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The Lloyd Cotsen Study Collection of Chinese Bronze Mirrors
Volume I: Catalogue

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Lothar von Falkenhausen, *editor*

**The Lloyd Cotsen Study Collection of Chinese Bronze Mirrors
Volume I: Catalogue**

by Suzanne E. Cahill

Cotsen Occasional Press
UCLA Cotsen Institute of Archaeology Press
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Los Angeles

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cover illustration

Inscribed Icon Mirror
PLATES 68–69

frontispiece

**Inscribed Mirror with Quatrefoil and Linked Arcs
on Reconstructed Stand**
PLATES 64–65

page 12

Terracotta Figure of Kneeling Woman Holding Powder Puff and Mirror

COLLECTION NUMBER: O-0811

Western Han dynasty (206 BCE–8 CE)

width: 14.61 cm

depth: 15.24 cm

overall height: 17.15 cm

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Lloyd Cotsen

Foreword

I PURCHASED MY FIRST GROUP OF CHINESE BRONZE MIRRORS in Hong Kong while serving in the Navy from 1950 to 1951, during the Korean War. Bronze mirrors held a particular appeal, as things made of gold were too expensive! I placed a bid at an auction and found out only after I returned to the U.S. that I had won four mirrors (PLS. 19, 20, 126, 127). (The other successful bidder was the Swedish government on behalf of Gustaf VI Adolf, the King of Sweden). These four pieces stayed around the house until the day I discovered my oldest son with a bronze mirror in his mouth.

When I was a young man, part of the attraction of Chinese mirrors was their compact size. Notwithstanding, of course, their beauty and the high level of technological skill they represent, mirrors were easy to pack in your suitcase or pocket. My interest in China, however, began even earlier, when I took an undergraduate course in Chinese art history with Professor George Rowley at Princeton University. In fact, I was so intrigued I took the class twice. At that time, few people in the West were studying China and the East, affording me the opportunity to explore a relatively unresearched area. Chinese art was unfamiliar to me, yet undeniably impressive by any aesthetic standard. And once I had acquired a few mirrors, from my perspective they came to exemplify Chinese aesthetics. Although at Princeton I was studying architecture and archaeology and working at ancient Greek sites, my interest was piqued by Chinese art because it contrasted so strongly with Western art and architecture. To my Western eye, China had a mystical aura.

When I was a child my family owned a huge volume on Chinese bronzes collected by George Eumorfopoulos; this tome seemed like a detective story to me. Research

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into my bronze mirror collection is an investigation into the many questions posed by these enigmatic objects. What are the clues that tell us where these come from? Who used them? Who made them and why? What was their significance to the individuals who held them? Did they come from Mongolia or western China? Where were the copper, tin, and lead mined? I hope that for the scholars contributing to Volume II of this publication, my mirror collection will hold both tantalizing clues, perhaps, and some answers.

One conspicuous piece of evidence is captured by the pottery tomb figure gazing into a mirror she holds in her left hand (PL. 1). The Han dynasty cosmetic set also points toward the use of the mirrors as a vanity item (PL. 66). The prevalence of astrological and mythological design patterns indicates a religious use for the mirrors. The designs of later mirrors attest to the impact of trade and interaction with the Middle East and to the significance of the Silk Road for Chinese art and culture. The development of mirror design reflects not just the history of China; these designs reveal a constantly changing set of aesthetics in ancient China and also tell personal stories of the individuals who owned them. To study and share information about the mirrors is to see beyond the surface; the mirrors say much more than meets the eye.

I have been told that I have a tactile relationship with art. I like to feel a mirror's weight and the sensation of rubbing my fingers across its cast pattern. My appreciation of textiles is also related to this enjoyment of the sensory experience. Having collected textiles for many years, one of the topics I find most intriguing is the juxtaposition between the development of textile design and that of the mirrors. The presence of textile patterns within the mirror designs is fascinating to me. In fact, I see the mirrors in much the same way that I see textiles—as flat objects that have been re-inflated into relief. I am drawn most strongly to older mirrors—those dating to the Zhou dynasty, particularly the Warring States period, a time of great intellectual ferment. (There are practically no pre-Warring States-period Zhou mirrors.) The designs cast on these mirrors flow like stenography recording a sacred geometry and encrypting cosmological wisdom. These motifs flow around the face of the mirror, intertwining in a complex dance that illustrates both the refined aesthetics and high technological skill of the Chinese craftsmen at that time.

I am also attracted to rare types of mirrors. One example is the Tang dynasty mirror inlaid with glass (PLS. 107–108). Here the inlay is a clue to its mystery; glass may very well have been as valuable as gemstones because of its rarity in China at that time. The glass had probably reached China by way of the Silk Road, perhaps from Persia.

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The proficiency of the craftsmanship and technology attracts me as much as the surface designs. For that reason, I believe that one of the most significant sections of Volume Two will be the one devoted to materials analysis. I am intrigued by what a person with scientific knowledge could add to a subject that has previously been dominated by art historical research. What can scientists add to a discourse on Chinese mirrors that is usually about motifs and iconography? Some new secrets can be revealed with the help of twenty-first-century technology. We are fortunate to be alive during an age when scholars all over the world are making groundbreaking contributions in archaeological research.

Highly qualified conservators have examined many of my mirrors. For an opinion on aesthetics you go to a respected art historian, but if you want to know about the construction and structure of an object you go to a scientist. The process of having the mirrors analyzed has been a fascinating one; through these scientists I have learned much about the way that bronze alloys change over time and how those changes can be faked. While I have great respect for the authentic artists, along the way I have also gained considerable knowledge about the boundless creativity and ingenuity of the fakers.

When assembling this study collection, I included some mirrors that are not Chinese and also some that are, perhaps, not really mirrors. They are imitations of Chinese bronze mirrors—fakes. Connoisseurship is partly the study of errors: until you comprehend fakes, you cannot really recognize authenticity. The process of understanding art is partly the process of learning what is real and what is not. Studying failures, faults, and fakes aids in recognizing the authentic and the flawless. One of the fakes in my collection (I don't think I am aware of all of the fakes) is painted. At first I thought it looked like a Mycenaean fresco, but when it was examined under a microscope, we learned that the paint had been mixed with soap to make the surface appear aged. I won't refuse to purchase an object because it is a fake. A fake Rembrandt too has instructive points for students of painting and may be a beautiful work of art in its own right.

I am most interested in artistic genres that have yet not been exhaustively researched and, therefore, retain some mystery. As a Westerner, I believe that I have a different perspective on these objects from that of a Chinese admirer. Knowing that people from disparate cultural backgrounds will perceive actions, art, food, and other social phenomena in a variety of ways has led me to question how we are taught and what we choose to teach about other cultures. My primary motivation when assembling a collection is to create a study collection—a group of objects that has research potential. I do not believe in acquiring art and then leaving it unpublished. Eventually,

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I will donate all of my collections, but along the way I can support scholars and graduate students who want to research and publish. For this particular study collection, the hope is to determine how and when the mirrors came into play in the greater picture of Chinese art and where they fit in its development.

As a collector, I have come to feel that the Chinese have a greater variety of artistic styles than other contemporary Asian cultures. The ancient Chinese were playful and humorous. The designs and motifs decorating these mirrors are exotic and fascinating, challenging me to come to understand them and the objects that they adorn. The influence of Chinese astrology and the importance of the sun and moon in Chinese folklore and mythology are embodied in the mirrors, making them wonderfully enigmatic and intriguing to my Western eye. This mystique entices me to investigate their history, and this publication is one important aspect of that investigation.

ACKNOWLEDGMENTS

THIS PUBLICATION WAS FUNDED BY COTSEN FOUNDATION FOR ACADEMIC RESEARCH. I wish to acknowledge the many people who have assisted with this project, which I hope will make a useful contribution to the study of Chinese bronze mirrors. In particular, I would like to thank Suzanne E. Cahill for authoring this first volume, and Lothar von Falkenhausen for serving as editor. Additional thanks to Karen M. Hudson, Mary Hunt Kahlenberg, Barry Munitz, Kerry Schutt Nason, Lyssa C. Stapleton, Linda Tansey, and Sonja Wong of Cotsen Corporation; Charles Stanish and Shauna Mecartea of the UCLA Cotsen Institute of Archaeology; Carol Leyba of Leyba Associates; Lorraine Wild and Xiaoqing Wang of Green Dragon Office; Amie Cooper and Mikki Kalar of The Actualizers; Bruce M. White; Jennifer Dillon; Greg Dodson, Rich Fosmire, Beckie McCarron, Kurt Novak, Pat Thompson, and Tom White of Lithographix; and Stephanie Emerson. Hanmo Chang, He Kunnyu, Wen Chenghao, Ye Baomin, and Ye Wa helped in deciphering the inscriptions.

I would like to acknowledge the late Professor George Rowley, who I'm sure never knew the extent of his influence on me in the form of this book.

And to my wife, Margit Sperling Cotsen, whose insight and inspiration guide me through all the worlds of wonder.

