antiquity evidences should be identified in terms of certain chemical and physical phenomena such as differential weathering, cleaving veins, diffusive markings and dissolved pits.

The Authentication of these phenomena needs theoretical foundation and experiences. In this book, Prof. Chen has provided microscopic images for facilitating the readers to examine the details.

I believe all the jade lovers will be enjoying reading this book.

Eugene Huang Ph.D. of Geology, Cornell University Associate Researcher, Institute of Earth Science, Academia Sinica Prof. Dept. Creative Fashion Design & Management, Chung Chou University of Science & Technology

Preface

Chinese Archaic Jades are not only artworks but also the physical evidences of the records of Chinese history. The content of the Chinese Archaic Jades study covers the areas of jade authentication, jade appreciation & jade appraisal.

The jade's authentication method consists of three aspects: 1. Jade antiquity authentication, 2. Material composition authentication and 3. Jade periods verification. The jade's authentication method described in this handbook is the scientific method which has been recognized in recent years by industry, government and academia in Taiwan.

This handbook attempts to provide a comprehensive guide to the fundamentals of the Chinese archaic jade's authentication, appreciation & appraisal methodologies. In order to describe these fundamentals in more detail, I have use my own collection of Chinese archaic jades of various periods from Hongshan Cultures (3500 B.C. -2200 B.C.) to the Ming & Qing Dynasties((1368 A.D. - 1911 A.D.) as examples. With the aim to facilitate the readers to examine the details of antiquity evidences of these items in mind, detailed microscopic images with full explanations are provided.

The knowledge and information provided in this handbook are the result of the author 's years experiencs of Chinese archaic jade collection process, including five year's teaching Chinese archaic jades authenication and appraisal courses at universities and many years practicing autentication services to many antiquity jades dealers and private collectors in Taiwan. I hope the readers of this handbook will be enjoyed reading the material provided here, and most importantly, will discover useful knowledge on the authentication, appreciation & appraisal methodologies of the Chinese archaic jades.

Mitchell (Ming Chieh) Chen M.A. Economics (1970), National Taiwan University M.S. Engineering (1975), Stanford University Associate Professor (2005.2-2010.7), Jade Authentication & Appraisal, Jinwen University of Science and Technology, Taipei, Taiwan

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Part One Fundamentals of Jades Authentication, Appreciation & Appraisal

Chapter One Jades Authentication

Chinese jade artifacts are not only pieces of artworks but also the physical evidences of the records of Chinese history. However, the value of jade artifacts depends on its genuineness in addition to other factors such as quality of jade and mastery of workmanship. As a result, jade authentication is of paramount importance in the Chinese jade studies.

There were works on the jade authentication theory and practice since the Song and Yuan dynasties (906 A.D. -1379A.D.) in China. Among them, the most popular two works were published in the late Qing and early Republic periods¹. Today, there are many jade authentication methodologies published. However, none of them are agreed and accepted by all professional researchers and the general collectors of Chinese antique jades. After years of research and studies, author of the present handbook has found that the method called the scientific method proposed by Prof. Tsien, H. H. and others seems to be the most appropriate one. The scientific method on jade's authentication is first seen in the article of Mineralogical Studies of Archaic Jades², presented by Prof. Tsien, H. H. in the 1995 jade's authentication conference held in Taipei. Since then, the scientific method for jade's authentication has gained universal acceptance from both academia and professionals in Taiwan. According to Prof. Tsien, the steps of authentication of jade antiques consist of material composition authentication, jade antiquity authentication and period verification. These three aspects of jade's authentication method are presented in this handbook in sequence.

1.1 Material Composition Authentication

The first step in jade authentication is to identify the kind of material of the object under investigated. According to E. S. Dana 1898's A Textbook of Mineralogy, jade may mean nephrite or jadeite. Nephrite is a variety of the calcium and magnesium-rich amphibole mineral actinolite. The chemical formula for nephrite is

¹ An Investigation into the Images of Antique Jades, 1889, by Wu Da-Cheng(1835-1902), Antique Jade Identification, 1940, by Liu Datong(1869-1952).

² p. 199 no. 32, Acta Geological Taiwanica

 Ca_2 (Mg, Fe) $_5Si_8O_{22}$ (OH) $_2$. Jadeite is a pyroxene mineral with composition NaAlSi $_2O_6$. The several major physical characteristics differences between nephrite and jadeite are shown in Table 1.

Characteristics	Nephrite	Jadeite
Mohs scale hardness:	6-6.5	6.5-7
Specific gravity:	2.95 (+.15,05)	3.24-3.43
Polish luster:	vitreous to greasy	vitreous to greasy
Refractive index:	1.606-1.632	1.667-1.693

Table 1 Major Physical Characteristics of Nephrite and Jadeite

As far as the material identification of jade is concerned, wave number reading via Raman spectrometer is usally applied in addition to the refractive index reading from the reflectomer such as the GIA Duplex Reflectomer. In practice, a prominent mode within the low wavenumber range of 600-800 or around 3700 in the high wavenumber range reading via Raman spectrometer implies that the sample under tested is nephrite.

1.2 Jade Antiquity Authentication

Jade antiquity authentication may be verified through certain physical and chemical characteristics. These characteristics consist of dissolved pits, cleaving veins, differential weathering, diffusive markings, exposure crystals, deterioration marking and secondary additive crystal planes. In addition, mineral attachments such as gold placer may be served as an evidence that the sample jade has been buried under the ground. The authentication of these antiquity evidences is of paramount importance in the whole process of the scientific method of antiquity jade authentication. The microscopic images provided in this handbook will be helpful to identify these antiquity phoenomena. In the following, each of the antiquity phenomena is explained.

□ Additive crystal planes: Additive crystal planes are the crystal planes added to the jade artifacts due to exterior materials. Needle like flat crystals is fabricated into the jade itself as a new material.



□ Cleaving veins: The cleaving veins seen inside the jade artifact are caused by the interaction of physical factors of heat and pressure on the jade. They are different from the cracks caused by percussion. Usually there are no exterior cracks for cleaving veins. Exterior cracks are common phenomena for cracks caused by percussion.



□ Diffusive markings: Diffusive markings are the phenomena caused by the incremental penetration of exterior chemicals after the impact of heat and pressure conditions of the underground environment. Different levels of condensed of colors are seen in the jade artifacts. The diffusive markings should not be mistaken as raw jade skin.



 \Box Differential weathering: By the definition from the Random House Unabridged Dictionary³, differential weathering is the difference in degree of discoloration, disintegration, etc., of rocks of different kinds exposed to the same environment. Here we define it as the different deterioration of the surface of the traces of carving on jade artifact due to humidity, heat and chemicals in the air after a long period of time. Wrinkles are seen in the traces of carving due to differential weathering.



³ Copyright © 1997, by Random House, Inc.

□ Dissolved Pits: These are the holes formed by natural causes. Mineral crystals are seen inside the hole. These mineral crystals are impossible to imitate through artificial methods.



□ Exposure crystals: Exposure crystals are crystals transformed from the jade itself due to physical factors such as heat and pressure. They are sometimes called micas. Almost all the antique jades buried underground have shown exposure crystals.



□ Underground plant root deterioration: Channel marks and traces shown on the surface of antique jades caused by plant roots as time passes by.



Deterioration marks :These are the areas inside antique jades having shapes like the legs of the ant. Deterioration marking sometimes is called aging spots, ant's leg or cow's hair. This may be the phenomenon of structural transformation of jade substances causing by underground heat, pressure and chemicals.



□ Calcification:

The phenomenon of calcification is believed to be caused by decomposing the structural water of the jade. The cause of decomposition may be from the interaction of heat and the pressure of the environment where the jade is buried.



1.3 Chinese Jades Chronology (Timeline of Chinese Jades)

The chronology or the timeline of the Chinese jade is the prerequisite knowledge for Chinese jade artifacts authentication and appreciation . The division of the timeline of chinese jades is usually based on the records from achaeological excavation and the documentations of the jade artifacts of museums displaying them. The timeline of Chinese jades this handbook follows is divided into the following periods: Hongshan Culture (3500 B.C. – 2200 B.C.), Liangzhu Culture (3400 B.C. – 2250 B.C.), Songze culture (3400 B.C. – 3300 B.C.), Longshan Culture (2800 B. C. -1700 B.C.), Shijiahe Culture (2500-2000 BC), Qijia Culture (2400 B.C. – 1900 B.C.), Sanxingdui Culture (1600 B. C. – 221 B.C.), Xia Dynasty (2183 B.C. - 1751 B.C.), Shang Dynasty (1766 B.C. - 1122 B.C.), Western Zhou Dynasty (1122 B.C. -771B.C.), Spring-Autumn & Warring States Periods (770 B.C. - 221 B.C.), Chin Dynasty (221 B.C. - 206 B.C.), Han Dynasty (220 B.C. -220 A.D.), Tang, Song, Liao, Jin & Yuan Dynasties (618 A.D. -1368 A.D.) and Ming and Qing Dynasties (1368 A.D. - 1911 A.D.). It should be noted that from Hongshan Culture to Qijia Culture is sometimes referred as Neolithic Periods by archaeologists.

Jades in each period will be discussed based on jade carving styles, motifs and designs to identify the period to which a particular jade artifact may belong. In addition, historical and cultural perspectives of jades for the particular period will be discussed.

1.3.1 Hongshan Culture (3500 B.C. – 2200 B.C.)

Dated back five to six thousand years and last for two thousand years, covers the areas of southeastern of Inner Mongolia and western Liaoning Province of China. Hongshan Culture has derived its name from the Hongshan Mountain of Chifon inside the Mongolia Autonomy. Hongshan Culture is in the prime time of matrilineal descent society. As a result, the theme of many Hongshan Culture jade artifacts derived from birds and animals of which the designs carried female supple nature. Besides serpentine, many Hongshan Culture artifacts are made of nephrite.

Artisans from the Hongshan Culture emphasized an object's shape rather than surface lines or curvature. Simple and round designs are characteristic of many Hongshan Culture jade artifacts. Dual holes called holes of bugle shape on the same side of the artifacts are usually seen. It is recognized that the dragon and phoenix motifs of Hongshan Culture are the ancestors of those motifs for later periods in the Chinese jade artifact's history.

1.3.2 Liangzhu Culture (3400 B.C. – 2250 B.C.)

Liangzhu Culture can be dated back four to five thousand years. The area covered mainly Lake Tai areas. The variants of jade artifacts of Liangzhu Culture include jade Cong, Jade arched plaque and ax-shape plaque. With the spirit's face as a major motif, the Liangzhu Culture jade artifacts are featured slim incised lines. Due to the extraordinary elegant workmanship, Liangzhu Culture jade artifacts are always the most favorite collection items for professional collectors worldwide. No wonder that the prices of Liangzhu Culture jade artifacts are always high in international auctions.

The major motif of Liangzhu Culture jade artifacts is "God's Face," which is usually carved with slim and incised lines. The jade artifacts of Liangzhu Culture have two significant elements worth considerations. The first element is the impact on the motifs of jade artifacts of the later periods. For example, the god's face motif constitutes the major motifs of the Spring and Autumn Period. The curling claws showed under the God's face constituting the claws of the dragon for the Shang and West Chou periods. Second, many Liangzhu Culture jade artifacts can be seen smooth cut on the surface of the motif that can be interpreted as some records of important events such as ceremonies and sad memories.

1.3.3 Songze culture (3400 B.C. – 3300 B.C.)

The Songze culture was a later stage of the Majiabang culture (which emerged around c.5000 BCE) and before the Liangzhu Culture materialized in the lower Yangzi region around c.4000 BCE and was given its name after the site of Songze in Shanghai. The general dates in which the Songze culture flourished is usually given is between 3400 - 3300 BCE and it was these people that are considered to be one of the ancestors of the Shanghai people.

Songze Site is the archaeological site of the Neolithic Age and the Spring and Autumn Period (770-476BC). Its cultural relics, including pottery, porcelains, stoneware and some bronze may be divided into three levels according to its stratum. The lowest level, but of the highest archaeological value of the three belongs to the Neolithic Age, unearthed relics including storage pits and production tools. The middle level is the tombs of the Matriarchy clan society. The upper level is the relic of late Western Zhou Dynasty (11th century-771BC) and the Spring and Autumn Period. Hole drilling pattern which serves an important aspect in authentication Songze jade plaques has the characteristics of those of Xia jades (two directional drilling with polishing both sides) and those of Qijia jades.

1.3.4 Longshan Culture (2800 B. C. -1700 B.C.)

Longshan Culture has derived its name from the remains of the Longshan Township of Shantung Province. Geologically, Longshan Culture covers mainly lower part of the Yellow River, including the areas of Honan, Shensi and Shantung Provinces. Longshan Culture jade artifacts contain many varieties from jade kwei, jade arched pendant, jade tube, bi-disk and notched bi-disk all of which are carved elegantly and dexterously. Judging the motifs and the style of line carving, the Longshan Culture jades are believed to be the origin of Shang Dynasty jades.

1.3.5 Shijiahe culture (2500B.C.-2000 B.C.)

Shijiahe culture was a late Neolithic culture centered on the middle Yangtze River region in Hubei, China. The carving style and jade quality are similar to the jade artifact unearthed Hubei Tianmen County Xiaojiayingzi Wugi.

1.3.6 Qijia Culture (2400 B.C. – 1900 B.C.)

Dated back around four thousand years ago; Qijia Culture covers Kansu, Ningxia and Chinghai of the Yellow River Areas. The variety of jade artifacts from Qijia Culture are various. Typical jade artifacts from this period are jade knives, zhangs, kweis, bi and congs. Most of the jade artifacts unearthed are found with plain and smooth surface.

A unique feature of Qijia Culture jade artifacts is the uni-directional hole-drilling, resulting in visibly irregular edges. Most of the jade artifacts unearthed are found with plain surface. It is claimed that the Qijia artifacts with motifs are doubtful. Typical jade artifacts from this period are fine thin jade knives and zhangs with very smooth surfaces.