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MAJOR CHINESE DYNASTIES AND PERIODS

XIA CA. 1900-1600 BCE
SHANG CA. 1600-1046
ZHOU CA. 1046-256
 WESTERN ZHOU CA. 1046-771
 EASTERN ZHOU CA. 770-256
 SPRING AND AUTUMN 770-450
 WARRING STATES 450-221
QIN 221-207
HAN 206 BCE-220 CE
 FORMER (WESTERN) HAN 206 BCE-8 CE
 XIN 9-25 CE
 LATTER (EASTERN) HAN 25-220
THREE KINGDOMS 220-265
 WEI 220-265
 SHU 221-263
 WU 222-280
JIN 265-420
 WESTERN JIN 265-317
 EASTERN JIN 317-420
NORTHERN AND SOUTHERN DYNASTIES 420-589
 Southern
 LIU SONG 420-479
 SOUTHERN QI 470-502
 SOUTHERN LIANG 502-557
 CHEN 557-589
 Northern
 NORTHERN WEI 86-534
 EASTERN WEI 534-550
 WESTERN WEI 535-577;
 NORTHERN QI 550-577
 NORTHERN ZHOU 557-581
SUI 581-618
TANG 618-907
 ZHOU 690-705
FIVE DYNASTIES 907-960
LIAO (KHITAN) 916-1125
SONG 960-1279
 NORTHERN SONG 960-1126
 SOUTHERN SONG 1127-1279
JIN (JURCHEN) 1115-1234
YUAN (MONGOLS) 1279-1368
MING 1368-1644
QING 1644-1911
PEOPLE'S REPUBLIC 1949-

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- Historical place names (some are still used today)
- Modern place names
- Names of archaeological sites
- △ The four Marchmounts

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俱含影中

All Is Contained in Its Reflection: A History of Chinese Bronze Mirrors

13

*To live in the present generation with your intentions on the ways
of the ancients is to give yourself a mirror.*

SIMA QIAN, *Records of the Historian*¹

DRAWING ON THE MANY FINE SPECIMENS in the Cotsen Collection, this essay investigates Chinese bronze mirrors as part of the history of material culture in China. The mirrors have two sides. One side is cast smooth and polished to yield a reflective surface. The other provides a field for designs and inscriptions, along with a raised knob that can be used to hold the mirror or fasten it to a stand or to the owner's belt. Their designs, inscriptions, and symbolic implications have fascinated collectors and historians for centuries.² Bronze mirrors were templates that expressed, and at the same time instructed the user on how to comply with, core beliefs and values. We can read them as charts of Chinese culture that change according to historical context, reflecting changes in society.³

The study of material culture assumes that things have meaning, that they embody and provide insight into the identities of their makers, and that we can read them as primary sources for the interpretation of history. As objects that played an intimate part in the daily life of the living and were buried with the dead over many centuries, bronze mirrors bear witness to historical and social change. Unlike more conventional written sources, mirrors do not narrate or explicate history, and thus they pose challenges of interpretation. But mirrors also present the historian with advantages. As direct products of the people we study, they reveal, in immediate and concrete form, information that can balance and correct the standard textual sources. They tell us about the daily life, concerns, and values of the people who made and used them, including groups

¹ Shiji 18.878.

² O'Donoghue 1990 opens with a history of the connoisseurship and scholarship of Chinese bronze mirrors.

³ My approach to the history of material culture in China has been influenced by Bray 1997 and Knapp 1999; both studies analyze Chinese houses as templates that both embody beliefs and values and instruct their inhabitants on how to practice those beliefs and values.

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usually excluded from history such as women and craftsmen. Reconstructing the history of bronze mirrors in China requires a multidisciplinary approach, drawing on theories and strategies from several fields, including archaeology, metallurgy, art history, philology, and history of religion.

The designs on the reverse sides of mirrors, sometimes incorporating inscriptions, were meant to be both beautiful and meaningful. Mirror manufacture and use extended into many aspects of life. The mirror was first of all a manufactured thing, made under certain historical conditions using certain materials and technologies. Next it was a practical object used in everyday life by both men and women, whether consulted in the privacy of the boudoir or worn as an accessory in public. A high-quality mirror was also a relatively costly object that conferred status. After serving the living, mirrors were often placed in tombs to honor and perhaps protect or instruct the dead. Both the inner quarters of a residence and the tomb were private spaces controlled by the family. When we examine the fabrication, use, and decoration of bronze mirrors, we can obtain primary information on many subjects: bronze technology and production, commerce, social classes, daily life, family values, mortuary practices, and religious history.

When we use the term “mirror” in English, we refer to an object that replicates or reflects an image of whatever stands before it. The earliest occurrence of a Chinese word for mirror, *jian* 鑿, in the oracle-bone inscriptions of the Shang dynasty (ca. 1600–1046 BCE), suggests this interpretation; it shows a figure gazing into a basin. However, the oracle-bone character refers to the act of self-reflection rather than to an object that reflects. The character used today to mean a reflective mirror, *jing* 鏡, first appeared in the Zhou dynasty (1046–256 BCE), but its meaning at that time is not completely clear. Before the late Zhou dynasty, we cannot assume that all shiny bronze disks were actually used for their reflective power. Some were pot lids, fire-starters, or grave furnishings. By the Han dynasty (206 BCE–220 CE), mirrors bore inscriptions clearly referring to themselves as *jing*, so we can be certain that by that time the term means an object that reflects.

In addition to its life as a material object, mirrors have been used as sacred, magically endowed objects in many East Asian cultures over a long period of time. The mirror appears in early Chinese texts as a metaphor with three principal meanings. First, the mirror, reflecting accurately what stood before it, represented truth and authenticity. For Chinese historians, the truth viewed in the mirror served as a lesson: an example to avoid or emulate. Chinese historians use terms for “mirror” to mean “history.”⁴ For Buddhist writers, the mirror provided an image of the perfectible mind

⁴ See the quote from Sima Qian in the epigraph, and the title of the masterpiece of the great Song historian Sima Guang 司馬光: *Zizhi tongjian* 資治通鑒, “A Comprehensive Mirror for the Aid of Governing.”

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that could be purified of the dust of the material world to reflect impartially whatever arose in front of it without reaction or desire. Daoist authors compared the casting of a mirror to the nurturing and refining of the adept's immortal soul.

After a short discussion of geography, chronology, fabrication, and design principles, this introduction presents a general history of the design and meaning of Chinese bronze mirrors in their historical and social contexts from their origin through the Tang dynasty (618–907 CE), using illustrations from the Cotsen Collection.

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GEOGRAPHY

AS HISTORICAL OBJECTS, MIRRORS CHANGE OVER SPACE AND TIME. Regional styles of art embodied in other media also appear in mirrors. Recent excavations have increased our knowledge of regional styles in Chinese art. They have also challenged the model of Chinese art history that asserts that stylistic developments are consistent and unilinear, and that all styles flow out from the capital to the provinces, becoming ever cruder and less sophisticated as they move farther away from the center. Instead, recent discoveries have shown that in the case of bronze mirrors as in many other media, several regional centers often operated almost simultaneously. Artistic influence moved in complicated patterns between various centers. At different times, different regions took the lead in mirror production in terms of both quality and quantity. The early Chinese interacted with other groups that had distinct cultural traditions who lived on their borders; this contact had an impact on mirror origins and styles.

The earliest objects identified as Chinese mirrors are too few in number for us to make reliable statements about geographical styles. But archaeological evidence suggests that Northern and Northwestern border peoples influenced the early manufacture and use of bronze mirrors in the Zhongyuan or Central Plains of the Yellow River, the heartland of China during the Shang and Zhou dynasties. The first mirrors and the first mirror-casting foundry discovered in China were found in regions of the Central Plains where the Chinese interacted with their non-Chinese neighbors. Once a native tradition of mirror casting was established during the Warring States period (450–221 BCE), the region along the Yangzi River that was associated with the Chu 楚 kingdom began to produce mirrors of high quality in large numbers, especially in the area centered around Changsha 長沙 in Hunan Province.⁵ Craftsmen from this area continued to make mirrors and invent new styles for centuries to come. During the Han

⁵ Here and in the survey of mirror designs below, my account of northern influences on early mirror production in China and the origins of a native Chinese tradition of mirror casting are deeply indebted to O'Donoghue 1990.

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dynasty, production centers in the region of the capital cities of Chang'an 長安 and Luoyang 洛陽 along tributaries of the Yellow River in the Central Plains became prominent and remained important centers of production through the Tang dynasty. The great centers retained their importance over time, while local foundries came and went.

Inscriptions that appear on mirrors from the Han dynasty onward occasionally mention geographical locations. Such inscriptions provide information about regional sources of copper used in bronze alloys and locations of workshops where mirrors were made. However, the information in mirror inscriptions is not always reliable. Several make false claims of origination in desirable locations. For example, hundreds of Han dynasty mirrors, some of rather low quality, claim as their place of manufacture the workshops of the Shangfang 尚方 (Directorate of Imperial Manufactories). These were prestigious government workshops in the capital city that made limited runs of high-value objects such as incense burners and lamps for the imperial household. One mirror even mentions the Shangfang workshops together with a contradictory place of origin in the same inscription. Mirrors with counterfeit inscriptions are comparable to today's knock-offs of high-status consumer goods such as Chanel handbags or Rolex watches.⁶ When reading inscriptions, therefore, we need to exercise caution, and to compare the data they reveal with that of the archaeological record.

In addition to inaccurate inscriptions, other factors complicate the question of geographical source in the case of bronze mirrors. Craftsmen moved to new regions for various reasons, including war and economic conditions, taking their local styles with them. Upon arrival, they could influence mirror makers in their new location. The portability of mirrors makes it difficult to determine their geographical origins. Relatively small and lightweight, mirrors could be transported easily from one region to another. Local craftsmen might copy a mirror carried to a new place. And a mirror could be buried in a tomb far from the place of its manufacture. Thus, the region of a mirror's discovery may not be the region of its original fabrication.

CHRONOLOGY AND DATING

ARCHAEOLOGISTS HAVE ESTABLISHED A ROUGH CHRONOLOGY for mirror production. The earliest mirrors in China are associated with the Qijia culture 齊家文化 (CA. 2100–1700 BCE), a prehistoric culture that flourished on the northwestern peripheries of China proper during the Early Bronze Age. The next set of mirrors comes from tombs

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dating to the Shang dynasty, but the mirrors themselves are almost certainly imports from areas that now belong to Mongolia and Siberia. During the following half-millennium, mirrors apparently disappeared from the archaeological record. The first firm evidence of the casting of mirrors in the Central Plains, at the foundry site of Houma 侯馬 in Shanxi Province, dates to the sixth to fifth centuries before the Common Era.

A native Chinese tradition of mirror casting first began to flourish in the Warring States period. At that time, mirrors began to accompany the deceased in the tombs, as part of a new trend to provide the dead with personal articles used in daily life, in addition to the ritual vessels and status symbols prevalent theretofore. Mirrors are encountered in tombs of a far wider spectrum of social rank than ritual vessels ever were, and this near-ubiquity has posed challenges to the archaeologist. Most of the thousands of mirrors found in China were produced from the Warring States period through the Tang dynasty. Few were produced before this time, and few mirrors of high quality were cast afterward. If we count only mirrors of fine quality, the overwhelming majority was made during this period, with but one slump. During a period of unrest and division from the fourth to the sixth centuries of the Common Era, mirrors declined in both quality and quantity.

Dating bronze mirrors accurately is as complex a challenge as assigning geographical origin. Mirrors may be dated by scientific excavation from archaeological sites of known dates. Less securely, the date of a mirror may be attributed by comparison with objects excavated at such sites. Least securely, a mirror may be assigned a date on the basis of apparent stylistic affinity alone. Physical qualities of mirrors that vary over time may also be used to corroborate a date reached by evaluating archaeological context and design. These include the profile or cross section of the mirror, its outline, the size and shape of the knob, and the height of the rim. A chart of profiles of mirrors in the Cotsen Collection, arranged in chronological order, gives a rough idea of these variations (FIG. 1). The presence or absence of inscriptions, the percentages of the different metals combined in the bronze alloy, the application of metallurgical processes in addition to casting, and the overall quality of the casting also give clues to the period of manufacture.

In addition to archaeological evidence and physical characteristics, inscriptions provide another tool for dating mirrors produced from the middle of the Han dynasty onward. One of the earliest dated mirror inscriptions mentions a date corresponding to 6 CE.⁷ Examples that bear dated inscriptions furnish a framework that has allowed scholars to trace the emergence and development of different designs. Once a chronological sequence of dated mirrors was established, other mirrors could then

⁷ See Bulling 1960: pl. 23.

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COLLECTION NUMBER: O-0751
Jin dynasty (1115–1234 CE)



COLLECTION NUMBER: O-0349
Eastern Han dynasty–Three Kingdoms period (25–265 CE)



COLLECTION NUMBER: O-0255
Tang dynasty (618–907 CE)



COLLECTION NUMBER: O-0399a
Eastern Han dynasty (25–220 CE)



COLLECTION NUMBER: O-0305
Tang dynasty (618–907 CE)



COLLECTION NUMBER: O-0779
Western Han dynasty (206 BCE–8 CE)



COLLECTION NUMBER: O-0425
Tang dynasty (618–907 CE)



COLLECTION NUMBER: O-0460
Qin dynasty (221–207 BCE)



COLLECTION NUMBER: O-0134
Tang dynasty (618–907 CE)



COLLECTION NUMBER: O-0750
Warring States period (450–221 BCE)



COLLECTION NUMBER: O-0234
Tang dynasty (618–907 CE)



COLLECTION NUMBER: O-0778
Warring States period (450–221 BCE)



COLLECTION NUMBER: O-0363
Sui dynasty–Tang dynasty (581–907 CE)



COLLECTION NUMBER: O-0200
Warring States period (450–221 BCE)



COLLECTION NUMBER: O-0233
Eastern Han dynasty–Jin dynasty (25–420 CE)



COLLECTION NUMBER: O-0427
Shang dynasty (CA. 1600–1046 BCE)

FIGURE 1:
Mirror Profiles in Chronological Order
(not to scale)

be placed in rough chronological order by comparison with known inscription formulas or the associated designs.⁸

But, like inscribed place-names, inscribed dates can mislead us: some dates are symbolic rather than factual. The inscription on a mirror in the collection of the Freer Gallery of Art, for example, asserts that it was cast on the cyclical day *bingwu* 丙午 in the first month of the year corresponding to 174 CE.⁹ In fact, no *bingwu* day actually occurred in the first month of that year. Yet the fictitious date does not make the mirror a fake. Mirrors in collections all over the world bear the same false *bingwu* date. Their inscriptions claim that the metalsmith cast the mirror on the day that, from a symbolic point of view, was ideal for such activity. In the cyclical numbering system used during the Han dynasty for calendrical calculations, the graph *bing* corresponds to fire while the graph *wu* represents the sun at its zenith. Therefore, a *bingwu* day was the most suitable for casting a shining mirror of molten bronze. A mirror cast on that day would draw potency from its alignment with natural forces. Medieval Chinese calendar experts used the cyclical numbering system to calculate auspicious and inauspicious days for important activities. The same system is used today to calculate entries in the Chinese almanac, published annually with a calendar that lists lucky and unlucky activities for every day of the year. The Freer mirror adheres to this system. The date had a ritual validity more real and more important to its maker than historical accuracy.

Additional factors cause confusion in dating and warn the historian to be cautious. Even excavation context is not an infallible criterion for dating because families could keep a mirror for decades or even generations and only then bury it, years after its style was current. Sometimes craftsmen reused an old mold long after it was made, or made a new mold from an old mirror. And occasionally ancient types were revived, sometimes in sincere reverence for the past, sometimes as outright forgeries.

Once craftsmen introduced a mirror type, it entered the general artistic vocabulary and became available for production from that time onward. As a result, we can determine when production of a certain type of mirror began, but not when it stopped. Dated inscriptions show that some types remained in continuous production for centuries. While individual mirrors cannot always be dated precisely, they can be classified as belonging to certain types for which the dates of introduction are known. As more and more Chinese mirrors have been excavated and studied, we have gained a more detailed and accurate chronology of styles and inscriptions. We continue to fill in the blanks. Since none of the mirrors in the Cotsen Collection has a clear provenance or

⁸ This pioneering work was done by Umehara Sueji (Umehara 1944).

⁹ This mirror (FGA 39.38) is discussed and illustrated in Cahill 1986: 63, fig. 3.

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dated inscription, we have dated them in relation to the known sequence of styles and in comparison to examples excavated in controlled digs.

20

FABRICATION: CASTING AND PRODUCTION

ANCIENT CHINESE BRONZE CASTING HAS NEVER BEEN EQUALED in excellence; this includes bronze mirrors. By the time bronze mirrors began to be cast in large numbers during the Warring States period, Chinese bronze technology was already mature and sophisticated. The early mirrors share techniques of fabrication with contemporary bronze ritual vessels. They were made from an alloy of copper, tin, and lead. As time went on, craftsmen changed and adapted the bronze recipe, altering the percentages of different metals to customize the alloy for mirrors. Average proportions for a mirror of the Han dynasty were 71 percent copper, 26 percent tin, and 3 percent lead. Some also contained small amounts of trace metals, such as zinc. This relatively high-tin combination allowed gas bubbles to disperse quickly during casting, leaving a hard, smooth surface. The result was more brittle and breakable than the metal used in ritual vessels; it could not be worked by hammering. However, it was gray or whitish in color and could take a high polish, producing a surface well suited to reflection. Alloys continued to change slowly over time as metalworkers experimented to achieve improved results. For example, Tang metalworkers increased the tin content again and lowered the lead, producing a smooth, silvery surface. Studies of the metal composition of bronze mirrors have made progress, but many questions remain. Tests currently being done on core samples of some mirrors in the Cotsen Collection will produce valuable information about the precise composition of the mirror alloys.¹⁰

On a continuum from simple to complex casting, with a coin representing the simplest casting challenge and an elaborate ritual vessel featuring many parts and projections representing the most complex, mirror casting was located toward the simpler end. Yet the mirror did present challenges. While the shape itself was simple, a smooth reflective surface was difficult to achieve. The mirrors were cast in two-section clay molds: one piece for the reflecting front surface and one for the decorated back. The mold needed to be even, smooth, and flat to produce an effective mirror. Artisans probably used a potter's wheel to obtain the most consistent results. The mold sections contained a negative image of the shape and surface decoration of the finished mirror. The maker carved or stamped decorations into the mold. After the molten bronze was

¹⁰ My discussion of bronze casting is indebted to conversations with Tom Chase, and to Chase 1991. David Scott of UCLA is preparing a materials analysis of the mirrors in the Cotsen Collection for Volume II of this catalogue.

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poured into the mold and allowed to cool, the mirror was removed and finished by grinding and polishing.