1.3.7 Sanxingdui Culture (1600 B. C. -221 B.C.)

In 1929, more than four hundred pieces jade artifacts were found by Yann Dao Chun, a farmer in the Kwanhan City in Szechwan Province in China, whose ancestors have settled there for many generations. The mystery of the Ancient Sze Kingdom has been unveiled since then. In 1986, several thousand pieces of gold, bronze, jade artifacts have been unearthed in Sanxindui by local archeologists. Suddenly, Sanxingdui Culture has been known worldwide. Some source claimed that Sanxingdui culture was the culture of Emperor Zen in 3000 B.C., however, most sources believed that it covered the period of the Dynasties of Xia, Shang, and Western Zhou to Warring States. With skillful carving, most of the jade artifacts of Sanxingdui Culture are made of nephrite. The derivation of prominent eyes and wide ears of the priests or knights with special design is still unknown.

Most jade artifacts from the Sanxingdui Culture are made of nephrite and are extraordinarily and elaboratedly carved. Jade artifacts of priests and knights from this period displayed prominent eyes, wide ears, and decorated with special markings, believed to be related to other cultures even from an extraterrestrial civilization.

1.3.8 Xia Dynasty (2183 B.C. - 1751 B.C.)

According to "The Age of Xia, Historical Records" of Ssu-Ma Chien, the Xia Dynasty lasts about four hundred years from 2138B.C. to 1751B.C. The Erlitou Culture found in Yensi Hsien of Honan Province in 1975 has been confirmed to be the Xia Culture. From the available Xia Dynasty jade artifacts found, the variety of Xia Culture jade artifacts include jade ring, jade ax, notched zhang, notched bi-disk, arched plaques most of which are rather large and thin in size and have symmetrical lines. Parallel and intersection incised thin lines are used to form simple and concise motif. Moreover, many Xia jades have the trellis design consisting intersecting straight lines to form close and inseparable rhomboid shape that further to generate the exaggerated effect and the feeling of the mystery and solemnness that these ritual artifacts are carrying.

Although the existence of Xia Cultural is still doubted by some typical historians. The Chinese classic book Shan Hai Jing is believed to contain some clues to its existence.

1.3.9 Shang Dynasty (1766 B.C. - 1122 B.C.)

According to the old Chinese legend, the Shang ancestors were born from a phoenix that was sent from heaven. As a result, phoenix becomes the major motif of Shang jade artifacts. The variations of Shang jade artifacts are rich. From weighing twenty kilograms to three centimeters in length, the Shang Dynasty jade artifacts include kneeling person, pig, sheep, the mythical animal, dinosaur, jar and jade plaques. It should be noted that the Shang Dynasty jade artifacts are not only made of fine quality jade, but also are with the extraordinary skillful workmanship. Low relief and streamlined lines done through the reduction of the surface, the square angle curling lines and the smooth dual relief lines are typical for the Shang Dynasty jade artifacts.

1.3.10 Western Zhou Dynasty (1122 B.C. -771B.C.)

The style of the carving for Western Zhou is noted for its single and double slant incised carving which is known as the forty-five degree big slant carving and the technique has been discontinued after the Han dynasty. The jade artifacts of the Western Zhou are in high demand for the serious collectors due to their fine workmanship and rareness of the unearthed artifacts in public museums and in private collections.

1.3.11 Spring-Autumn & Warring States Periods (770 B.C. - 221 B.C)

The carving style of the jade artifacts for the Spring-Autumn period (B.C.770-B.C.403) is derived from the late Chou dynasty and develops into a more detailed pattern. The bosom auspicious cloud is the typical motif of this period. The jade artifacts of the Spring-Autumn are the favorite items of many serious collectors. The jade carving of the Warring States (B.C.403-B.C.221) is of exquisite quality. With a streamlined design, most of the motifs are dragons, dancing ladies and crops. The low

relief on the surface of the artifact applies abstract and simplified motifs while those carvings extend from the artifact to express realistic ones.

1.3.12 Chin Dynasty (221 B.C. - 206 B.C)

Although short period in the history, the Chin Dynasty reveals the highest achievement in the jades carving techniques. The jades in this period have presented unique motifs that are the key to identifying jades for this period. The most important and mysterious jades of Chin are the Seal of the Inherited Empire and the Seal of the Empress. The kind of jade to carve the Seal of the Inherited Empire and the whereabouts of it after Chin remain unknown. The existence of the Seal of Empress has earned lots of debates.

1.3.13 Han Dynasty (220 B.C. -220 A.D.)

The jade carving technique of the Han dynasty is famous for its straightforwardness and is known as the eight times of carving. The main motif for western Han is the auspicious animal. The size of jade artifacts tends to become large. After eastern Han, the main motifs are the four auspicious creatures (dragon, phoenix, tiger, the integrated structure combining snake and turtle), cloud and eagle. Different from previous periods, Han Dynasty jades have modern Chinese characters reading long happiness, suitable for offspring appeared on many bi-disks jades. Many exquisite and spectacular royal jades, some with scripts, identifying particular emperors, have been found in private collections.

1.3.14 Tang, Song, Liao, Jin & Yuan Dynasties (618 A.D. -1368 A.D.)

The jades in the Tang dynasty are characterized as realistic and related to daily life. Most traditional styles of dragon and phoenix motifs tend to be amiable. Their appearances are no more majestic and imposing like those of previous dynasties. Buddhist sculptures and jades with gold gilt, jade forms of Flying Apsara and races from the central Asia are popular.

The varieties of the Tang jades are rich. There are three categories. The first category relates to practical utensils such as jade cups, jade spoons, jade plates, jade bowls, jade boxes and jade cans. The second category relates to women wearing accessories and hair care items such as a hairpin, dangling ornament, bracelet and comb. The third category relates to jade booklet for the imperial ceremony.

One of the major carving styles of the Tang jades is slant carving of motif on the surface with trimming the empty background. Incised lines are often applied similar to the painting sketches. The main theme motif is shown convex and prominent with dense incised lines to express the lines of the

motif especially for the clothes. Owing to the particular cultural development such as the Tang trio color ceramics, many jade artifacts are painted with rich colors and gilt with gold.

The carving styles of the Song jades are greatly influenced by the Song paintings. Some of the Song jades have the theme implanted from the Song paintings which are characterized by detail drawing. The jade carving consists the main drawing and the background. Quite often, the jade is carved by open work technique. The main themes are seen human, animal and bird while the background is seen rock accompanying by pine trees, bamboo and plum trees. In addition, boy motif jades are very popular due to the people's eagerness in seeking the future generation in the family. The typical motif of them is a jade child with lotus to imply good luck and abundant offspring's.

Liao Dynasty (AD.907-1125) was founded by Yeluapogi of Khitan race who were a nomadic tribe. By neighboring to the Han people for a long time, the culture and jade craftsmanship of the Liao Dynasty are greatly influenced by those of the Tang and Song Dynasties. However, the Liao Dynasty has its unique nomadic culture. The royal families of Khitan race have camping site serving as a temporary palace called Napo. Wild animals are one of the popular jade motifs for the Liao Dynasty.

Original as the subordinated racial country of the Liao Dynasty, Jin Dynasty founded in 1115 by the Jurchen race, Oneyehagota who had united several Jurchen tribes. The capital city is Fueining that is today's Acheng, Harbin, Heilongjiang, China. As a nomadic race, the Jurchen inherited the customs of the Khitan race to live on hunting in the mountains and waters. Their amusement activities divide into spring activity called spring water and the autumn activity called an autumn mountain.

Jades of the Yuan Dynasty are similar to those of the Song Dynasty. However, jades of the Yuan Dynasty have presented uniqueness of Mongolian folklore. Some of Yuan jades are characterized applying the carving technique of the notched shape of oak trees. Dragons of the Yuan jades have the shape of two long horns, three clusters of hair, unrolled eyebrows, high and broad nose. Jade hooks are popular Yuan jades.

1.3.15 Ming and Qing Dynasties (1368 A.D. - 1911 A.D.)

With deviating both outside form and inner theme, the carving style of jade in the Ming Dynasty is in search of decorative beauty and delicacy of workmanship. Jades for the royal families are carved by the palace workshop. Jade collection and appreciation are popular among people in the Ming Dynasty. Many jades are carved with the style imitating the forms and designs of the bronzes of the Shang and Western Zhou Dynasty. These jades have antiquity flavors.

The designs and motifs of Ming jades are rich in variety. In addition to animal and plant motifs, icons of richness, happiness, longevity are often applied. Deeply influenced by the painting arts, the painting style motifs are used in jade carving.

Jade carvings in the Qing Dynasty have developed as one of the high peaks in the Chinese jade carving history. Due to the fact that Emperor Qinglong he is a connoisseur of jade carvings, jade carvings in the reign of Qinglong are both rich in quantity and high workmanship in quality. The proportions of the jade are meeting the requirement of aesthetics. The lines are correctly and nicely sketched. Straight lines and curving lines are skillfully constructed and elaborately carved. Some ancient jades have been recarved or added scripts by the order of Emperor Qinglong.

The designs and motifs of Ming jades are rich in variety. In addition to animal and plant motifs, icons of richness, happiness, longevity are often applied. Deeply influenced by the painting arts, the painting style motifs are used in jade carving.

1.4 Hole Drilling Patterns Seen in the Chinese Antique Jades

The irregular surface seen in the hole of authentic jade artifacts of many periods is believed due to the result of applying particular instruments different from modern ones. As such, those holes are difficult to intimate by using modern tools for fake jades. In addition, holes of artifacts of different periods are shown to have particular patterns. For examples, holes of Hongshan and Liangzhu Cultures jade have shown patterns of dual holes having an irregular inner surface or helical scoring on the same side. Jade artifacts of the Xia Dynasty have holes of double surfaces with fine carving on both sides. Holes of Qijia Culture jade artifacts are seen one directional drilling with the irregular remains in the end. As a result, hole drilling patterns of different cultures are vital factors to be considered in jade Authentication.







1.5 How to Authenticate Jade Artifacts Without Unearth Report?

It is believed that the quantity of jade artifacts without unearth report is far greater than those of with unearth report. As a result, to authenticate jade artifact without unearth report is more important than to authenticate those with unearth report as well as is more difficult. Fortunately, modern technologies are available to make jade artifact authentication as accurate as possible. Among them, reference method tentatively called may be one the jade authentication methods which seem to be appropriate.

The reference method may be described as follows:

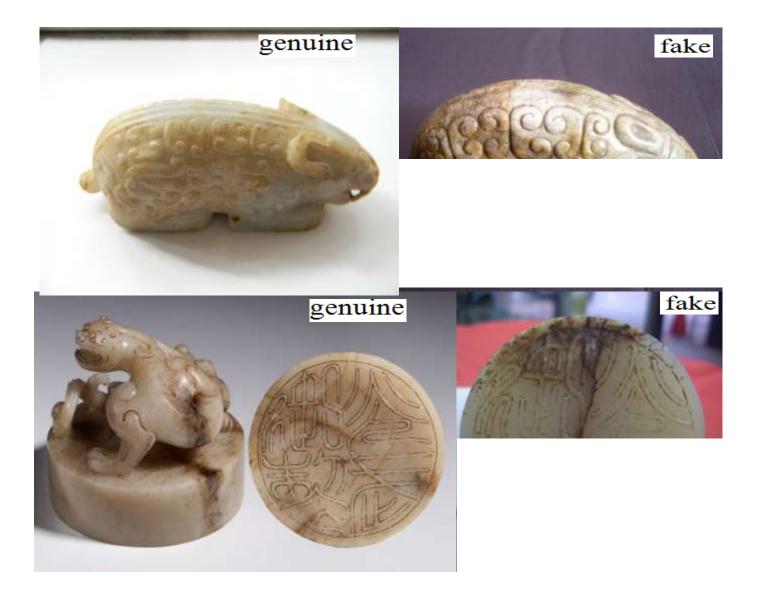
Firstly, we select a referral jade artifact with unearth report that was designated as a particular period, such as Han Dynasty from the public museum⁴.

Secondly, we list all the referral item's attributes of antiquity phenomena due to chemical and physical factors, the attributes of motifs, the attributes of craftsmanship due to carving style and hole drilling pattern. The chemical and physical factors consist of cleaving veins, differential weathering, diffusive markings exposed additive crystal planes and dissolved pits. Since the attributes of motifs, the attributes of craftsmanship due to carving style and the drilling pattern of hole are unique for a particular of the period. For example, the detail of the dragon of Xia Dynasty is different from that of the Han Dynasty. Hole drilling pattern of the Qijia Culture jade artifacts is characterized by the one directional drilling, which is different from the Xia Dynasty which has dual directional drilling. The lines on the Hongshan Culture artifacts are usually seen round, smooth channel that is different from the Western Zhou Dynasty which have forty-five degree big slant carving.

Lastly, we map the attributes of the item to be identified with those of the item referred. If we end up with all the attributes matched, then we can infer that the item to be identified should be from the same period of the item referred to. If 90% of the attributes matched, then we can infer that the item to identify has a probability of 90% from the same period of the item referred to. At least 70% is required to be confident that the item to be identified should be from the period of the item referred. If the period of the jade artifact to be authenticated has no reference jade artifact with unearth report, then we may search artifacts of different material such as bronze to find clues such inscriptions to make a comparison. For example, we have applied this method for the authentication of the Shin dynasty (AD. 8-25) Octagon-shape Jade Container with Dragon and Phoenix Motif and Inscriptions. For jade seal, the Authentication should be based on the scripts on the base and the style of motifs such dragon & phoenix of the handle. The interesting secret nonscientific method used by Chinese seasoned jade collectors is referred as hand feeling. The method used is to rub the jade for several times with thumb to see whether to have a feeling of oiliness but not sticky. If it is shining and oily, it is antique jade. If not shining and astringent, then it is modern. That is why many experts insist on

⁴ It should be noted that many private museums in China of recent years may collect fake items. Even public museums, sometimes the collection procedure is not so strict, in the case of Han's seal of an empress is one example, in my opinion.

touching the jade by hand to believe instead of only seeing it. They also claim that only studying the documents and the visiting the museums without investigating your own collection will not make you a real antique jade expert.