The earliest mirrors were small and crudely cast. Beginning in the Warring States period, as mirrors increased in number in the archaeological record, their casting reached a very high quality, easily on a par with that of the splendid bronze vessels cast during that period. The craftsman manipulated his materials to produce a thin, flat, almost perfectly round shape with fine surface detail. A viewer receives the impression that mirror makers during the Warring States and Han periods used small items such as mirrors and belt hooks as a means to show off their virtuoso mastery of elaborate design and complex casting techniques. The quality of casting and alloys, as well as the overall volume of production, diminished during the period of division following the fall of the Han, to return again to high levels during the Sui (581–618 CE) and Tang dynasties. After the Tang, mirrors once again show a marked and rapid decline in both the quality of alloy and the level of craftsmanship that corresponds with a drop in their cultural significance.

Craftsmen sometimes employed casting technologies other than clay piece-molds. As early as the Spring and Autumn period (770–450 BCE), Chinese bronze craftsmen may have begun to use the lost-wax process that had arrived from the Near East. The name comes from the wax model used to fashion the mold that later melted away and became “lost” when molten bronze was poured in. By the Warring States period, craftsmen possibly used this process to make the occasional bronze mirror. A few stone mirror molds have also been discovered.¹¹ But casting using clay piece-molds seems to have been the dominant method of mirror production through the Tang dynasty. Chinese craftsmen continued to use this relatively labor-intensive method to make mirrors after it was no longer used for other kinds of metal objects, perhaps because they had mastered it so completely and obtained such consistently fine results that they saw no need to change.

Artisans embellished the surfaces of mirrors using other techniques in addition to casting and polishing. During the Warring States period, some fine mirrors were inlaid with gold and silver as well as turquoise and jade (PL. 11). Surface tinning was invented at roughly the same time, in the Warring States kingdom of Qin, and craftsmen may have applied it to mirrors. In the Han dynasty, some mirrors were inlaid with metal, gems, glass, or mother-of-pearl, while others had sheets of hammered or cut silver or gold attached, and still others were gilded or silvered. Some Han dynasty mirrors have designs in two colors, one silvery and the other darker (PL. 62).¹² And one group, known as “black lacquer” mirrors, has a black and lustrous finish that mimics

¹¹ Chase 1991: 79, fig. 45.

¹² Chase 1991: pl. VII.

lacquer (PLS. 64–65, 68–69). A few Warring States and Han mirrors actually were painted with multicolored lacquer (PLS. 44–45, 46–49, 50). And one rare mirror in the Cotsen Collection has an embroidered and painted textile adhering to it (PLS. 51–54).

During the Tang dynasty, ancient Chinese metal technology was enhanced by the study of western, especially Persian, crafts. Several new metalworking processes were introduced into China as part of an enormous transfer of technology that took place at this time along trade routes, known collectively as the Silk Road, that led from the Chinese cities of the Central Plains westward across the mountains and deserts of Central Asia to Persia and India and eastward to Korea and Japan. To the native Chinese art of casting mirrors in clay molds, Tang metallurgists added engraving, stamping, granulation, openwork, repoussé, and embossing. They expanded their work with inlay. The Cotsen Collection contains examples of several of these techniques. One mirror, inlaid with mother-of-pearl, amber, and turquoise, depicts a scene of entertainment (PLS. 105–106). Another, its surface covered with gilt copper granulation, is inlaid with glass, a substance so rare in Tang China that craftsmen treated it like a semiprecious stone (PLS. 107–108).¹³

Mirror production was not only casting and finishing, but a process that took place in several stages. Since we have more information about bronze manufacture during the Han dynasty than for earlier eras, and since craftsmen of the following centuries followed Han dynasty modes of production, we use the Han as our model in discussing mirror manufacture. The Han dynasty government standardized mirror production and kept records of the steps involved in the manufacturing process, from mining through production to distribution. The *Official History of the Han Dynasty* (*Hanshu* 漢書) describes the organization of mining and manufacturing in some detail, and Han mirror inscriptions refer to several aspects of their manufacture.¹⁴

Fabrication of Han dynasty mirrors started with mining and transporting metals to the workshops where they were then processed. Government offices set standards, organized production, and oversaw workshop practices. In the shop, craftsmen combined and heated the metals, poured the molten alloy into a mold, cooled it, removed the cast object from the mold, and finished it. Then, through market mechanisms still incompletely understood, the finished product was passed on to the consumer.

During the Former or Western Han dynasty (206 BCE–8 CE), copper mines in the south of the empire operated on a massive scale, supplying metal to large imperial workshops in the capital city of Chang'an. The mines employed mostly unfree labor, including convicted criminals and conscripted peasants. The place most frequently mentioned in first-century mirror inscriptions as the source of copper used

13 On glass during the Tang dynasty, see Schafer 1963: 235–239.

14 My discussion of Han dynasty mirror production relies upon Barbieri-Low 2007 and Wang Zhongshu 1982.

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in the bronze mirror alloy is Danyang 丹陽. Danyang prefecture, in modern Anhui Province, was the location of a famous copper mine during the Han dynasty, and the “Treatise on Geography” in the *Official History of the Han Dynasty* states that the government established a position called “copper official” there.

The Shangfang, or Directorate for Imperial Manufactories, an institution established during the Qin dynasty, supervised the imperial bronze workshops of the Former Han dynasty. Originally, this was a palace department that managed the many masters of occult technologies (*fangshi* 方士) that served the Qin court. It governed physicians, alchemists, and magicians as well as bronze casters, all specialists who claimed exclusive knowledge and fantastic powers. The link of craft with magic inclined consumers to regard craftsmen with fear and suspicion, as “crafty” and potentially dangerous fabricators (in all senses of the word) who nevertheless made products that were necessary for daily life.

During the Former Han period, the Shangfang offices and workshops, financed and controlled by the Privy Treasury, were located inside the Weiyang Palace 未央宮 compound in Chang’an. These government workshops made luxury bronzes for the emperor’s use. They also manufactured goods in other media, bringing artisans with different specialties into contact with one another. In addition to the imperial workshops, there were large and small foundries, both public and private, in the capital and in the provinces. Some produced mirrors of high quality. Individual families operated many of these shops, proudly inscribing their surname or shop name on their products and guarding their trademarks.

Production, especially in the government workshops, was organized and efficient. As in workshops that produced other manufactured goods, a head craftsman supervised the shop. He was held accountable for the quality and timely delivery of the finished product. Each worker was responsible for a specific task. Workers made mirrors using an early version of the assembly line that allowed both high output and good quality control. The workshop produced a seemingly infinite variety of patterns by mixing and matching a limited number of design elements. We can imagine a scene in which the shop supervisor, presumably with input from the customer, chose from a “catalogue” of models, specifying the design elements the craftsman was to combine in order to make the final product.¹⁵

Although craftsmen produced goods that were essential for daily life, they ranked below officials and farmers in the social class hierarchy of the Han dynasty. Literacy was a primary marker of the highest class, the officials. Anyone who performed manual labor had lower social status than those who did mental work. Among groups who did

15 On modular production as a key feature of Chinese civilization that allowed quick and efficient manufacture of large quantities of material goods in many media, see Ledderose 2000.

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physical work, craftsmen ranked below farmers. Defenders of the class hierarchy cited the craftsman's deceitfulness and his association with luxury goods, a source of waste and corruption, to rationalize his low social standing.

The rate of literacy was probably higher in government than in private workshops. But only the supervisor in a mirror-casting operation needed to read; the workers could simply carve characters into the molds following patterns supplied by their superiors. And the literacy of even master craftsmen was not held to as high a standard as that of government clerks. This might account for the many nonstandard characters found in mirror inscriptions. Homophones, as well as characters written backward, with missing strokes, or with the wrong radical, are all common. In addition, on several mirrors the maker seems to have had too much space, requiring him to insert extra characters as filler, or not enough space, requiring him to truncate the inscription. These irregularities suggest that the artisan could not read what he carved into the mold, even though the characters are executed in an elegant calligraphic style.¹⁶

While the Shangfang workshops supplied the imperial palace and government, private workshops sold their products in the marketplace. Mirror inscriptions from family-run shops used inflated rhetoric to advertise their mirrors, fostering competition in the interest of keeping sales volume and prices high. Archaeologists have excavated bronze mirrors in large numbers from many Han dynasty graves, leaving no doubt of their wide distribution among the Han dynasty population.

DESIGN PRINCIPLES AND INFLUENCES

THE SHAPE AND FORMAT OF THE MIRROR present the designer with obstacles and opportunities. With few exceptions, mirrors are small, round, and more or less flat. An average mirror is about the size of the saucer for a teacup: a limited field for decoration. Over centuries, Chinese artisans mastered these design challenges.

During the Warring States period, as mirrors became an ever more important part of the output of bronze workshops, mirror design began to evolve independently from that of ritual vessels and other kinds of bronzes, becoming more and more suited to a flat surface and round outline. This adaptation produced two of the earliest and most lasting principles of mirror design: radial symmetry with a rotating viewpoint, and division of the mirror surface into quadrants. Both affect how the viewer perceives the decorative program.

16 Other possible explanations of truncated inscriptions are not related to workers' literacy. Since the inscriptions were standard and repetitive formulas that everybody knew, perhaps it was unnecessary to reproduce the entire formula. Or perhaps the formulas were considered so powerful and efficacious that a few words were enough to suggest the whole.

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The way mirrors were designed to be viewed changed over time. To read a Warring States or early Han dynasty mirror, the viewer looks down from above at the entire horizontal plane of the mirror back, or revolves the mirror like a wheel to read the design in circular fashion. From any particular point of view, the lower part of the mirror design is coherent, while the upper part looks upside down. The more abstract the design, the weaker the upside-down effect. Decorative schemes on mirrors favor repetition and interplay between circular and square shapes. This design principle corresponds to the characterization of heaven as round and the earth as square in traditional Chinese correlative cosmology (discussed below).

As soon as craftsmen began inscribing mirrors, during the second century BCE, they incorporated the inscriptions into the decorative program. Inscriptions continued to appear occasionally for as long as mirrors were cast. The graphs themselves, written in seal script, clerical script, or a variety of decorative or talismanic scripts, became aesthetic variables within the design. Craftsmen integrated an inscription into the decor, locating it in a separate ring encircling the mirror (PL. 63), in the main field (PLS. 64–65), in cartouches (PL. 72), or in square seals (PL. 75). For some mirrors, the inscription was the main decoration. The presence of an inscription makes the mirror more interesting and valuable to the Chinese collector. The high esteem accorded inscribed mirrors derives from their historical content, their participation in an aesthetic that values intertextuality, and Chinese reverence for the written word.¹⁷

Late in the Han dynasty, artisans began to design some mirrors in a more pictorial fashion, so that the whole decorated field reads vertically. The first stage in this process created a format divided into vertical registers, or tiers, that contain figures. Later, during the Tang dynasty, the entire design field became a single picture plane, depicting one narrative or decorative scheme.

Mirrors shared design features with bronze ritual vessels of the late Zhou dynasty. Artisans made the early mirrors in the same workshops as the vessels, using the same casting techniques and applying the same forms of surface decoration. The earliest mirrors are difficult to distinguish from lids to ritual vessels: they have the same round shape and central handle for lifting. Early mirrors also share with ritual vessels their decorative vocabulary of auspicious and apotropaic (protective) motifs. Elements of design like the *taotie* 饕餮 mask, dragon, tiger, and bird had all appeared on ritual bronzes for centuries before appearing on mirrors. The fine-patterned backgrounds seen on Warring States mirrors descended from the “thunder pattern” (*leiwén* 雷文) of squared spirals on the ritual vessels.¹⁸ But very soon, the vocabulary of background patterns and decorative motifs used on mirrors, like their overall design strategies and

17 Reverence for the written word lies behind a traditional Chinese system of naming mirror types in which inscribed mirrors are named after the first few characters of the inscription. This method of classification assigns mirrors with the same decorative scheme to different categories and mirrors with different designs to the same category, so it is not followed here. But the existence of such a naming system demonstrates a high regard for inscribed mirrors.

18 For images of *taotie* and *leiwén* on bronze ritual vessels, see Gettens 1969: 59, figs. 20–22.

alloy recipes, evolved independently of the ritual vessels. As a consequence of such idiosyncrasies, Chinese connoisseurs have traditionally regarded the study of mirrors and their inscriptions as a specialized subfield of antiquarianism, and assembled collections of mirrors separately from those of other kinds of bronzes.

Mirrors share features of format and subject matter with other art forms. A permeable boundary between different media during the late Zhou through Tang periods allowed influences to flow back and forth. Objects made of different materials or by different techniques were regularly found in close proximity to one another in workshops, daily life, and tomb furnishings. Proximity promoted an integrated decorative repertoire. Design influences on mirrors from objects fashioned from jade, lacquer, textiles, and clay are readily apparent.

The mirror shares its round shape with one of the earliest and most auspicious forms of Chinese art: the jade *bi* 璧 disk seen first in the Neolithic.¹⁹ As soon they started writing about the meaning of the *bi*, the Chinese considered this object a symbol of heaven and marker of high status. Mirrors, through their designs and inscriptions, were also consistently linked to heaven and high status (PL. 78). A Warring States mirror in the collection is inlaid with an openwork jade *bi* (PL. 11), and mirror inscriptions mention jade (PLS. 86–87).

Mirrors also share design elements with lacquer painting. Lacquer and bronze objects were used together in the household and buried together in the grave. Both lacquerwork and bronze mirrors reached a high point of design and technical mastery during the later Warring States and early Han periods. During the Han dynasty, bronze and lacquer workshops often operated in neighboring facilities, so that opportunities for observation and imitation arose.²⁰

The lines and motifs of lacquer painting influenced the fluid curvilinear designs on Warring States mirrors. In some cases, artisans used colored lacquer pigments directly on bronze mirrors. Compositions of humans, animals, and imaginary creatures in simple landscape settings appeared earlier in lacquer painting than on mirrors. While we do not have the evidence to prove direct influence, paintings on lacquer may have inspired the earliest images of human figures on the mirrors.

Textile designs and weaves also influenced mirror decoration.²¹ Artisans in the Changsha region of the Chu kingdom during the Warring States period and later in the Han dynasty capitals took the lead in adapting textile designs for use on mirrors. People buried textiles and luxurious clothing together with mirrors in tombs. Like other grave goods, mirrors were sometimes wrapped in silk. Several mirrors in the

19 For example, see the Neolithic *bi* excavated at Fanshan 反山 in Zhejiang in 1986 (Guojia Wenwuju et al. 1999: 49).

20 On lacquer painting from Hubei Province in the region of the Warring States kingdom of Chu, see Chen Zhenyu 1996.

21 The argument that textile weaves and patterns influenced other art forms, including bronze mirrors, is found in Mackenzie 1999.

Cotsen Collection bear textile pseudomorphs, evidence of their contact with cloth in the tomb (PLS. 25, 36).²²

Rectilinear and angular elements in the designs on mirrors from the Warring States and early Han eras echo characteristic shapes from woven textiles. Shang dynasty weavers already exploited the potential of their looms to form designs along diagonal axes, creating lozenges and the interlocking T-hook pattern. Warring States silk textiles continued to emphasize diagonal elements, creating abstract geometric and pictorial designs constructed of angular or stepped elements. The diagonally oriented designs of interlocking T's also appear in lacquered woven bamboo hampers, fans, and mats of the Warring States period in the Chu region.²³ Mirror craftsmen of the late Warring States era may have borrowed their lozenges and T-shapes (*shan* 山 elements) from woven patterns (FIG. 2). A little later, the curving shapes made possible by the addition of embroidered ornament to woven textiles may have inspired mirror makers to devise the graceful phoenix and dragon arabesques that dominate late Warring States and early Han mirrors (PLS. 24, 25–26).

Ceramic arts may also have influenced mirror design. As early as the Shang dynasty, potters decorated white clay vessels with the interlocking T-shapes that eventually appeared on the mirrors. Zhou and Han dynasty terracotta roof-tile ends, also round and flat, share with mirrors their raised outside rims and depictions of auspicious animals.²⁴

HISTORICAL SURVEY OF MIRROR DESIGNS

The Earliest Mirrors

The first Chinese bronze mirrors, associated with the Qijia culture, were excavated in Qinghai and Gansu Provinces, regions where cultural influences from China and areas to the north interacted. The fact that they are nearly pure copper also suggests a metallurgical tradition different from the one that developed later in the Central Plains. They have simple designs: sawtooth bands, rows of parallel striations, and sometimes a star-shaped central pattern. The star patterns also appear on Chinese Neolithic pottery.²⁵ The earliest mirror in the Cotsen Collection, (PL. 2), resembles a Qijia specimen found at Gamatai 冢馬台 in Qinghai in 1977.²⁶ The Cotsen mirror features the same central star as well as two small holes that may have been used to attach the mirror to its owner's clothing. The design suggests that makers of this object revered

22 Textile pseudomorphs on round bronze disks appear as early as the Erlitou 二里头 period (1900–1600 BCE). One excavated in 1975 at Erlitou in Henan Province is illustrated in Guojia Wenwuju et al. 1999: 67.

23 See Chen Zhenyu 1996: pls. 25, 53, and 54.

24 See the animals of the four directions on roof-tile ends in Little 2000: 129, cat. 9.

25 One excavated in 1974 at Dawenkou 大汶口 in Shandong is illustrated in Guojia Wenwuju et al. 1999: 34–35.

26 See Li Xueqin 1985: 297, fig. 126.



FIGURE 2:
Compound Weave Silk Textile
from the Cotsen Textile Traces Collection
COLLECTION NUMBER: T-0327f
Warring States (450–221 BCE)

the sun and stars. Mirrors with similar designs were made for well over one thousand years. They have been excavated in a broad area along the northern peripheries of China, stretching all the way to Korea—an area inhabited at that time by groups of semisedentary peoples who mixed influences of Chinese and other traditions.²⁷

During the Shang dynasty, mirrors continued to be small in size and unusual in burial assemblages. They are distinctly different in design from other Shang ritual bronzes. A Shang mirror in the Cotsen Collection (PL. 3) resembles mirrors from the royal tomb of Lady Hao 婦好 excavated in 1976 at the Shang capital city of Anyang 安陽 in the Central Plains of China proper.²⁸ The Anyang mirrors show affinities with artifacts of northern neighboring people that the Shang state regarded as enemies; these mirrors may not have been Chinese at all. Rather, they may have been war booty or the products of captured craftsmen. With its bands of simple striations, the Cotsen mirror resembles even more closely a Shang dynasty mirror from Zhangbei 張北 County, on the border of Hebei Province and Inner Mongolia.²⁹ This was a region where Chinese and northern peoples continued to interact during the Shang dynasty, producing local indigenous traditions.