1.6 How to Distinguish Between Genuine Jade Artifacts and Fake Jade Artifacts?

"The Complete Book of Unearthed Jades In China⁵" is an excellent source to study the characteristics of genuine jade artifacts. An interesting observation is that the real old jades usually covered by calcification that in some cases was scrubbed away (called opening the window) in order the jade can be seen while the fake jade usually made it looking old by covering chemicals or dirt (reverse the process). If the whole jade covered lime to have a cloudy appearance or has scattered white pits, it is very probable fake.

1.7 Ritual Jade Artifacts in Ancient China

Ritual jade artifacts are used for praying for good harvests without flood and drought. Ritual jade artifacts in ancient China consist of six worshiping items and six ceremonial items. The six worshiping items are bi-disk for the heavenly deities, cong for earthly spirits, kwei, zhang, huang or arched plaque and tiger-shape plaque for the four deities in the four directions. The six ceremonial items confer to the six ranks of emperor, king, duke, earl, viscount, baron with four different kweis and two different bi-disks. This guide only presents the images of these six worshiping items here.

⁵ http://bbs.artron.net/thread-1217870-1-1.html

The fact that the ritual jades are the characteristics in Chinese culture may serve as the evidence the Sanxingdui Culture which has jades with the six worshiping items is not from other cultures.



1.8 On the Motifs of Dragon, Phoenix and Spirit's Face

The motifs of dragon, phoenix and spirit's face which also called Taotie motif can be traced back to the Hongshan and Liangzhu Cultures in the Neolithic period, in China. As shown on the items of Hongshan Culture, Phoenix & Dragon Plaque and Hongshan Culture, Knife with Motifs of Dragon and Phoenix listed on this website, the motifs of dragon and phoenix are similar to those of the jade artifacts appeared in the Shang dynasty. As for the motif on the spirit's face, it seems to derive from the spirit's face⁶ shown on the Liangzhu Culture. The spirit's face on the Liangzhu Culture's jade artifacts in turn is supposed to be derived from the various parts of the bird's body. The spirit's face motif as evolved to the Shang and Zhu dynasties has contained animal's features. As further evolved into Spring and Autumn and Warring States period, the spirit's motif has become a human face.

In the Neolithic period, the appearance of dragon, phoenix and spirit's face may be explained by the awesome to the unknown power of the nature. In the Shang and Zhu dynasties when the societies are governed by the kings and emperors, these motifs became the symbols communicating between them and the ordinary people. The spirit's face became scarce after the Tang dynasty and the motifs of the dragon and phoenix have become the symbols of royal families and purely as the auspice symbols. An understanding of the development of jade motifs will help to determine the age of jade antique in jade Authentication.

⁶ It is sometimes referred as beast's face



Chapter Two Jades Appreciation

2.1 The Essence of Chinese Jade Artifacts Should Be Rediscovered

The Chinese is a nation that has shown a great appreciation on jade. The jade history in China can be traced back as long as eight thousand years in the Xinglongwa Culture (BC6200-5400). The extent the Chinese cherishes jade can be realized by the way the Chinese compare the quality of gentleman to that of jade.

According to the Book of the Analysis of Chinese Characters⁷, jade is a stone of beauty that can be revealed in its five virtues. Its luster produces a feeling of warmth, the virtue of humaneness; its translucence enables one to comprehend its inner markings, revealing the virtue of morality; its purity ensures the austere virtue which harms no one.

It is a great happiness to enjoy a jade object of good quality by watching its color, hearing its sound, touching its surface and reasoning its vein development.

Jade artifact Authentication has been practiced widely and in great detail on the identifying the age and the genuineness of jade objects. The appreciation of jade artifacts should not be only on the historical aspect. More appreciation should be placed on the aesthetics and inner theme the jade artifact presents.

The elegance of Chinese jade will be rediscovered if jade enjoyment can be matched with the final purpose to establish a harmonious society for all human beings by following the virtues of jade.

²說文解字 Shuo Wen Chieh Tzu) of Hsu Shen (許慎) in Eastern Han dynasty (c. 100 B.C.

2.2 The Admirable Buddhist Jade Carving Arts

The glorious Buddhist arts in China Buddhism have a great impact on the Chinese culture for various respects. The Buddhist culture relics are abundant in the Chinese historical records. The stone carvings found in the caves of Tunhwang; Yunkang and Lungmen are known worldwide for their artistic achievements. In the Sui and Tang dynasties, Buddhism has reached its peak in popularity. Many Buddhist relics from the Sui dynasty have been kept intact due to the promotion of the rulers of the dynasties. Among the many caves carving of the Sui dynasty, the most abundant and glorious is the Mohrkao cave.

After the Tang dynasty, Buddhism has been combined with the thought of Confucians and the political ideas due to the emphasis of the imperial exploitation and management. In the nineteenth year of Jenkwang of the Emperor Tai Tsung of the Tang dynasty, Master Hsuan Tsang came back from India with 600-odd Buddhist scriptures many of which he and his disciples translated into Chinese. Lungmen Grottoes were carved in the Tang dynasty under the rule of Empress Wu (625-705). Most of the Buddhist statues found in the Sui, and Tang dynasties are carved with jade and gilt with gold. The bases are usually carved with bronze. The style of the Buddhist statues has deep genre of Tibetan mantra school. The motif of flying fairies shown on the aureole of the Buddhist statues found in the Sui and Tang dynasties conforms the genre of those appeared on the jade objects of the Tang dynasty.



2.3 The Lovely Mutton Fat White Jade

Material composition of jade antique is usually considered to be an important factor in the area of jade Authentication and appraisal. Nephrite consists of tremolite (Ca2Mg5 [Si4O11] 2 (OH) 2) and actinolite ((Ca2 (Mg, Fe) 5 [Si4O11] 2 (OH) 2). The jade consists mainly tremolite a more white color element. The more element of actinolite the jade contains the lesser the white color element the jade has.

The mutton white color nephrite contains almost all the tremolite and has creamy luster feelings. The texture of the structures of the mutton white nephrite is so small that it is not so easy for human eyes to observe. Mutton white Hotan jades are recognized by jade collectors the best quality jades, no wonder that the price of fine quality mutton white is higher and higher due to increasing demand and decreasing supply in recent years. The main source for the mutton white jade is Hotan (Hetian) jade which has its name since 1959. The Shang Dynasty eagle shown on this page is a sample of mutton white jade.



Chapter Three Jades Appraisal

3.1 How to Appraise Chinese Jade artifacts?

According to the jade Authentication and appraisal expert, Dr. Daphne Lange Rosenzweig, the value of jade antiques may be appraised through the following factors:

- 3.1.1 Physical properties:
 - a. Authentication and quality of the material
 - b. Size and condition of the carving
- 3.1.2 Aesthetic properties:
 - a. Quality of the workmanship
 - b. School, style and period characteristics
 - (Author's Note: This item may not

be relevant for jade antique. According to Prof. Henry G. Hartman⁸, beauty is harmony, proportion, symmetry, unity in variety, perfection, meaning, reason, or truth. I think it is the aesthetic property instead of school, style and period characteristics which should be relevant to the value of antique jades.)

- c. Consideration of shape, subject, color, proportion and size
- 3.1.3 Extraneous properties:
 - a. Provenance
 - b. Market volatility and local taste

Dr. Rosenzweig stresses the necessary discipline of judging jade on its own merits and not by its pedigree or the important name of its former owner. The jade antique to be collected must be those valuable items which are genuine with fine workmanship. (Source: Roger Keverne (Consultant Editor): Jade, Lorenz Books, 1995, pp. 196-207)

In practice, in order to carry out the actual appraisal, qualitative factors have to be transformed into quantitative measurements. Theoretically speaking, Delphi method may be applied via pooling the opinions of a group of experts. Generally speaking, jade appraisal usually takes market approach to evaluating a particular jade item by comparing prices of similar items sold in the market. If no market value may be found and before more sophisticated methods available, then the appraisal may be based on original purchase price multiplied by inflation index or use an inflation calculator.

⁸ Aesthetics, A Critical Theory of Art, Columbus, O., R.G. Adams & co. Year: 1919.

Applying partly Dr. Daphne Lange Rosenzweig's appraisal factors, I have established scales for each factor, including rareness, historical and cultural significance, quality of jade, workmanship, sizes⁹. To assign each index a monetary value, we may reach an appraisal value¹⁰. From the beginning, the index only assigned by my own judgement. In order to more consensus, we have to contact many experts to have their opinions to implement a Delphi Method approach for the Chinese antique jade's appraisal.

⁹ In the range index of 1 to 10 to reach weighted average. The indexes of historical and cultural significance and rareness should overwrite the other indexes. Selected items in Part Two have applied this appraisal method.

¹⁰ In addition to the market approach.

Part Two Jades Authentication, Appreciation & Appraisal Practices Using Jades of Different Periods

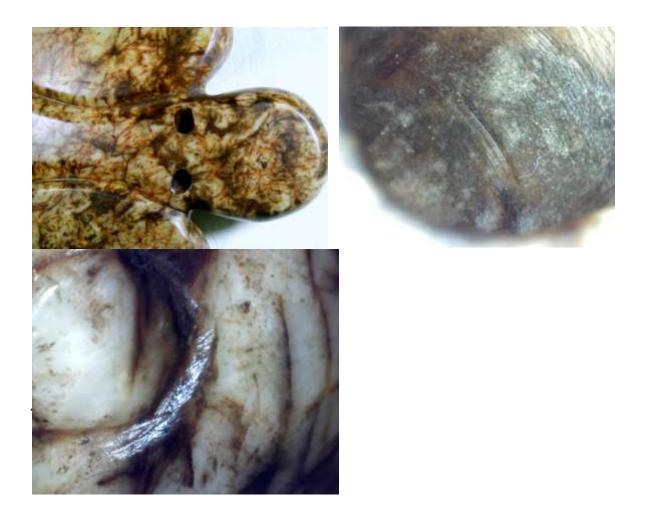
In part one of this handbook, I attempt to provide the readers a guide to the jade's authentication, appreciation & appraisal fundamentals. Here in part two, I am going to use real Chinese archaic jades of various periods to provide the readers hands-on experience for the Chinese archaic jades authentication, appreciation & appraisal. Most of the items have microsopic images for the evidences of antiquity.

Chapter Four Neolithic Periods

4.1. Hongshan Culture (3500 B.C. -2200 B.C.)

Jade Falcon, H. 25cm, W. 22cm, 3500grams.





Authentication:

The bright and piercing eyes carved with incised lines with a design more reflect the real object to conform the later genre of the Hongshan culture artifacts. On the backside of the falcon are two smooth double slant incised lines between the wings and the body. A double side bugle shape holes pertinent to Hongshan culture are seen on the neck.

Made of fine quality jade¹¹ and with perfect workmanship and big size¹², it is a rather rare and extremely valuable Hongshan jade eagle artifact. Its antiquity evidences include differential weathering, exposed crystal plane and diffusive markings. The style of carving, hole drilling method and ancient tool mark all conform the characteristics of Hongshan culture artifacts.

¹¹ White tone nephrite has a prominent mode within the low wavenumber range of 600-800 tested by Raman spectrometer.

¹² 3500 grams and H. 25cm (much bigger than the one H.18.3 cm which had been claimed the biggest in 2004).

Appreciation:

To reflect Hongshan people's dream of flying high in the sky, eagles are one of the main motifs other than the C-dragon or pig dragon for the Hongshan Culture jades. With strong and solid chest and the wings wide open, it seems ready to fly high. The designs of falcons have evolved from simple shapes of more abstract forms into more detail ones. This falcon is seen detail design represent the later period Hongshan genre. Coupled with high quality of jade and mastery workmanship, this is a valuable rare Hongshan artifact.

Tri-Bi Ax, H. 29cm

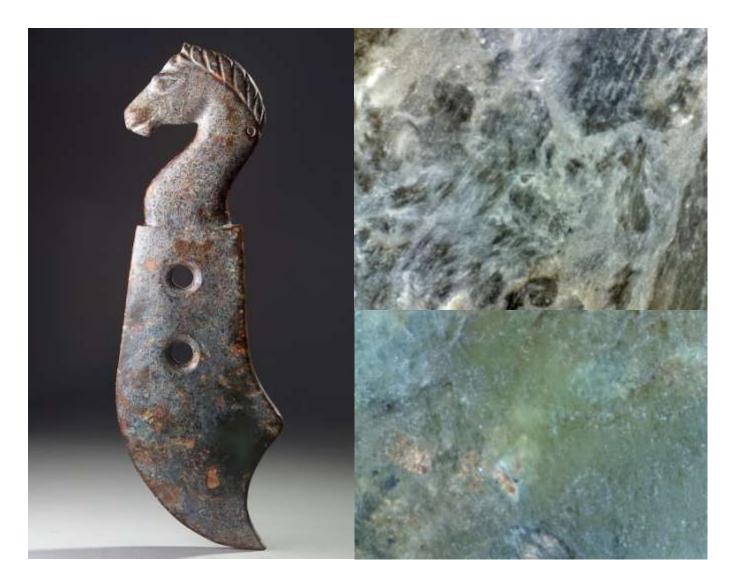


Authentication:

Jades such as Bi, ax or C-dragon are usually seen in Hongshan Culture. This artifact was dexterously combined the three into one piece that made this artistic achievement five thousand years ago. The sizes of bi are increasingly larger from the top to the bottom. There is a dragon with S shape as those in the Warring States (the S shape dragon may be derived from Hongshan culture) on one side with the head lies clockwise along the whole of the middle bi and the tail lie anti-clockwise along the hole of the bottom bi. The edges of the whole ax have been sharpened like a blade. With streamlined carving and mastery workmanship, this Tri Bi Ax is similar to the one (H.6.4 cm) unearthed from graveyard in Hutougou village, Fuxin County, Liaoning Province¹³. Antiquity evidences include differential weathering, additive crystal and diffusive markings.