Mirrors almost disappear from the archaeological record during the Early or Western Zhou dynasty (1046–771 BCE). Their scarcity and departure from the standard decorative repertoire of Zhou ritual bronzes suggest that mirrors continued to be culturally marginal. Northern tombs from the early Zhou period have yielded burial panoplies that included bronze disks together with round bronze openwork fittings for horses' harnesses (*danglu* 當盧), two objects that may have been the ancestors of native Chinese mirrors.³⁰ Archaeological evidence suggests that mirrors were reintroduced into tomb assemblages in the Eastern Zhou through the agency of northern peoples who valued horses and worshiped the sky.

Mirrors remained rare and unrelated to standard ritual bronze vessels during the early Eastern Zhou dynasty, also known as the Spring and Autumn era (770–450 BCE). A mirror excavated in 1957 at Shangcunling 上村嶺 in western Henan Province, dating to the eighth or seventh century BCE, is probably the earliest Eastern Zhou mirror found in the Central Plains.³¹ Like the mirrors found in Shang tombs, this specimen is probably an import; its closest counterparts have been found in Xinjiang and elsewhere in Inner Asia. Perhaps not coincidentally, the earliest firm evidence for mirror casting within the Central Plains comes from the state of Jin 晉, which had a long history of contact with non-Chinese populations in the northern steppes. Mirror molds datable to the sixth to fifth centuries before the Common Era were found at the

27 See O'Donoghue 1990: ch. 1.

28 O'Donoghue 1990: fig. 6.

29 O'Donoghue 1990: fig. 8.

30 O'Donoghue, 1990: fig. 43.

31 Li Xueqin 1985: 301, fig. 129.

site of the Houma bronze foundry, right outside the rulers' palace compound at the Jin capital of Xintian 新田 in Shanxi Province. Mirrors appear in burials at cemeteries of the Jin elite.

30

The Warring States Period

The Warring States period saw a sudden and enormous increase in the number of mirrors found in tombs. It also saw great changes in society and thought. We cannot directly link changes in Warring States mirrors with contemporary changes in thought. This is different from later periods when there is a clear convergence of new mirror designs with new systems of thought. Nevertheless, it is possible to glimpse potential connections.³²

The seventh through the third centuries BCE are known in world history as the Axial Age because so many important philosophical concepts and government institutions evolved then. Thinkers of the Warring States period, an era named for its political divisions and well known for its robust philosophical debates and surprisingly high degree of social mobility, set Chinese discourse about good government, individual ethics, and the nature of the universe for the next two thousand years. Of particular importance for mirrors of later periods, Warring States thinkers argued about definitions of the legitimate state and the ideal person, and began to devise a system of correlative cosmology that linked heaven, earth, and human beings.³³

During the Warring States period, bronze disks were still buried in tombs as part of horse-and-chariot gear, together with openwork grilles that replaced the earlier ornamental harness fittings. Warring States craftsmen put grille and mirror together, affixing the grille on top of the mirror to create a two-piece or double-tier mirror. This is the earliest native Chinese mirror type. Several double-tier mirrors, associated with the royal cemetery complex of the Zhou dynasty at Jincun 金村 near Luoyang, date to the fifth to third centuries BCE. Members of the ruling class by that time valued mirrors and collected them in their treasuries. The diversity, sumptuous decoration, and innovative styles of zoomorphic tracery that became hallmarks of the style associated with the Jincun cemetery demonstrate that craftsmen lavished more care on mirrors than ever before. At about the same time, craftsmen along the Yangzi in the region associated with the Warring States kingdom of Chu began to make large numbers of fine mirrors. Mirrors, no longer marginal, had entered mainstream Warring States elite culture.³⁴

The earliest Warring States period mirrors in the Cotsen Collection are a group of double-tier mirrors. A square double-tier mirror (PLS. 4–5) shows four opposed birds with wings outspread, each grasping what looks like a branch with its beak and claws. Both

³² For discussion of the correspondence between ornamentation and systems of thought in classical China, see Powers 2006.

³³ On philosophical debates of this era, see Graham 1989. On the archaeological record, see Falkenhausen 2006. On the influence of correlative cosmology on Chinese art, see Rawson 2000.

³⁴ See O'Donoghue 1990: ch. 4.

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the bird and the outer band of interlace resemble openwork lacquer pieces from the state of Chu. Comparison with Chu pieces reveals that the “branch” is actually a serpent.³⁵

A round mirror depicts two interlaced dragons in the center, surrounded by four serpents biting the rim (PL. 6). The serpents strongly resemble those found on a circular harness fitting excavated at Liulige 琉璃閣 in Henan Province.³⁶ The dragons and serpents also call to mind those painted in lacquer on separate parts of a Warring States Chu stringed instrument.³⁷ Two other mirrors showing teeming coils of horned mythical beasts (PL. 8) and dragons (PLS. 9–10) resemble double-tier mirrors excavated in the Chu region.³⁸

Joining a piece of openwork with a flat mirror creates three-dimensional relief. Decorative schemes of two-tier mirrors play on the tension in the design between two and three dimensions and between figure and ground. This play continued as an aesthetic principle in the design of mirrors long after they were cast in one piece.

For mirror designs that develop later in the Warring States period, the background dominates the design. In many cases, the background was the design (PL. 12). The fine-background patterns descend from the spiral-pattern grounds of earlier bronze vessels. Warring States craftsmen favored small repeated patterns: similar patterns also appear in lozenge-shaped textile motifs and in the swirling commas that decorate lacquered shields of Warring States Chu.³⁹ The mirrors tend to be quite flat, with the surface separated into three zones: center, main decorative field, and rim. The central knob or boss is small and often has three ridges. A few bosses assume animal shapes. A flat, smooth band often circles the boss, in striking contrast to the main design field. Joined arcs may ring the center or periphery of the mirror (PLS. 29–30, 38). The circular display of joined arcs may represent radiant light, identifying the mirror with celestial luminaries—early evidence of the influence of cosmology on mirror design.⁴⁰

Figures and forms resolve themselves out of the intricate and delicate designs of the background patterns on many late Zhou mirrors. One such motif evolved from Shang and Zhou dynasty bronze vessels: the *taotie* mask. The Cotsen Collection contains two mirrors, one round and one square (PLS. 13–14, 15), showing a pair of addorsed masks filling the whole central field. The mask, appearing in Chinese art long before any text attempts to explain it, was first identified on ritual vessels by Song dynasty (960–1279 CE) antiquarians. The *Springs and Autumns of Mr. Lü* (*Lüshi chunqiu* 吕氏春秋), a work written around 240 BCE, explains: “Zhou dynasty tripods are decorated with the *taotie*. It has a head but no body. It is in the act of devouring a man but has not yet swallowed him.”⁴¹ According to legend, the *taotie* was a greedy monster that ate the sun, causing an eclipse, and the sun only escaped because the beast had

35 See Chen Zhenyu 1990: pls. 84, 104.1.

36 See O'Donoghue 1990: fig. 39.

37 See Chen Zhenyu 1996: pls. 2.3–2.5.

38 See O'Donoghue 1990: fig. 50.

39 See Chen Zhenyu 1996: pls. 95.1–2, 96, and 97.

40 Warring States craftsmen reflected the system of correlative cosmology in other media, in designs depicting configurations of the sun, moon, and heavenly bodies.

For example, a lacquer-painted clothing chest excavated in 1978 from the tomb of the Marquis of Zeng 曾, dated ca. 433 BCE, shows a tiger and dragon, the twenty-eight lunar mansions, and N. Dipper. See Little 2000: 128, cat. 8.

41 This is based on the explanation of the *taotie* found in Chang 1986: 12.

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an upper jaw but no lower jaw. The archaic phrase “The sun is eaten” (*ri you shi zhi* 日有食之) still appears in the Chinese almanac when a solar eclipse is forecast. We might suspect that the mask on the mirrors had an apotropaic function, as designs on later mirrors clearly did.

Other mirrors of the late Warring States period show contrasting elements against the fine-patterned ground. One well-known type features three to six flat bands shaped like the letter “T” or the Chinese graph for mountain (*shan* 山) arising from the rim. The Cotsen Collection contains a rare mirror with eleven 山 elements (PL. 16), as well as two more standard versions with four elements (PLS. 17–18, 19). This design often incorporates other shapes, such as petals. The 山 element may have originated in weaving; its angularity and pronounced slant are more reminiscent of textile patterns, such as interlocking T’s, than the conventional character for mountain. Another possibility is that it replicates the 山 shape of large Warring States bronze objects, such as those excavated at in 1977 at Pingshan 平山 in Hebei Province.⁴²

Next, Warring States artisans placed interlaced birds, dragons, or mythical animals on top of the fine-patterned ground. They sometimes added lozenge shapes, in isolation or interlaced with the creatures. One mirror in the Cotsen Collection (PL. 22) shows distinct and isolated birds and lozenges, while another (PLS. 29–30) inventively uses lozenges to represent mountains. In contrast to the legibility of those two, another (PL. 23) shows split and attenuated birds connected and interlaced so thoroughly as to make recognition difficult. Still another (PLS. 25–26) shows abstracted animal tracery, interlacing dragons with the lozenge shapes. One lively composition extant in several nearly identical examples exhibits both clarity and connection: four large animals with open mouths and protruding tongues leap around the decorative field, two paws overlapping the outer rim and one overlapping the inner, with the front paw of each touching the long curling tail of the one ahead (PL. 31).

The hundreds of examples of mirrors with fine-patterned backgrounds exhibit a mix-and-match composition plan: they deploy a limited number of design elements but combine them in such a variety of patterns that the designs seem much more diverse than a simple cataloguing of motifs would suggest.⁴³ Variations of these designs of figures against a fine-patterned background continued well into the following Qin and Han dynasties. Part of the aesthetic pleasure of such designs results from the tension between figure and ground and the effort the viewer must make to read the images.

Several rare painted mirrors in the Cotsen Collection are of uncertain date, though comparison with lacquer paintings from the region of the Chu kingdom suggests late Warring States or early Western Han manufacture. One painted mirror (PL. 50) that

42 One is illustrated in Guojia Wenwuju et al. 1999: 112–113.

43 The seeming diversity results from modular production (see Ledderose 2000).

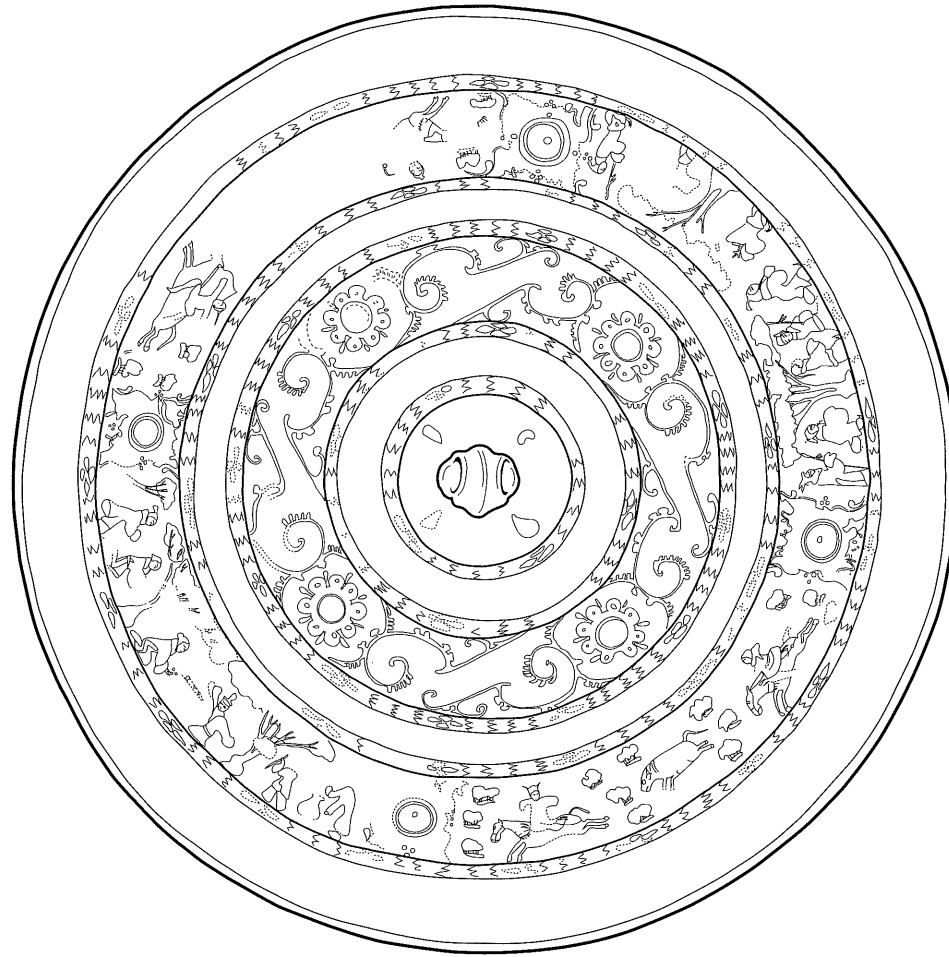


FIGURE 3:
Line Drawing of PLS. 46–49

shows two curling, elongated, and simplified birds resembles lacquered mirrors from Chu dating to the fourth century BCE.⁴⁴ Another (PLS. 46–49; see FIG. 3) has a painted central ring with a *trompe l'oeil* rendering of inlaid jade or turquoise, resembling the actual inlay on another mirror in the Cotsen Collection (PL. 11). The outer ring of the painted mirror shows chariots, riders on horseback, and figures in groups, separated by trees and four circles. This little picture is reminiscent of one found on a Chu lacquer box.⁴⁵ The mirror has sixteen joined arcs around the perimeter, a Warring States design component that continued through the Western Han. The central knob takes

⁴⁴ See Chen Zhenyu 1996: pls. 37, 60.

⁴⁵ See Chen Zhenyu 1996: pl. 36.

the small, thin, and three-ridged form found on late Warring States to early Han mirrors. This mirror is almost identical to a Han dynasty example excavated near Xi'an 西安 in Shaanxi Province in 1963.⁴⁶

The most extraordinary of the painted mirrors (PLS. 51–54) has an embroidered and painted piece of cloth cut exactly to fit; the cloth adheres to the flat surface of the mirror. The radial design shows eight figures in small groups separated by trees. One figure of a woman identifiable by her long braid and bright red robes is repeated three times. Hanmo Chang has identified the subject as the story of Wuzi Xu 伍子胥 from the *Springs and Autumns of the Wu and Yue Kingdoms* (*Wuyue chunqiu* 吴越春秋). It concerns the ongoing rivalry between the kings of Wu 吴 and Yue 越 during the Warring States period and the fatal part played by the beauty Xi Shi 西施.⁴⁷

The Qin Dynasty

The First Emperor of the short-lived Qin dynasty (221–207 BCE), Qin Shihuangdi 秦始皇帝, conquered the Warring States one by one through a brilliant combination of charisma, military strategy, and centralized organization. Most famous today for the spectacular terracotta army assembled in pits not far from his tumulus near the modern city of Xi'an, he devoted considerable resources to the pursuit of immortality. His career received a mixed review in the writings of later Chinese historians. He won their praise for his contributions to infrastructure and government institutions, as well as to his alleged standardization of writing, roads, money, and weights and measures. The same historians reviled him for his harsh laws, extravagance, and cruel overuse of his subjects' labor. The rulers of the following Han dynasty inherited his accomplishments and distanced themselves from his excesses.⁴⁸

No significant changes in mirror design or fabrication took place during this short time. A finely cast mirror in the Cotsen Collection (PLS. 55–56), virtually identical to one excavated in Shuihudi 睡虎地 near Yunmeng 雲夢 in Hubei Province in 1974 and dated to the Qin dynasty, demonstrates stylistic continuity.⁴⁹ It features two leopards and two armed warriors carrying shields, set against a background that closely resembles lozenge-patterned woven silk textiles of the period (FIG. 2). The mirror has the small, three-ridged central boss typical of the late Warring States and Western Han periods. A smooth, square band that separates the decorative field from the boss contrasts with the fine-patterned ground and shows the interplay between round and square shapes that remains a prominent feature of mirror design from the Warring States through the Tang periods.

46 See Five Thousand Years of Chinese Art Editorial Committee 1993, vol. 1: color pl. 21, pl. 73.

47 Hanmo Chang, personal communication, 2009. He is preparing a study of this mirror for Volume Two of this catalogue.

48 For a general history of this period, see Lewis 2007.

49 See Five Thousand Years of Chinese Art Editorial Committee 1993, vol. 1: color pl. 16, pl. 60.

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People of later times remembered a famous Qin dynasty mirror. According to Han dynasty legend, a mirror hung in the Xianyang 咸陽 palace of the Qin ruler that revealed the inner organs (literally: gall and heart) of the person who stood before it. If a woman with licentious thoughts or an official with traitorous intentions passed in front of the mirror, it exposed their perfidy. The First Emperor of Qin reportedly executed several palace women on the basis of evidence reflected in the mirror. Later poetry, religious texts, and mirror inscriptions refer to the Xianyang palace mirror's magical capacity to reveal the true self. The inscription on a Tang dynasty mirror in the Cleveland Museum of Art reads: "If I could obtain as a gift the mirror of the King of Qin, I would certainly not resent paying a thousand pieces of gold. It is not that I want to illuminate others' secret feelings, but especially to light up my own heart." This speaker prized the mirror not for its power to expose others, but as an instrument of self-reflection.⁵⁰

The Han Dynasty

Han dynasty mirrors tracked social and philosophical developments more directly than did earlier mirrors. With the advent of comparative materials such as the Han dynastic histories and of inscriptions on the mirrors, connections are more easily demonstrated. The inscriptions are formulaic and short, but provide new data.⁵¹ Both images and inscriptions cast on Han dynasty mirrors give information on contemporary government, the family system, cosmology, and religion. Revealing what people feared and wished for, they shed light on the systems of beliefs and values underlying those fears and desires.

Modern Chinese people look back to the Han dynasty with pride. The word used today for people of Chinese ethnicity, Han 漢, derives from this dynasty. It was a great era of institution building. From their main capital city at Chang'an, the Han rulers governed a great, rich, strong, and diverse empire with the help of a growing imperial bureaucracy. Subjects related to the government through the institutions of tax collected in kind, corvée labor, military draft, and the census. During the Han dynasty, the Chinese family system assumed the patriarchal, patrilineal, and patrilocal form that remained the norm until the twentieth century. New interpretations of classical texts from the Zhou dynasty, combined with ideas from earlier systems of thought, resulted in a resilient system of ethics and statecraft. The correlative cosmology that informs Han dynasty and subsequent Chinese art and culture matured. The first great dynastic histories were written, with the explicit intention of providing models for individual and state action.