¹³ A collection of Museum of Liaoning Province

Horse Head Jade Knife, L. 42cm, 2500grams



Authentication:

Made of nephrite, this jade artifact is emphasized in shape rather than the lines of curvature appeared on the surface as by many Hongshan Culture jade. With a horse head as the handle of the knife whose design has bold and rough style, this jade knife has the form of the most typical shape of an ancient Chinese weapon knife. As short mane and mouth looking of the horse are seen¹⁴. The horse of the jade knife has shown that it is the horse found in Mongolia that belongs to the geographical area of the Hongshan culture. Dissolved pits and additive crystals are seen in various areas of the knife.

Dragon Head Jade Knife, L.33cm, T. 2.5-3.5cm, 1500grams



Made of yellow tone Hetian jade, the handle of the knife has the shape of the dragon head which may serve as the origin of the dragon motif for the later period.

¹⁴ It may be Mongolian Tarpan of five thousand years ago.

There is a bugle shaped hole at the mouth part of the dragon. The conjunction between the handle and the blade is decorated with motifs of phoenix on both ends. Again, the phoenix motif is believed to be the origin of Phoenix for later times. On the back side of the blade, three new moon shape curves are seen. The cutting-edge is blunt. The surface of the blade is concave with a surface slanting outside. Antiquity evidences include differential weathering, diffusive markings and additive crystal to prove its old age. With mastery workmanship, this artifact may be one of the most beautiful large Hongshan jade knives.

Jade Owl Plaque, L.5cm, W.3.5cm



Authentication:

All carvings conform the Hongshan style: dual directional hole drilling to the wide opening from inside towards outside and the smooth curvature lining. Irregular rings are seen on the inside ward of the hole. Antiquity evidences include dissolved pits, differential weathering and ancient tool marks.

Appreciation:

This is the shape of an owl seen from the front side of the head. The two eyes of the owl are the most special part of the owl body which has been fully expressed by the design of this jade plaque.

Cicada Jade Bracelet 8.5cm x7. 2cm x2. 3cm



This oval shape bracelet is made of green tone jade. Decorated with four cicadas locating on the the four corners of the outer ring. Most part has been calcified with some area is seen transparent. Evidences of antiquity have differential weathering, cleaving veins and exposure crystals.

collar Bi, D. 23cm



Bi is one of the ritual jade in ancient China. This Hongshan Culture collar bi is similar to the Shang Dynasty collar bi¹⁵ unearthed in 1976 from Fuhow graveyard. In general, Bi is the ritual jade used to dedicate the heaven. The surface of this collar Bi is plain, while the surface of the Shang Dynasty collar Bi has circles of increasing size from the center hole towards the outer edge. The evidence of the antiquity includes dissolved pits and additive crystal.

Jade Bi, D. 12cm





¹⁵ D. 18.6cm, hole edge H.1.4 cm, T. 0.4cm. A collection of the Institute of Archaeology, Chinese Academy of Social Sciences.

Made of green tone jade, the object is identified as Hongshan bi based on the overall jade appearance and carving style. Antiquity evidences include differential weathering, dissolved pits and exposed crystal planes.

Appreciation:

This is a plain bi without any motif on it. Both edges of the outer ring and inner ring are round and smooth. According to ancient Chinese beliefs, Bi is the symbol to pray to the heaven in order that a good harvest will be given.

Jade Dragon Plaque, L. 9.5cm, H. 6.5cm



Despite its simple design, the artifact has expressed the art quality, perfectly on a thin piece jade less than a half centimeter in thickness. The wider square end is the head, and the narrower round end is the tail of the C shape dragon. On the head, there are two curved shallow lines. A hole with irregular

drilling traces is seen in one third of the line next to the edge of the head. It is made of white tone jade which has been calcified completely. Differential weathering and ancient tool marks are seen. The plaque of the C dragon may be the origin of Chinese plaque jade works for the later periods.



Jade Fish, L. 32cm, H. 22cm, Weight 3000g

Authentication:

The rainbow shape design of the Hongshan culture jade fish made of nephrite¹⁶. The fish's mouth opens slightly implies the cheerfulness of having water after the dry season. The body of the fish is separated from the head by two round shape incised lines which conform the genre of Hongshan jade carving such as the jade pig head pendant seen here (Hongshan Culture, Jade Pig Head Pendant, H.3.5 cm, W.4.5cm, T.2cm, A collection of Artifact Division, Culture Bureau, Tianjin City, China). The fins on both sides of the body are carved within the body instead of extending from the body.

This abstract design also becomes the origin of some of the fish designs¹⁷ seen in the Western Zhou dynasty. The fish tail also opens slightly and horizontally touches the ground to be consistent with the fish head. The color of the whole object is red with some green secondary additives. There is obvious differential weathering, dissolved pits, cleaving vein, diffusive markings and additive crystals to further confirm its antiquity. In general, besides mastery workmanship, this item has significant historical value due to its originality in design for artifacts made in later periods such as Western Zhou Dynasty

Appreciation:

In terms of the jade appreciation, this artifact may be looked into the following three aspects: 1. Abstract design: the curvy body to symbolize rainbow that has the shape of an arch or Huang. This object serves the originality of Chinese jade huangs in the later period. 2. The fish fin carved inside the body instead of extending from the body is an artistic expression signifies the Hongshan carving style. 3. The open design of the fish's mouth symbolizes the hope and joy of having water after long time suffers from drought.

¹⁶ Tested by Raman spectrometer

¹⁷ Zhou Jade Fish, L.11cm, W.1.9cm, T.0.2cm, unearthed in 1983, Graveyard #50, Zhang Jia Po, Chang An County, Shanxi Province. A collection of Chinese Academy of Social Science.

C-Dragon, H. 18cm



This C-Dragon is similar to (smaller than) the one¹⁸ unearthed from Sanxin Tala Village ruin. Generally speaking, delicate and graceful lines are shown, particularly in the eyes.

Dragon Head Set, H.16 cm, 7500grams



¹⁸ a collection of the Wengniute Banner Museum of Inner Mongolia Autonomous Region

With the design of C-Dragon head stands, the artifact has an unpolished curved base which is unusual in Hongshan jades. The water drop shape eyes are skillfully carved with low relief style. Three convex lines coupled with four concave lines are seen on the nose bridge. The head has a mane typical to the Hongshan C - dragon. With streamlines carving, it has also seen a trace of ancient tool, differential weathering and dissolved pits.

Jade Cicada, L. 14cm, W. 11cm



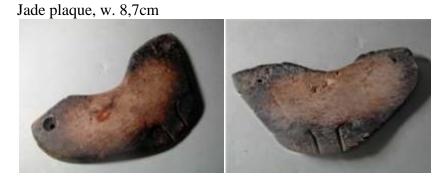
There are many varieties of jade Cicadas seen in the Hongshan Culture. The jade cicada is rather an abstract one with big size head and decreasing body with low relief carving. The tail has a slanting upward shape edge to express the state of tweeting. The entire antiquity phenomenon such as differential weathering, dissolved pits and additive crystals are available. Dual holes on the flank are seen with irregular rings. Jade Eagle standing on God set H. 25.5cm



Made of green tone jade, with a simple and plain design, this artifact is seen an eagle standing on the God. The simple and plain design is exaggerated with a bigger proportion of both God's head and eagle's head to the total body. It is implied that intelligence is utmost important for everyone, bird.., even God. Antiquity evidences include differential weathering, additive crystal and dissolved pits. The combination of eagle and god has transformed into that of an eagle and bear. The eagle is powerful in birds while the bear is powerful in animals. The combination of eagle and bear carries the meaning of hero in Chinese words¹⁹.

¹⁹英雄 in Chinese

4.2 Songze culture (3400BC – 3300 BC)



Authentication:

Based on the carving style and the appearance of the shape, this object is identified as Songze Culture jade plaque. Antiquity evidences include differential weathering, dissolved pits, additive crystals and ancient tool mark.

Appreciation:

From the shape seen, this should be a jade eagle flying in the sky, or the object symbolizing the idea that the human being wants to have a pair of wings to reach the ultimate top of a dream²⁰.

Jade Plaque, w. 9.7cm

²⁰ To use some imagination, may it be the advanced flying aircraft from alien seen by the ancient people?



Authentication:

Based on the carving style and form, the object is identified as jade plaque of Songze Culture, similar item is seen as L. 6.6cm, unearthed in 1974, at the graveyard of No.64, Songze relics, Qingpu County, Shanghai City. A collection of Shanghai Artifacts Regulatory Commission. Antiquity evidences include differential weathering, dissolved pits and ancient tool mark.

Appreciation:

The design of the jade plaque very similar in shape of the sperm whale that might be seen by people of Songze since their settlement close to the ocean.

4.3 Qijia Culture (2400 BC-1900BC)

Jade Knife, L. 32cm, W. 5cm T. 0.5cm.



Authentication:

In addition to the conforming the characteristics of unidirectional drilling of holes, this jade knife, is very thin to only 0.1cm on the thinnest part. The good quality is similar to the jade knife unearthed in Zong RI ruins in Tongde county in the Hainan autonomous prefecture in Qinghai, A collection of the Qinghai Provincial Museum. Antiquity evidences include differential weathering and diffusive marking.

Spindle-shaped bi, L. 8cm, W. 8cm



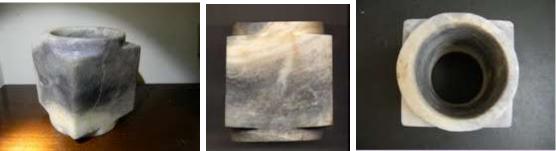
Authentication:

The object is identified as Qijia spindle shape bi based on the carving form and one directional whole drilling style. One hole is seen on each diagonal side of the bi. Antiquity evidences include differential weathering, exposed crystal plane, cleaving vein, dissolved pit and diffusive marking.

Appreciation:

This spindle shape jade bi may serve as the physical evidence that the Qijia culture has a highly developed textile industry.

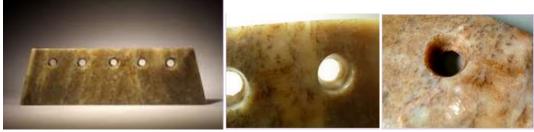
Jade Cong, H. 9.5cm, W. 8cm



Authentication:

The plane on each side merges the round part of the center cylinder without a clear boundary as the Congs of other cultures. Similar items are seen in the National Palace Museum. Antiquity evidences include differential weathering, cleaving veins and dissolved pits.

Jade Knife, L. 36cm, W. 9cm T. 0.5cm

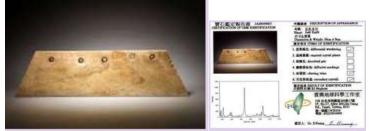


Authentication:

With the shape of a trapezoid, this jade knife is made of semitransparent jade. It is seen five different sizes of holes with unidirectional drilling on the upper part of the blade. Both sides of the blade have shown a convex profile. The color and quality of jade are similar to those of the jade knife

of Shanghai Museum collection. Antiquity evidences include cleaving vein, diffusive marking and mica.

Jade Knife, L. 46cm, W. 12cm T. 0.5cm



Authentication:

In the shape of a trapezoid, this jade knife is seen five different size holes with unidirectional drilling on the upper part of the blade. Both sides of the blade have shown a convex profile. Antiquity evidences include additive crystal, cleaving vein and differential weathering. In addition, the back end of the knife has seen calcification phenomenon. One of the hypotenuses is seen several small cracks owing to the effects of ages.

Notched Jade Ring, D. 8cm



Authentication:

Based on the size of the inner hole, this object should be called a ring. With notches on the outer edge of the ring, it is thus a notched ring. The notches are divided into three major sections; each

section has four group notches. Antiquity evidences include exposed crystal plane, differential weathering and diffusive marking.

Jade Ring, D. 13cm, T. 0.3cm



Carved with semitransparent jade, this jade ring is similar to the items seen from the unearthed in ruins of La Jia, Minhe Hui and Tu autonomous county in Haidong prefecture. A collection of Qinghai Provincial Museum. Antiquity evidences include additive crystal, diffusive marking, mica and differential weathering.



Jade Zhang, L. 18cm

Authentication:

Carved with translucent jade with a yellow tone, this jade zhang is seen sharp blade with two different length points. Near the handle are seen three notches on each side with one directional drilling hole located at the center between the two sides. Antiquity evidences include cleaving veins, dissolved pits and deteriorate marking.

Jade Bi, D. 23cm, T.0.3cm



Authentication:

Carved with white jade from the area of Qijia culture, this jade Bi is seen rectangular flavored round shape with unidirectional hole. Similar item seen as the one Huang Liang Liang Tai, Wuwei City, Gansu Province. Antiquity evidences include additive crystal, diffusive marking and differential weathering.

4.4 Longshan Culture (2800 BC – 1700 BC)

Notched Jade Bi, D.15 cm



The design of this object is similar to the notched bi²¹ unearthed in 1983. Graveyard #50, Zhang Jia Po, Chang An County, Shanxi Province. A collection of Chinese Academy of Social Science.)Notched Bi, D. 8cm, Longshan Culture, Unearthed from Li Village, Teng County, Shangdon Province, China 1978, a collection of Museum of Teng County, Shangdon Province. Antiquity evidences include additive crystal and differential weathering.

²¹ Graveyard #50, Zhang Jia Po, Chang An County, Shanxi Province. A collection of Chinese Academy of Social Science.)Notched Bi, D. 8cm, Longshan Culture, Unearthed from Li Village, Teng County, Shangdon Province, China 1978, a collection of Museum of Teng County, Shangdon Province.

4.5 Liangzhu Culture (3400BC-2250 BC)

Jade Cicada W. 8.3cm, H.17 cm



Authentication:

With a flat back side, the cicada has two high relief rectangular eyes on each side of the head. A circular line with intersection design is at the neck. The wings are carved with 60 degrees round curve by the technique of surface pressed down to show the raising effect. The tail is seen the shape of seeing notches. The typical deity face motif of Liangzhu culture is seen on the back. With streamlined carving and mastery workmanship, this cicada is one of the masterpieces of Liangzhu jade. Antiquity evidences include differential weathering, additive crystal, exposed crystal plane and dissolved pits.

Jade Plaque, L. 7cm



Authentication:

This object is identified as Liangzhu Culture jade plaque based on the carving style and motif characteristics. With an oval shaped eyes, carved with incised lines different from trenches made by a metal tube like other Liangzhu jades. The exaggerated eyes are supposed to be those of a mysterious bird as seen as the typical motif of Liangzhu cultural jades. There are two pairs of two directional holes on both ends of vertical edges on the top edge of the plaque. Antiquity evidences include differential weathering and additive crystals.

Jade Cong, H. 11.8cm, D. 19cm, 11kgs



Authentication:

This Cong is similar in design, but bigger than the one²² unearthed from Fan Shan Graveyard, Chih Shan Village, Chang Min Township, Yu Hang County, Zhejiang Province, 1986. Antiquity evidences include differential weathering and additive crystals.

Crown Shape Jade Plaque, L.13.5cm, W.6.5cm



This object is identified as Liangzhu Culture jade plaque based on the motif and carving style. Similar item is seen for the Crown shape jade plaque²³. Antiquity evidences include differential weathering and dissolved pits.

Jade Cong, H.30.5 cm, W. 6cm.

²² H. 8.8cm, E.D. 17.6cm, Weight 6.5kgs, A collection of Archaeology Institute of Zhejiang Province.

²³ H.6cm, Upper W. 9.15cm, Lower W.7.5cm, T.0.35cm, unearthed in 1986 at Graveyard of Fan Shan Village, Zhi Shan Country, Chang Ming County, Yuhang District, A collection of Zhejiang Provincial Archaeologist Institute.



Authentication:

Carved with white jade, the cong has eight sections alternating arrangement of deity faces and crowns which have a curvature cut mark that may be interpreted as the recording of the pass away of the queen. Compared to the typical Liangzhu cons, this one has employed more elements of low relief carvings such as the eyes of the deity. Antiquity evidences include dissolved pits, additive crystal, cleaving vein & deteriorate marking.

Jade Septic, L.33.5cm, W.3.5cm



Authentication:

Based on the carving style and motif, the object is identified as Liangzhu Culture jade septic. Similar object is seen for the awl shape jade²⁴ unearthed in 1982 from Graveyard N0.9 Fuquan San District, Qingpu, Shanghai Municipality. Antiquity evidences include differential weathering, dissolved pits and additive crystals.

²⁴ L. 34cm, W.1.5cm, A collection of Regulatory Commission of Shanghai Municipality.

Jade Plaque, L.17cm, W.7.5cm



Authentication:

Based on the motif and carving style, the object is identified as Liangzhu Culture jade plaque. A similar item is seen as for the jade plaque²⁵, unearthed in 1986 at the Graveyard of Fan Shan Village, Zhi Shan Country, Chang Ming County, Yuhang District. Antiquity evidences include differential weathering, additive crystal and dissolved pits.

²⁵ H.5.6cm, W.13.8cm, T.0.7cm, A collection of Zhejiang Provincial Archaeologist Institute

Jade Trident, w. 30cm, h.17 cm



Authentication:

The jade material and carving style of this object are similar to those of Liangzhu Culture Jade Trident, H.3.65 cm, w. 5.9cm, Unearthed from Fan Shan Graveyard, Chih Shan Village, Chang Min Township, Yu Hang County, Zhejiang Province, 1986, A collection of the Archaeology Institute of Zhejiang Province. Antiquity evidences include differential weathering and exposed crystal planes.

4.6 Shijiahe culture (2500BC-2000BC)

Jade Tube, D. 3cm, H. 6.5cm



The carving style and jade quality are similar to the jade artifact unearthed Hubei Tianmen County Xiaojiayingzi Wugi, A collection of Hubei Jingzhou Museum. Antiquity evidences include calcification, cleaving vein, differential weathering and dissolved pits.

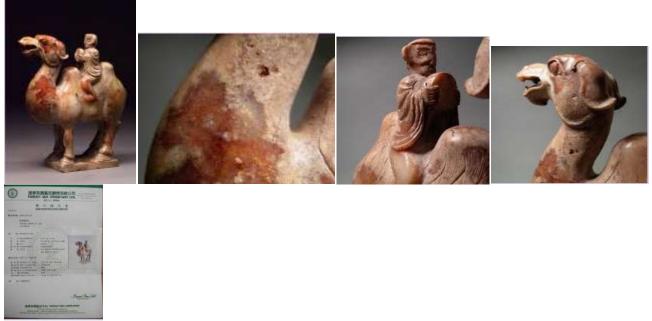
Chapter Five Sanxingdui Culture (1600 BC-221 BC)

General with Sword Set, H.28 cm & H.21 cm



The larger piece measures 28cm in height while smaller piece 21cm. Both artifacts have similar design. Each wears mask with dragon design. Holding an awl sharp sword, both have thick lips and simplified square legs. The cong of the larger piece has an elephant motif to imply the peace for the country. The mythical animal motif on the bottom of the standing base for a smaller piece is carved with the decreasing contour style. Both pieces are made of Hetian nephrite with the archaic phenomena of additive crystals, dissolved pits, diffusive markings and cleaving veins.

Jade Knight on Camel Back (H.18.5 cm)



Having two humps, the camel of this artifact is bosom. With eyes having a piercing gleam, the mouth of the camel is open to outcry. The knight on the camel back tries to get some water from the canteen, preparing for a long and tough journey in the immense desert. The artifact is made of white nephrite with the obvious phenomenon of red, brown markings, cleaving veins and dissolved pits.

Jade Priest Head, H.18cm



Based on the carving styles of the eyes, ears, nose and mouth, the characteristics of this jade priest's head conform those of the typical jade priest heads of Sanxingdui Culture. The antiquity evidence of additive crystal is seen in many locations of the object.

Jade Priest Head, H.19.5cm



Authentication:

The jade priest's head is seen the carving style of the bronze priest unearthed from the number two praying pit in Quanghai Sanxingdui, a collection of Sanxingdui Museum. Ancient Chinese characters unidentified are seen on the head. Antiquity evidences include additive crystal and differential weathering.

Jade Priest, H.20 cm



Based on the carving style, this gray tone jade priest is identified as a Sanxingdui Culture artifact. The hands are seen the posture as the bronze priest unearthed from the number two praying pit in Quanghai Sanxingdui, a collection of Sanxingdui Museum. The priest is standing on the square cube with four sides with the motif of connected sprouts having a style of Warring States. The bottom of the base has ancient Chinese scripts of $\Leftrightarrow \boxplus \bot$ primes (upon seeing the order, stop marching). Antiquity evidences include additive crystal, cleaving vein, dissolved pits and differential weathering.

Jade Statues Set with Priests Holding Bi, Cong, Huang & Kuei, H.45 cm



These four pieces are a set. Each one is composed with five separate pieces which are the priest's body above from the legs, the two legs, the stand with backward angle, the phoenix headstand with four faces, and the openwork base. The exaggerate presentation of eyes of the priest and the phoenix

had the stick design to imply the powerful eyesight. The big butterfly wind style ears of the priest may have the implication of powerful hearing. The dress, the carving style of thin incised line with cloud motifs, the slant carving of thunder and the open work with a rope motif all confirm the typical art genre of the Warring States. Antiquity evidences of additive crystal, dissolved pits, differential weathering and diffusive markings are seen. Made of white Hetian nephrite with coupled with historical significance, cultural importance, artistic implication and mastery workmanship²⁶, this set of jade priests is believed to be the topknot collection of the Sanxingdui Culture jade artifacts.

²⁶ Please be noted that the multiple contours and the detail of curvature shown in the design of the shoulder have explained the mastery workmanship which modern copy would never know. In addition, beautiful contour surface of the phoenix on the base also explained it all.

Chapter Six Xia Dynasty (2183 BC - 1751 BC)

Jade Zhang, L.36cm, W.10cm



Carved with yellowy green tone jade, this Zhang is seen three notches at the end of the blade. On the flange are two strips of low relief square spirals carving which are separated by a space with two notches on both ends. Antiquity evidences include dissolved pits and additive crystals.

Xia Dynasty, Jade Zhang, 51cm, W.12cm



Authentication:

Carved with yellowy green tone jade, this Zhang is seen special structure at the end of the blade. The structure is composed with two square shape branches with four notches in-between. On the flange are two strips of low relief rhomboid shape carving which are separated by a space with four notches on both ends. The number of notches appeared on the flange is believed to have special meaning related to the ranking of the master who carries this zhang. Antiquity evidences include dissolved pits and additive crystals.

Jade Zhang, L. 36cm, W. 12cm



Authentication:

Carved with yellowy green tone jade, this Zhang is seen two peaks at the end of the blade. Between the blade and the handle are seen two graceful parallel square spiral shapes with a space having three notches. Antiquity evidences include additive crystal, dissolved pits and water erosion markings.

Jade Ax, L.29.5cm, W. 11cm, D.3 cm



Authentication:

In the shape of the ax, the handle of phoenix and dragon, the carving style of lining and hole drilling pattern conform those of the Xia jades. The script on the blade read: 五公祭日上呈 (present on the date of pray to the fifth duke). The lines of the scripts have the style of dual incise lines forming lines having convex effect. Additive crystals are obvious.

Jade ax-shape notched bi, D.24 cm



With a round shape, having a hole of which the diameter is shorter than the length of outside space, the object is thus identified as Bi. Notches are seen on both sides; thus it is identified as notched bi. The upper part is thick with the shape of the handle, while the lower part is shaped like a blade. The object is identified as an ax. This object is thus identified as jade axe-shape notched bi. Antiquity evidences include dissolved pits, additive crystal and differential weathering.

Chapter Seven Shang Dynasty (1766 BC-1122 BC)

Jade Bi, D.14 cm



Authentication:

Carved with yellow tone jade, this bi has two dragon motifs on each side. The carving style is the two incision line to form a line having the convex effect. The dragon has been decorated with the Shang Dynasty arms motif of the square angle curling lines. Antiquity evidences include additive crystal, cleaving vein and diffusive markings.



Dragon Fish, L.19.5cm

Authentication: Carved with top quality white jade, the fish head has the design of the dragon with an ax shape mouth. Two pair of legs is seen in the center part. Square angel lines carrying the Shang Dynasty genre of ko or hooked sword are decorated for the whole body. Fins are detailed with gracefully incised lines. Antiquity evidences include additive crystal and differential weathering.

Jade Eagle, H. 14cm, W. 12cm. 500grams



Authentication:

The artifact is made of mutton white jade²⁷. Adopting the motif seen in many jade artifacts²⁸ in the Longshan Culture, this gracious eagle sees low relief lines with the carving style of pressing surface special twisting motifs which are believed the symbol of Ko Halberd Ax. The shield symbol as seen on the tiger²⁹ unearthed in 1976 from Fuhow graveyard, a collection of the Archaeologist Institute of the China Academy of Social Science. It is a top grade art work in terms of design, carving workmanship that it is no doubt one of the most beautiful jade eagles in the Shang dynasty even in the Chinese jades. The archaic evidences of differential weathering, cleaving veins and diffusive marking are obvious to prove its genuineness. In addition, it has similar exterior aging appearance as the Shang Jade bird³⁰.

Appreciation:

The similarity in eagle design between this jade and the one shown in on the Longshan kwuei has expressed the heritage of the Longshan culture to the Shang Dynasty. The ko and shield motifs shown on this eagle have provided the evidence that the worship and warfare are the most important events of the nation (國之大事, 在祭祀與戎) in the Shang Dynasty. This eagle has served as a spiritual symbol of which the Shang people who believed the phoenix eagle are their ancestor (In Chinese 玄鳥之後).

Appraisal Indexes:

- 1. Quality of jade: 10
- 2. Rareness: 9
- 3. Historical and cultural significance: 9
- 4. Workmanship: 10
- 5. Size: 8
- 6. Condition: 9

Jade Musical Slab H. 15cm, W. 8.5cm

²⁷ refractive index has been tested by GIA Duplex II Refractometer: reading 1.61

²⁸ Jade Kwuei with eagle motif, L.30.5cm,W.7.2cm, T.1.05cm, collection of The National Palace Museum

²⁹L.13.3cm, also see Jade plaque w/Eagle and Priest heads, H.9.1cm, W.5.2cm, T.0.9cm, a collection of the Palace Museum.

³⁰ H.10.3cm, W.4.3cm, unearthed from Graveyard No. 63 of marquis Jin in early Western Zhou Dynasty in Beichao Village, Chiowl County, Sanxi Province, A collection of Shanxi Museum.



Authentication:

With the shape of zhang having narrower handle with a long round hole, this musical slab has Shang Dynasty motif on the deity's face and hooked sword with plain level reduction carving style. Antiquity evidences include additive crystal and diffusive marking.

Jade Ring, D. 6.5cm

Carved with white jade, this ring has a design of four dragons with decreasing size by using low relief, high relief and open work carving style. Scripts read as the marquis adds a son name Zenshih who will join to share the land that appeared on both sides. Antiquity evidences include differential weathering, additive crystal, cleaving vein and calcification. This ring is similar to the other ring in terms of quality of jade, style of scripts and appearance of antiquity. The meaning of the script of this ring is related the other ring. The reading may be arranged as it follows:

The marquis adds a son name Zenshih who will join to share the land; The King issued orders to have the property for public use.

侯又子壬十宗邑天下爭田矣. (Both rings have the appearance of the so-called glass shining (glossy))

Jade Ring, D. 6.5cm



Made of top Hetian mutton white jade, this ring has two sets of dragon motifs with carving style of reduction surface low relief lines of the genre of Shang Dynasty appear on both sides. Inscriptions (皇王令宦用作公富 The King issued orders to have the property for public use (as seen on the right hand side images)) of a bronze writing style are seen on the side of the outer edge. Archaic evidences of differential weathering, diffusive markings and exposed crystals are apparent. With mastery workmanship and historical scripts, this jade ring is an important artifact as well as artwork.

Chapter Eight Western Zhou Dynasty (1122 BC-771 BC)

Jade Bi Pair, D. 14cm, T.0.5cm

Authentication:

Carved with green tone top quality jade, this jade Bi is seen two opposite position dragons on both sides. The carving style is unique to the Western Zhou big slant 45 degree incised lines. A similar item is the Palace Museum collection, D.16.1 cm, T. 0.4cm Bi. Antiquity evidences include differential weathering and diffusive marking.

Jade Plaque, 8cm x 7cm x 0.5cm



Carved with yellow tone top quality jade, this jade plaque has the shape of rectangular with round corners. Each corner has a phoenix motif with Western Zhou carving style on each side. Between the phoenixes, there are two holes with on long round hole, one round hole. The plaque may be used for decoration of a hat or dress. Antiquity evidences include additive crystal and differential weathering.

Jade Tiger Plaque Pair, 7.5cm x 4cm x0. 3cm



Carved with top quality jade, the tiger plaque designed with mother and son tigers. Graceful 45 degree big slant carving incised lines with Western Zhou genre are decorated to express the stripes of the tiger. Antiquity evidences include additive crystal, diffusive marking and calcification. One of the major themes of Chinese jade artifact design is the mother and child. This tradition has last a long period at least from the Western Zhou to Han Dynasty.

Jade Fish Pendant, L. 7.5cm



Jade Authentication:

Pendant w/ Fish Motif, Western Zhou dynasty, L. 7.5cm³¹. The word of fish in Chinese pronunciation has the meaning of surplus. Fish motif is a popular one among many motifs in Chinese jade design. Antiquity evidence is obvious from the additive crystal seen. Carving style and design pattern are similar to the two fish pendants, as shown here, unearthed in 1972 and 1980 from Jin Gao Ruins Changan County, Xian City and now are a collection of Artifacts Bureau, Xian City, China.

Appraisal Indexes:

³¹ Compare similar item from Smithsonian Museum: Pendant: fish 1300-1050 B.C.E. Shang dynasty Nephrite H: 5.5 W: 5.5 cm China Purchase, F1979.28.

- 1. Quality of jade: 7
- 2. Rareness: 6
- 3. Historical and cultural significance: 6
- 4. Workmanship: 8
- 5. Size: 2
- 6. Condition: 10

Jade Pig L. 13.5cm



Made of jade with green tone, this artifact has a bosom body with ears upright. The design has the tenet of Liangzhu Culture. The mouth has a shape of the ax and the both sides have shown the motifs of spiral with low relief and incised lines. Open spaces are filled with thunder motif with slanting lines. Archaic evidences of differential weathering, cleaving veins, diffusive marking and secondary additives are presented

Chapter Nine Spring-Autumn & Warring States (7705B.C. - 221 B.C) Period

Jade Container, H. 26cm



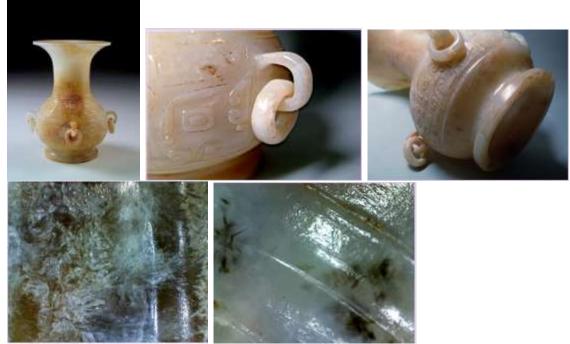
The auspicious symbols of dragons and phoenixes have been layout ingeniously with three carving techniques of high relief, low relief and incised thin lines. On the top of the lid, stands a high

relief phoenix shows high spirit with sharp eyes and raising feathers. On the surface of the lower part of the lid, lower relief motifs of curling dragon with the genre of the Warring States period are seen. The upper part of the main container is narrower than the lower part. Each side of the upper main container inclined a high relief dragon with curly body. The dragon stretches the tongue out with a fierce appearance. On the surface of the middle part of the container, low relief motifs of abstract dragon and phoenix are layout symmetrical. The prodigious craftsmanship is almost beyond description, and the motifs covered are so complete that they are sure to serve as the benchmarks of those of the Warring States. Antiquity evidences consist of diffusive marking, additive crystal and differential weathering.



Made of mutton white Hetian jade as a whole piece of work, this vase is seen three sections. The upper and lower sections are in the shape of a trapezoid, with the middle section around corner cube. The four corners of the container are seen typical Warring States wave curve notched edge with open work. The upper and lower sections are seen low relief motifs of spirit's face and phoenix and the middle section with spirit's face and the dragon. The motifs are extraordinarily fine carved. The archaic evidences of differential weathering and cleaving veins are found in several spots on the object.

Jade Vase, H. 14cm



The object is made of Hetian jade with pure white glassy touch quality. As far as the design is concerned, fluid curvature and symmetry perfection are seen for the whole vase. The size of the vase mouth and that of the body is equally presented.

The height of the vase neck and that of the lower body is equal. Loose rings are seen on each side of the quarter area. On the surface of the one third area of this object, there is the deity's face surround by low relief dragon motifs. The archaic evidences are seen to include deteriorated marking and additive crystals. This jade is one of the rare and marvelous items for professional collectors.



Dragon Fish, L.8.3cm, 50 grams

The inherited form of dragon fish from the Shang Dynasty, this dragon fish has the typical motif of Spring Autumn Period auspicious cloud with the carving style of low relief but prominent contour. The over the wide mouth is a variant of the ax shape mouth of the Shang Dynasty pattern. The wide open with curling up and down is the same of that of the Shang Dynasty. While the fin of Shang dragon fish is detailed to express the element, the present one to integrate the fin into the body as a whole. Antiquity evidences include differential weathering, cleaving vein and exposed crystal plane. Made of white jade, this jade dragon fish has mastery workmanship.

L.7.5cm, W.6.5cm, T.1cm



The auspicious cloud motifs have the same style as those of the Late Spring Autumn Period Jade Bi³² unearthed in 1986 from Zenshan, Wu County, Jiangsu Province. Considered as a symbol of good fortune by ancient Chinese, jade toad has been always a favorite collection item by serious as well as amateur collectors. Combined by special refined workmanship, in addition to the general antiquity of diffusive marking, cleaving vein and additive crystal, this item has beautiful calcification development which proves its authentication and most collectors would love to enjoy.

³² Outer D.7.5cm, inner D.2.37cm, T 0.3cm. a collection of Artifacts Management Commission of Wu County, Jiangsu Province.

Jade Huang, L. 13.2cm, W.2.8cm, T. 0.5cm, 45grams





Carved with white jade with glossy bright, this jade Huang has a design of dual dragons on both ends with a whole body decorated with beautifully incised lines with slant slope carving. Two small dragon heads are seen on the center part of the huang. Three holes are seen on the object. One at the top of the middle. With mastery workmanship, the carving styles of this huang conform those popular in the Warring States period. Low relief with slant slope lines which have shown elegant and streamlined curvature. With a mastery carving, the plaque is one of the masterpieces. Antiquity evidences include additive crystals, differential weathering and diffusive marking. Similar items³³ are seen in the museums, in China.

Appraisal Indexes:

- 1. Quality of jade: 10
- 2. Rareness: 7
- 3. Historical and cultural significance: 6
- 4. Workmanship: 8
- 5. Size: 4
- 6. Condition: 10

Jade Huang w/ Motif of Dual Dragons, 12cm x 2.5cm, 35grams

³³ Late Spring Autumn Period Jade Huang, L. 10.9cm, W.3cm, T.0.2cm, unearthed in 1979 from the Ho Guo Dui graveyard #1, Guo Se County, Henan Province, a collection of the Artifacts Institute of Henan Province, Late Spring Autumn Period Jade Huang, L.8.75cm, W.2.4cm, T.0.2cm, unearthed in 1986 from Zenshan, Wu County, Jiangsu Province, a collection of Artifacts Management Commission of Wu County, Jiangsu Province.



Authentication:

Both the nose and the beard of the dragon head have the shape of an ax which has the pronunciation of tiger in Chinese. The section between the two heads sees the typical auspicious cloud carrying the genre³⁴ of the Spring, Autumn & the Warring States period. The auspicious cloud carving style conforms that of Jade Huang, L.5.4cm, W.4.3cm, T.0.5cm unearthed in 1978 from the graveyard of Marquis Yi of Zeng, Leigudon, Suizhou City, Hupei Province, China. A collection of the Hu Pei Province Museum). Archaic evidences of the additive crystal plane, diffusive markings and differential weathering are seen.

Appraisal Indexes:

- 1. Quality of jade: 8
- 2. Rareness: 6
- 3. Historical and cultural significance: 6
- 4. Workmanship: 8
- 5. Size: 4
- 6. Condition: 10

Jade Cong H.9cm, W. 7cm

³⁴ The dragon head carving style conforms that of Jade Huang, H6.8cm, L.15.4cm, T.0.3cm unearthed in 1977 from graveyard #2 of Duke Yang, Chuang Fon County, Anhui Province, A collection of Artifacts & the Archaeology Institute of Anhui Province.



The cong has the shape of a square cube with four wings opening phoenix is holding the four corners. The four sides of the cong are decorated with lying silkworms that have the Spring Autumn carving style. Antiquity evidences include cleaving vein, dissolved pit and calcification.

Jade Mouse, L.10cm



Made of white jade, with style of Spring Autumn, this mouse is vividly carved and has mastery workmanship. Antiquity evidence is seen in the calcification and additive crystal.

Jade Tiger, L.7.4cm



Made of Hetian jade with green tone, this jade tiger has the motif of auspicious cloud with Autumn Spring period style. The openwork carving at the mouth has demonstrated a highly skillful way to drill the holes with tiny remaining connecting areas which are almost not possible to achieve using modern tools (Genuineness may be thus implied). In addition to the mastery workmanship, antiquity evidences of cleaving vein, differential weathering, additive crystals and calcification are presented.

Appraisal Indexes:

- 1. Quality of jade: 7
- 2. Rareness: 6
- 3. Historical and cultural significance: 5
- 4. Workmanship: 7
- 5. Size: 3
- 6. Condition: 10

Jade Dragon Turtle, L.7.5cm, H.5 cm, W.4cm



The evidence of the different appearances, causing by different conditions of sunlight, water and earth can be seen from this Warring States jade artifact. One side of the object facing the earth covering with mud has shown preserving the surface while the other side has direct sunshine and rain has evolved into the rough but smooth surface.

In addition, antiquity evidences of additive crystals, cleaving vein and diffusive marking are shown. The object is a censer with openwork carving. The major motifs are two mythical beasts. The small one is the typical Warring States style dragon climbing on the bigger one with open work turtle shell.

Jade Bi-disk, D. 32.8cm, T. 0.6cm.



Authentication:

The bi-disk has a dual motif for both sides. On each side, there are two layers of motifs separated by a rope motif. The inner layer is crop motif. The outer layer consists of four sets of spirit's face. The spirit's face is composed of two dragon heads, which in turn composed from phoenix. The carving technique of the artifact applies the typical Western Zhou Dynasty 45 degree slant carving and slimly incised lines for the Spring Autumn period to the greatest extent. The spirit should be touched by offering this bi-disk. Judging by the mastery carving and superior and unique design, this is believed to be the bi disk closest to the legendary Ho's bi before fully identified. Antiquity evidences consist of differential weathering, diffusive marking and ancient tool mark.

Jade Dragon Ring, W. 19.3cm, L.32cm



Authentication:

Carved with chartreuse tone Hetian jade, this object is skillfully designed with a standing dragon coupling a ring of which one side carved with two low relief phoenixes on the front and crop motif on the back. The carving style has the Warring States motif and the connected thin incised lines. Antiquity evidences include dissolved pits, additive crystal and calcification.



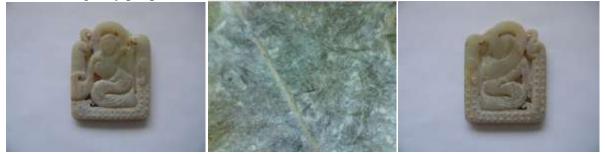
The artifact is made of Hetian jade with a yellow tone. Three sections comprise the whole object with the upper section with low relief phoenix whose tail is exaggeratedly extended is the biggest, the middle section with low relief deity face motif is bigger, and the bottom section which is plain is the smallest. The archaic evidences of differential weathering and additive crystals are found in several spots on the object.

Jade Tiger Plaque, L.14cm, W.4cm



With exquisite workmanship, carved of jade of green tone with big slant 45 degree incised lines, the carving style of this jade tiger is exactly the same as a pair of Jade Tiger, L.14.6cm, T.0.4cm, unearthed in 1978 from graveyard #1 of Xisi, Henan Province. A collection of the Institute of Artifacts Study, Henan Province. Antiquity evidences include differential weathering, dissolved pits and diffusive markings.

Jade dancing lady plaque, H. 7.1cm, W.6.0cm, T.0.5cm



Appraisal Indexes: 1. Quality of jade: 8 2. Rareness: 7

- 3. Historical and cultural significance: 5
- 4. Workmanship: 9
- 5. Size: 4
- 6. Condition: 10

With mastery workmanship, this jade plaque is made of semi translucent white jade with a wonderful design of the dancing lady surrounded by dragon and phoenix. The connected crops motif conforms the one shown on the Warring States Jade Huang³⁵; The carving style the dancing lady is similar to the one late Warring States or early Warring States Jade dancing lady plaque³⁶. Antiquity evidences include differential weathering, cleaving vein and additive crystal. Jade Plaque w/Motif of Phoenix & Dancing Lady, W. 15cm, H.8 cm, 110grams



Carved with green tone Hetian jade, this jade plaque has a design w/Motif of Phoenix & Dancing Lady. With mastery workmanship, the carving styles of this plaque conform those popular motifs such as net shape and thin stream lines in the Warring States period. Antiquity evidences include differential weathering, cleaving vein and diffusive marking.

³⁵ H6.8cm, L.15.4cm, T.0.3cm unearthed in 1977 from graveyard #2 of Duke Yang, Chuang Fon County, Anhui Province, A collection of Artifacts & the Archaeology Institute of Anhui Province.

³⁶ H. 3.5cm, W.3.5cm, T.1.0cm, unearthed in 1983 from the graveyard of King Nan Viet Zhao May, Shengang, Guangzhou City, Canton Province, a collection of Museum of King Nan Viet of Western Han.

Jade plaque, L. 8.5cm, W.3. 5cm



Handsomely crafted by yellow tone jade, this jade plaque resembles a reduced-size mask. The front side shows a convex plain with a bump in the center where sees a hole in the upper. The thickness gradually decreases to both edges. The upper edge has three grooves. The lower end is narrower and has rounded corners. The major motif of the front side is low relief Deity face. The forehead of the Deity face has two dragons. The rest area is padded with cloud motifs in both low relief and incised line styles. This jade plaque shows great attention to detail, phenomenal subtlety of surface and fluent lines. Antiquity evidences are different weathering and calcification.

Chapter Ten Chin Dynasty (221B.C. - 206 B.C)

Seal of Empress, H.7.5 cm, W.6cm.165grams





The material has been tested with GIA Duplex II Refractometer with refractive index 1.61 spot reading to prove it is made of natural nephrite. The carving style of the mouth of the mythical animal is similar to that of the Chin Dynasty. The low relief carving without open work is unique which is different from the other periods (such as the Shang and Han Dynasties).

The style of the scripts on this seal conforms the bronze seals (around 2.2cm x 2, 2cm) of the Chin dynasty of the Palace Museum of Beijing's collection. Especially the last stroke of the seal character of this seal conforms the typical lining of the Chin calligraphy style.

The artifact consists aging elements such as diffusive markings; deteriorate markings, calcification, cleaving veins, exposure crystals, differential weathering and one third of the object is fully calcified to form evidence that seasoned collectors should recognize its genuineness at a first glance.

According to History of the Former Han Dynasty(漢書), composed by Ban Gu(班固), First volume, List of High Ranking Officials of Royal Court(百官公卿表上): Zhan Shi 詹事, Public official in the Chin Dynasty. Responsible for the affairs of the empress and princess's families. Beginning Learning Record《初學記》, Compiled by Xu Jian (徐堅) in the Tang Dynasty, Volume

1 Inner Court Section (中宮部) Empress First (皇后第一) mentioned Chin had the title of Emperor, the first wife is called Empress. The Han Dynasty had followed this system. This is a historical record to prove that the Empress title first appeared in the Chin Dynasty.

Based on the carving and characters' styles of the jade seal, the Authentication of antiquity evidences, the style of the scripts, the historical records of the Chin Dynasty official systems, this jade seal is reasonablly authenticated as genuine Seal of the Express from the Chin Dynasty. Above all, the Seal of the Empress is the physical evidence to this historical record and is no doubt an item of greatest value.

Appraisal Indexes:

- 1. Quality of jade: 10
- 2. Rareness: 10
- 3. Historical and cultural significance: 10
- 4. Workmanship: 10
- 5. Size: not applicable when rareness, historical and cultural significance reach 10.
- 6. Condition: 10

Chapter Eleven Han Dynasty (220 B.C. - 220 A.D.)

Emperor Kwan-Wu of Eastern Han Dynasty (BC6-AD57) Mutton Fat White Jade, H. 15cm, L.18cm, 1.0kg



Authentication:

The inscription of "Kwan-Wu-Yu-Zhi (光武御製)" on the chest has identified the original owner of the container that is supposed to be used as water containers (硯滴 Yan DI in Chinese) for brush³⁷ writing. In other words, it was made by the order of the first emperor Kwan-Wu of Eastern Han dynasty about two thousand years ago. With mastery workmanship, this artifact is made of top

³⁷ Writing brush had been used already before Eastern Han.

quality mutton white jade³⁸. As far as antiquity is concerned, evidences of diffusive marking deteriorate marking and differential weathering is obvious.

Appreciation:

The container design of mother carrying baby on the back has seen in the western Zhou Dynasty bronze artifacts. The lid of the container has a young eagle carving. Underneath the tail having two branches (having similar style to that of the bronze bird container) of the mother eagle protecting a young dragon. The mother eagle is staring backward at both the young eagle and the young dragon to make sure she is taking care of them nicely. The noble character of loving not only your own loved one, but also the others has fully been expressed. This theme conforms the Emperor Kwan -Wu's economic policy of paying attention to people's livelihood, resting with the people. The motif of the dragon is seen on both wings, with the Ruyi (fulfill of one's wishes) curly cloud motif on the tail. Both motifs are the symbol of nobleness and luck. Fairly unique among emperors in Chinese history was Emperor Guangwu's combination of decisiveness and mercy. He often sought out peaceful means rather than bellicose means of putting areas under his control. He was, in particular, one of the rare examples of the founding emperor of the dynasty who did not kill, out of jealousy or paranoia, any of the generals or officials who contributed to his victories after his rule was secure. The main theme of this jade artifact has fully expressed this. Judging from the perfect design made of top quality jade and historical significance, this artifact is no doubt one of the most valuable ones for serious collectors.

³⁸ see gem lab test result

Emperor Kwan-Wu of Eastern Han Mutton Fat White Jade Paperweight, H. 7cm, D. 7.5cm, Weight: 500g



Authentication:

This seal-form paperweight³⁹ is made of mutton white jade⁴⁰ with carving style of Han Dynasty. The inscription of "Kwan-Wu-Yu-Zhi (光武御製)" on the bottom side of the paperweight has clearly indicated the item belongs to the imperial palace of Emperor Kwan Wu, the first emperor of the Eastern Han dynasty of China. Antiquity evidences include diffusive marking, differential weathering and additive crystal.

Appreciation:

The paperweight has a high relief dragon carving with the body curling around the head. The imposing and majestic looking of the dragon has been thoroughly expressed. In addition, the round and smooth carving has made it easy for holding by hand. It symbolizes that all the livings and properties under the heaven are under the emperor's control.

³⁹ paper had been used before Eastern Han Dynasty

⁴⁰ See test result from gem lab

Jade Pixie Plaque, L.25.5cm, W.20.5cm, T.0.2cm



Authentication:

Applying the techniques of low relief and open work, this artifact presents one god's face, three divines and eighteen mythical animals on the jade plaque as thin as 0.2cm. The appearances of all figures which may be only the head, half and whole body of the mythical animals have been depicted vividly. Despite the difficulty of workmanship, the lines of the objects on the artifact are presented smoothly and elegantly, it is no doubt that this artifact is a masterpiece in jade carving.

Jade Bi Disk, H.10 cm, W.7cm, T.0.6cm, 65grams



Authentication:

This object of jade bi is designed to express three major sections. The outer ring with connected cloud of the bi-disk, the inner open work with one side seam "eternal happiness (長樂)⁴¹" inscription, the other side seen the dragon and phoenix motif, the dragon form attached to the top edge of the outer ring. The object may be used as a pass for entry to the palace of Chanlegong. With mastery workmanship, this Bi disk is pervasively populated with various archaic elements, including cleaving veins, additive crystals and differential weathering.

⁴¹ Changlegong is the name of the palace of the Han Dynasty

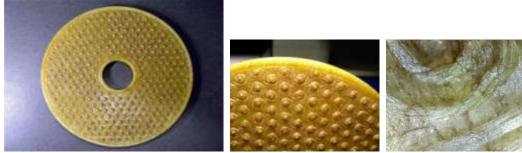
Jade Rhino Set, L. 22cm, H. 14cm



Authentication:

Carved with white jade, this jade container has the shape rhino with the young rhino as the cover. The whole body is decorated with low relief of auspicious motif. The main motif is a phoenix fabricated with stripes. The major antiquity evidences are calcification and differential weathering.

Jade Bi, D.19.5 cm, T.0.8cm



Authentication:

Carved with yellow tone Hetian jade, this bi is decorated crop sprouts on both sides. The edge of the bi has a sharp angle. Antiquity evidences include diffusive marking and differential weathering.

Jade Mythical Animal Set, H.14 cm



Authentication:

Carved with chartreuse tone Hetian jade, this mythical animal set has an upper part as dragon with one horn. The young dragon is lying on the neck. The lower part is a phoenix shape. On the back of this artifact, there is an open work carving of a deity's face. Antiquity evidences include additive crystal, cleaving vein and diffusive marking.

Jade Ko Halberd Ax, L.13cm, H.7.7 cm, T.0.4cm, 45grams



Deriving from the pattern of Shang Dynasty's bronze ko halberd axe, made of extreme nice quality of Hetian jade, this ko halberd axe is designed by unifying the blade, the flange and the tang into a whole object. The blade whose edge is sharp and is seen a nice curving line starting from the tip reaching the flange. Three vertical rectangular holes have been drilled for the flange while, on the horizontal, one is seen on the tang. Both the blade and the tang are decorated with connected cloud motif. The quality of jade and carving style of this Ko are similar to the one⁴² of unearthed from Xi Shan Han Graveyard, Mangshan township, YongCheng County, Honan Province in terms of jade, carving style and motif.

Aging evidences are obvious to include differential weathering, diffusive marking and cleaving vein. With mastery workmanship, this Han Dynasty ko is one of valuable collectives.

- 1. Quality of jade: 10
- 2. Rareness: 7
- 3. Historical and cultural significance: 6
- 4. Workmanship: 8
- 5. Size: 4
- 6. Condition: 9

To assign each index a monetary value, we may reach an appraisal value (in addition to the market approach).

Chapter Twelve Xin dynasty (8A.D. – 25A.D.) Octagon-shape Jade Container with Dragon and Phoenix Motif and Inscriptions, H. 21cm

⁴² L.11.3cm, T. 0.5cm. A collection of Shangqiu Museum of Honan Province.



The inscriptions of the four corners are translated as follows: The virtues of the original ancestor Emperor Huang have handed down to my nation. In the year of A.D. 9, the new system of measurement is announced for the first time, for all generations to follow forever. The twenty-four Chinese characters⁴³ appeared on the surfaces of the four corners of the container are digested from the eighty-one Chinese characters⁴⁴ inscribed on the outside wall the bronze container from Shin dynasty (A.D. 8-23) in the National Palace Museum collections.

This octagon-shape container is broader on the upper part and narrower on the lower part. The lid of the vase has an open octagon-shape tub. It is broader on the upper part and narrower on the lower part of the tub. There is a negative thunder motif between two thicker negative lines on the lower part of the lid. The same design also appears on the upper and lower parts of the main container. The four narrowest surfaces have inscriptions with negative lines. The two narrow surfaces have a low relief phoenix motif. The two broader surfaces have a low relief dragon motif. The design of the dragon has featured the fairy tale of King of the sea dragon with motif of sea horse appears in the wings. The motifs of this container are picturesque with elegant lines and dexterous carving technique. It is reasonable to believe that this container is from the imperial palace of the Shin dynasty. The item is made of high quality white jade with evidences of diffusive markings, additive crystals and dissolved pits. The Shin dynasty is last only for a short period of fifteen years (from A.D. 8 to A.D.23); the artifact from its imperial palace is extremely rare. In addition, the inscriptions on it have recorded the history of the ancient Chinese measurement system. It is no doubt that this container is both important for its artistic value and historical value.

[&]quot;黄帝初祖長壽, 龍集己巳享傳, 初班天下子孫, 萬國永遵億年

[&]quot;黃帝初祖,德及于虞,虞帝始祖,德及予新,歲在大樑,龍集戊辰,戊辰直定,天命有民, 據土德受,正號即真,改正建醜,長壽隆崇,同律度量衡,稽當前人,龍集己巳,歲次實 沈,初班天下,萬國永遵,子子孫孫,享傳億年。

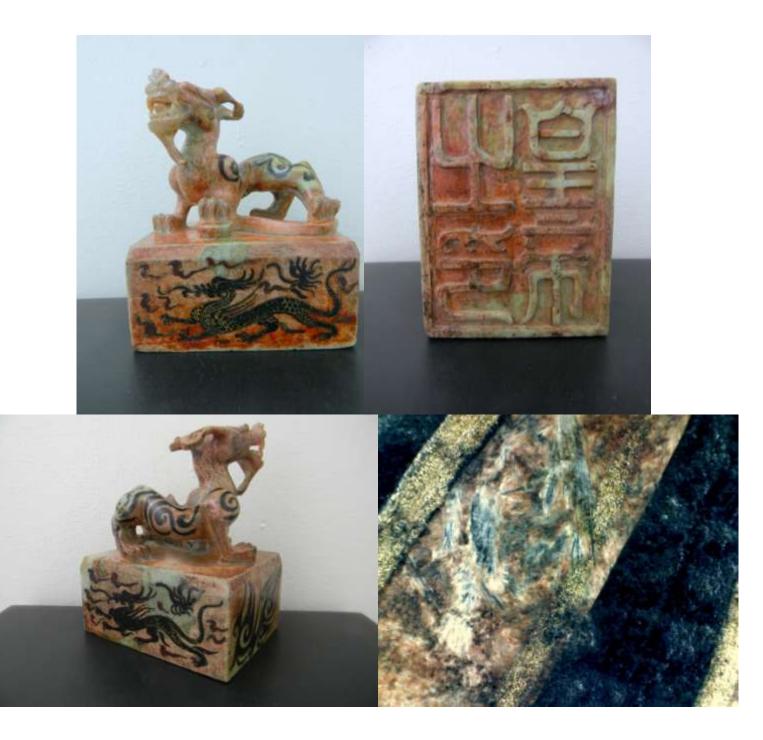
Chapter Thirteen The Tang Dynasty(618A.D.- 907 A.D.)

The Thinking Buddha H. 27.5cm, D. 6cm, W.17cm, 500grams.



Carved with chalcedony, the object is the Bodhisattva in meditation escorting with two waiters. The Bodhisattva has a high comb hair, plump chest, slim waist. Sitting cross-legged on the bronze lotus seat, the Bodhisattva has the left elbow slightly drooping during the right elbow elevating. The head is tilted to the left with eyes slightly open to practicing meditation. Although it is a Buddhism artwork, its design has adopted the principle of Taoism by inlaid jade plaques with a motif of the dragon and tiger on both sides of the bronze base. The front side of the base has a low relief deity's face. The front side of the aureole has two low relief Central Asian style goddess playing lutes while the back side of the aureole is the low relief statue of Buddha. The flanks of the base have two jade plaques. One is a dragon and the other is a tiger. The carving style of these jade plaques is seen Tang style low relief with gradually decreasing from the edge of the motif to create the effect of the upheaval of the object. Antiquity evidences include diffusive marking, additive crystal and differential weathering.

Seal of Emperor, H. 12 cm, W.10cm, D, 7cm, 1300 grams



The Tang Dynasty is an important period in the development of Chinese painting art. The painted drawing skills have been very mature. With rich colors and ornate to create the perfect visual effects, the Tang Dynasty has created various colorful painted works on different material, jade is one of them.

The style of dragon of this seal is similar to that of the Dragons on the robe of the Portrait Scroll of Emperor Tang Taichong, a collection of National Palace Museum in Taipei. The dragon carving style has shown the Tang Dynasty. The fire motif of Zoroastrianism has the characteristics of the western countries of the Tang Dynasty to reveal that fact that cultural and economic exchange between the west and the Tang Dynasty is common. Made of Hetian jade with green tone, this seal of the emperor with the characteristic of Tang San Cai is unique and rare in the Chinese jade seals. Antiquity evidences include differential weathering, cleaving vein , expose crystal and additive crystals.

Jade Beauty, H.22.5 cm



Carved with yellow tone jade, this beauty has a quite similar appearance as the color wood beauty statue of the National Palace Museum in Taipei. In addition, the hairstyle is similar to that of

the one of the ladies of the Tang painting. Antiquity evidences include calcification, cleaving vein and diffusive marking

Jade Bell, H.20 cm



Vajra bell adder of Tantric Buddhism, introduced into China from India, Buddhist monasteries popular in all parts of the country, especially the prevalence of Tibet, Inner Mongolia, Qinghai, Gansu, Sichuan, Yunnan and other provinces.

This Vajra jade bell is constituted by three parts, the bell, the handle and the clapper. The Vajra bell carved with the edge of the top and the whole body is decorated with exquisite chrysanthemum and lotus pattern and prayer bead pattern. Bell handle carved on both sides of the Bodhisattva heads in the middle of the bell handle; the top is an open work structure.

The carved decoration in the style of the Tang Dynasty, it has an antiquity of evidences of cleaving veins, diffusive markings, additive crystals and calcification. With mastery workmanship, this Tang Dynasty jade Vajra bell is one of the best collections of its kind.

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The Six Arms Dorje Tsundi, H.50 cm, 10kgs



The Six Arms Dorje Tsundi The motif of flying fairies shown on the aureole conforms the genre⁴⁵ of those appeared on the jade objects of the Tang dynasty. In addition, the appearance of baring the chest and exposing the arms confirms that of Buddha statue from Tibetan esoteric Buddhism. Four of the six arms of the statute are holding the wheel of the law, ax, main board, miniature Buddha set, the other two hands making mudra of meditation. The inscriptions on the back of aureole are identified that the statue is The Six Arms Dorje Tsundi Bodhisattva. Antiquity

⁴⁵ such as the wooden Buddha statue in the National Palace Museum in Taipei.

Authentication evidences consist of differential weathering, additive crystal, cleaving vein, deteriorate marking, dissolved pit and diffusive marking. Considering the workmanship, the jade quality, the cultural and historical elements, this pair of Six Arms Dorje Tsundi should be one the most precious objects to collect.

Chapter Fourteen Song, Liao, Jin & Yuan Dynasties (906 A.D. -1379A.D.)

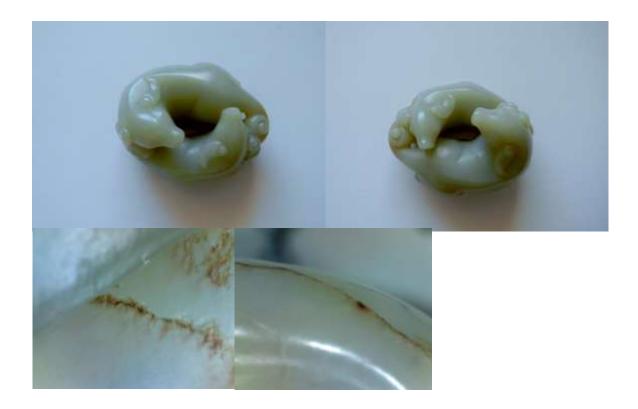
Song Dynasty(960A.D.-1279A.D.) Asian paradise flycatcher jade mountain, H.7.5 cm, W.6cm, D.2.5 cm



Carved from green tone jade, this jade mountain is seen open work design. On the front, an Asian paradise flycatcher is resting on a rock with plum blossoms

scattered around. On the back, a three branch Lingzhi mushroom symbolizing good luck is carved in the Tang style of slant cut on the plain. The details of the carving could be compared to the meticulous paintings of the Song Dynasty. The Asian paradise flycatcher is vividly carved especially for the eyes and feathers. Antiquity evidence of differential weathering is seen. This is one of the masterpieces of Song open work jade mountains.

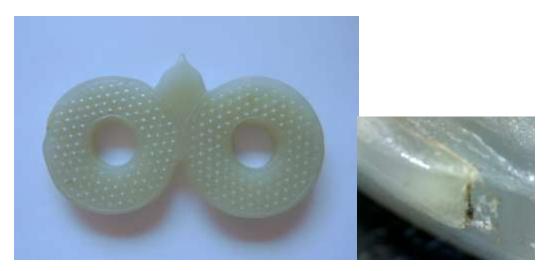
Liao Dynasty(907 A.D.-1125 A.D.) Jade Badger Couple, L.6.5cm, W. 5cm, H. 3cm



Carved with green tone jade, the object is consisted of a male badger and a female badger. They are lying leisurely with head to touching each other's tail expressing the love and care to each other. The jade set is carved vividly with correct proportion and wonderful posture. In addition to pertaining the Liao culture element, this jade set has antiquity evidence of diffusive marking and differential weathering.

Chapter Fifteen Ming & Qing Dynasty (1368 A.D. - 1911 A.D.)

Ming Dynasty Breast nipple motif dual jade Bi, L.19cm



Carved with white jade, the object has two Bi with breast nipple motif connected by a rhombus structure. The object may be served as a gift for marrying. The breast nipple motif is a symbol of mother who should be remembered after the daughter has married to her husband. The antiquity evidences include cleaving vein and differential weathering.

Qing Dynasty Jade Bi, D.7.8 cm, T.0.4cm



Made of high quality Hetian white jade, this bi has an openwork design with two layers of motifs carrying the genre of Shang Dynasty. The inner layer has three dragons implying the three elements of the universe: the heaven, the earth and the human being. The outer layer is decorated with auspicious clouds. Antiquity evidences include cleaving veins and differential weathering. This jade Bi is a masterpiece of the Qing Dynasty.

Appraisal Indexes:

- 1. Quality of jade: 9
- 2. Rareness: 6
- 3. Historical and cultural significance: 6
- 4. Workmanship: 8

5. Size: 4
6. Condition: 10

Qing Dynasty, Jade Plaque, W. 5.2cm, T. 0.5cm, 20grams



The object is designed to have dragon head on each end of the plaque. Woven grid scales are seen on the necks with an intermediate section with sprout crops motifs. Made of top quality Hetian mutton jade (Refractive index has been tested with GIA Duplex II Refractometer. Reading: 1.61), the object has shown various archaic evidences such as cleaving veins and differential weathering.

Qing Dynasty, Jadeite Plaque, L.9cm, W. 5.9cm, T.0.7cm, 95grams



With the multi-layer carving technique of mastery workmanship, this top quality jadeite⁴⁶ plaque consists two landscape paintings on both sides. One side sees a phoenix is resting on the Paulownia tree which is behind the bridge hanging over two cliffs with two Ruyi, under the bridge waves from the water, are seen. The phoenix implies the nobility and the zuyi imply your wish will come true. The other side sees a deer on the rock above which is seen a bat behind the Japanese banana leaves⁴⁷. The deer implies that you will have a high ranking position in the government⁴⁸ and the pronunciation of bat in Chinese iii is the same as iii, which is luck. Antiquity evidence of vein and ancient tool marks are seen.

Qing Dynasty, Jadeite seashell form openwork carving, L.8.3cm, H.5 cm, D. 4cm



⁴⁶ Refractive index has been tested with in house GIA Duplex II Refractometer. Reading:1.66

 $^{^{\}scriptscriptstyle 47}$ which implies to have big business, the pronunciation of leaves in Chinese is the same as \$, business.

 $^{^{\}scriptscriptstyle 48}$ the pronunciation of deer, \boxplus is the same as $\clubsuit,$ income from government.

With the form of sea shell, this jadeite⁴⁹ open work carving is seen skillful design of two dragons integrated with zuyi and peach to signify lucky wish and eternal life. The sea shell is one of the mascots in Buddhism (sea shell, bottle, wheel, ball, fish, knot, umbrella, lotus) customs. With elaborate and exquisite design, oriental cultural significance and mastery workmanship coupled with the best quality of jadeite, this is one of the valuable jadeite carving to collect. Antiquity evidences consist of differential weathering cleaving veins and diffusive marking.

Qing Dynasty, Jadeite⁵⁰ Plaque, w/ Nine Dragons Motifs, L. 8.3cm, W. 5.8cm, T. 0.6cm, 74grams



⁴⁹ Refractive index has been tested with GIA Duplex II Refractometer. Reading: 1.66
⁵⁰ Refractive index has been tested with GIA Duplex II Refractometer. Reading: 1.66

Made with mastery workmanship coupled with elaborate and exquisite design, this jadeite plaque has a motif of nine dragons which are the symbol of the emperor, five on one side and four in another side of the plaque. Based on the quality of workmanship with the style of Qinglong royal court and the noble symbol, this is the jadeite plaque is supposed to be owned by the Emperor Qinglong! Antiquity evidences include differential weathering & cleaving vein.



Qing Dynasty, Jadeite Plaque, H.7.5 cm, W. 5cm, T.0.5cm

With bergamot⁵¹ () on the top and the Ruyi (如意-as you wish) at the bottom, this jadeite has been applied open work and low relief carving techniques with mastery workmanship. A jadeite plaque with auspicious motif is very popular in the Qing Dynasty. The Chinese translation of bergamot has the meaning of the hand of Buddha to imply good luck. Ruyi in Chinese is a good result, according to one's wish. To wear this jadeite plaque, you will have good luck and everything according to your wish. Antiquity evidences are differential weathering and cleaving vein.

⁵¹ Chinese 佛手-hand of buddha

Appraisal Indexes:

- 1. Quality of jade: 9
- 2. Rareness: 7
- 3. Historical and cultural significance: 4
- 4. Workmanship: 8
- 5. Size: 4
- 6. Condition: 10

Qing Dynasty, Jade Geese Set, H.5 cm, W.7cm, D.5 cm, 180 grams



Made from top quality Hetian jade, this three geese set is seen holding the lotus plant to imply the continuous passing three major examinations which will lead to high ranking posts in the government. The pronunciation of goose in Chinese has the same sound as the name of the ancient examination system (科舉)-Imperial examination. The head of the biggest goals is high implied the highest level examination is passed with high score or the first place. The Chinese translation of this

carving is 連中三元-continuous pass the various levels of the imperial examination... Antiquity evidences consist of differential weathering, cleaving vein and diffusive marking. Appraisal Indexes:

- 1. Quality of jade: 7
- 2. Rareness: 6
- 3. Historical and cultural significance: 5
- 4. Workmanship: 8
- 5. Size: 4
- 6. Condition: 9

Qing Dynasty, Jadeite plaque, 8x5cm



Carved with jadeite, this plaque has the following motifs: bat, peach, gourd, ruyi. These motifs have particular meaning in the Chinese culture and custom. The bat in Chinese has the meaning of luck. The peach in Chinese custom usually has the implication of longevity. The gourd in Chinese is 葫蘆, which has the pronunciation of 福祿 that has the of lucky and good compensation. The Ruyi symbol has the meaning of your wish will come true. The antiquity evidences of this jadeite plaque with mastery workmanship are differential weathering and cleaving vein.

Qing Dynasty, Jadeite plaque, 7x5 cm



Carved with jadeite, this plaque has the following motifs: monkey, peach, gourd, Ruyi. These motifs have particular meaning in the Chinese culture and custom. The monkey in Chinese is 猴. The pronunciation of it is same as the Chinese 侯 which is a marquis. The peach in Chinese custom usually has the implication of longevity. The gourd in Chinese is 葫蘆, which has the pronunciation of 福祿 that has the of lucky and good compensation. The Ruyi symbol has the meaning of your wish will come true. The antiquity evidences of this jadeite plaque with mastery workmanship are differential weathering and cleaving vein.

Appraisal Indexes:

- 1. Quality of jade: 8
- 2. Rareness: 5
- 3. Historical and cultural significance: 6
- 4. Workmanship: 7
- 5. Size: 4
- 6. Condition: 10

Qing Dynasty, Jadeite plaque, L.8cm



With the Ruyi (如意-as you wish) at the center, phoenix, lotus and peach on both sides, this jadeite have been applied open work and low relief carving techniques with mastery workmanship. A jadeite plaque with auspicious motif is very popular in the Qing Dynasty. Ruyi in Chinese is a good result, according to one's wish. Phoenix means noble female. Lotus means abundant of offsprings. Peach means longevity. Antiquity evidences are differential weathering and cleaving vein. Refractive index has been tested with in house GIA Duplex II Refractometer. Reading: 1.66

Qing Dynasty, Jadeite Thumb Ring, D.3.2 cm, 35grams



Thumb ring is an object to be put in the thumb for thumb protection in ancient Chinese archery. In the Qing Dynasty, thumb ring may also be used as a gift for the engagement. This jadeite thumb ring may be used for a later purpose due to the motifs of Ruyi; lotus leaves and fish shown. The ruyi has the meaning of a wish. The lotus leave means lucky. Finally, the fish implies abundant foods and clothing. Antiquity evidence of vein and ancient tool marks are seen. Refractive index has been tested with in house GIA Duplex II Refractometer. Reading: 1.66

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