⁵⁰ This mirror and inscription are discussed in Cahill 2005: 31.

⁵¹ The inscriptions tend to be short, formulaic, and standardized. They take verse form whenever they are more than a few words long. The same phrases and poems, with slight variations, are repeated on a large number of mirrors. This helps us read inscriptions with characters that are illegible due to corrosion or written in nonstandard forms. We can often fill in the blanks in mirror inscriptions with the characters from well-attested formulas.

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The best-known emperor was Emperor Wu 武帝 (r. 141–87 BCE), whose martial expeditions ushered in a great age of contact with other peoples along the Silk Road. These roads, already conduits of trade, travel, and the exchange of ideas between China and the West before the Han, gained increased traffic as well as cultural and economic significance after Emperor Wu's great western military campaigns. Han dynasty exports from China included silk, high-value manufactured goods, and spices. Imports from the western regions included jade, glass, horses, and Buddhism.

Han thinkers developed a system of correlative cosmology inherited from earlier eras and applied it broadly. They posited a unified and holistic cosmos in which the microcosm reflected the macrocosm. Hierarchical and interlocking structures of order were repeated in the universal and the particular, in both general principles and their specific embodiments. The realms of heaven, earth, and human beings corresponded to and completed one another. A round heaven covered the square earth, with humans located between the two. Actions in one realm affected the others.

The cosmos evolved from a single origin, sometimes identified as the Dao 道. This original undifferentiated entity split into the equal and opposite forces of yin 陰 and yang 陽 which interacted constantly, and further divided into the five elements or five phases (*wuxing* 五行). These are wood, fire, earth, metal, and water. From the five phases emerged the entire created universe, collectively known in Chinese as *wanwu* 萬物, “the ten thousand things.” Since all things emerged from one original state, passing through the stages of yin and yang and the five phases, they could all be categorized as yin or yang in nature and further classified according to the five phases. The five phases were in turn related to the seasons of the year and to the five directions (four compass points and the center), so that the natural world, time, and space were all part of the system. Everything related to the whole and to everything else. Correlative cosmology permeated Han dynasty and later art and culture, with a particularly powerful impact on mirror design.

During the Eastern or Latter Han dynasty (25–220 CE), a momentous change took place in the Chinese religious landscape: the birth and early development of the Daoist religion. Daoism, the native high religion of China, began to take shape as an institutionalized religion and to gain a large following during this time. Two early schools that arose during the Latter Han, the Way of the Celestial Masters in Sichuan Province and the Way of Great Peace centered in the capital city of Luoyang, became the ancestors of all later Daoist schools. These early schools formed as several streams of old and new religious belief and practice flowed together to create a diverse religion. Among the converging streams were such ancient practices as reverence for the

ancestors and worship of the Five Marchmounts (holy mountains of the four directions and the center). These elements mixed with elite and popular cults of deities and transcendents, as well as with local traditions of divination, healing, and shamanism, to create a system with broad appeal. Daoists borrowed the idea of a hierarchical bureaucracy from the powerful Han dynasty government to organize their host of deities, and they used the model of official petitions to construct a way for the faithful to interact with those deities. The individual searched for perfection and eternal life by nurturing the immortal embryo or germ of transcendence with which each human being was born.⁵²

The designs and inscribed texts on bronze mirrors of the Han dynasty document the earliest stages in the process of the formation of the Daoist religion, revealing a narrative mostly missing from other historical texts. Mirrors refer to Daoist beliefs, ideals, and practices; they name places, gods, and natural forces important to early Daoists. Further, inscriptions and images on Han mirrors link the official class of the late Han dynasty to Daoist beliefs and practices. Mirror testimony refutes a persistent historical misconception, promoted by nineteenth- and twentieth-century Chinese intellectuals and their Western students, that the Daoist religion appealed only to poor and illiterate peasants. While fairly low-ranking people owned mirrors during the Han dynasty, poor peasants did not have the resources to buy mirrors. And mirror designs suggested elite associations. The connection between mirrors, elite values, and Daoism continues through the Tang dynasty.

In contrast, Buddhism has little influence on mirror design or inscriptions. Although the Buddhist religion made inroads into late Han dynasty China, mirrors barely reflect the change. The image of the Buddha appears on some mirrors near the end of the Han dynasty, but it is nearly indistinguishable from that of a Daoist deity, and seems to be just one among many auspicious symbols incorporated in the decorative scheme.

Early Han dynasty artisans continued the mirror styles of the Warring States period. For example, archaeologists have excavated mirrors with interlaced dragons on a fine-patterned ground in Han dynasty tombs at Mawangdui 馬王堆 near Changsha 長沙 in Hunan Province.⁵³ New decorative schemes began to emerge around the middle of the second century BCE. The first new pattern, called “grass leaf” (*caoye* 草葉), repeats a motif that resembles a stylized sheaf of grain. A mirror in the Cotsen Collection (PL. 58) is virtually identical to a mirror of this type excavated from the Han dynasty graves at Mancheng 滿城 in Hebei Province.⁵⁴ The design features sixteen joined arcs on the outer edge, four small bosses surrounded by petals between the grass motifs, a

⁵² On the connection between Daoism, correlative cosmology, and art, see Little 2000: ch. 2.

⁵³ See Wang Zhongshu 1982: fig. 142.

⁵⁴ See Wang Zhongshu 1982: fig. 143.

square band with an inscription around the central zone, and a quatrefoil around the central boss. The fine-patterned ground has disappeared in favor of a smooth background, and the central boss has increased in size to become a hemisphere—two features typical of Han dynasty mirrors. The arcs, small bosses, division into quadrants, and the interplay between circles and squares all suggest that this arrangement embodies cosmological principles.

This mirror, one of the earliest types to carry inscriptions, is the earliest inscribed mirror in the Cotsen Collection. Located on four sides of the band around the quatrefoil, the inscription makes a request on behalf of the mirror's owner:

長貴福 (May you) enjoy noble status and blessings for a long time;
樂無事 (May you) have pleasure without incident;
日有熹 (May you) have delight every day;
宜酒食 May (you have plentiful) wine and food;
常得君喜 (And may you) regularly obtain lordly delights (or: your superior's pleasure).

The inscription asks for concrete and practical blessings such as wealth and high position, freedom from misfortune, pleasure in daily life, enough food to eat and enough wine to drink, and the well-being that comes with high rank. Such inscriptions, with their easily memorized formulaic constructions, resemble prayers or petitions, standard forms of communicating with deities in Han dynasty Daoism. And their presence on mirrors implies that makers and owners believed in their efficacy. The same words requesting the same blessings still grace modern Chinese homes, especially around the lunar New Year.

The next style to appear is known in Chinese as the “star-cloud” (*xingyun* 星雲) mirror. A mirror in the Cotsen Collection (PL. 59) is nearly identical to one such mirror unearthed from an early Han tomb at Nanchang 南昌 in Jiangxi Province.⁵⁵ Both have a smooth ground, sixteen joined arcs on the periphery, a main field filled with clusters of raised circlets (the “stars”) separated by four quatrefoils, and another band of linked arcs surrounding the central boss. This design, with its orientation to the four directions (each quatrefoil representing a direction), and its arrangements of small raised circlets in clusters that look like constellations, has cosmological significance.

The most famous type of Han dynasty mirror, and the one most highly prized by Chinese collectors, originated during the first century BCE. This mirror achieved its mature form around 100 CE and remained in continuous production until the second century CE or later. The English-language term for this pattern is “TLV,” after the

55 See Wang Zhongshu 1982: fig. 144.

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shapes in its design that resemble those letters. The Chinese name, “*liubo* 六博 gameboard” (*boju* 博局), captures its cosmological meaning. The scheme replicates the board for a Han dynasty game of strategy that had cosmic implications. Although the rules to the game are no longer extant, we know that the board was related to divining boards, to the geomancer’s compass, and ultimately to the structure of the universe.⁵⁶ The earliest pattern that explicitly embodies Han dynasty notions of correlative cosmology, the TLV is a diagram of the cosmos with the square earth at the center, covered (in the two-dimensional design, surrounded) by the round heavens, with all the directions clearly marked, and the world sea flowing around the outer rim.

TLV mirrors frequently display the animals of the four directions, powerful protective deities, running around the central zone. The four animals, known as the Four Deities (*Sishen* 四神) or Four Numina (*Siling* 四靈), are the Blue-green Dragon of the East, the White Tiger of the West, the Vermilion Bird of the North, and the Dark Warrior of the North (pictured as a serpent wrapped around a tortoise). Their presence signifies control of space, amplifying the cosmic resonance of the design. An inscribed TLV mirror in the Cotsen Collection (PL. 63) shows animals of the four directions, joined by other animals and birds. The portrayal of the animals using slightly raised relief against a flat background, typical of this style, gives the appearance of outline drawing.

Many TLV mirrors are inscribed. The inscription on the Cotsen TLV mirror uses a standard formula, in this case a prayer for longevity. Han and later Daoists sought healing, longevity, and even immortality through ritual, devotion, and meditation. They revered and emulated perfected beings called transcendentals (*xian* 仙), immortals so blessed that they did not even recognize old age. The inscription on the Cotsen mirror describes the lives of these beings. This formulation appears first in the Eastern Han dynasty, dating this mirror to the first or second century CE.

Located in a ring around the TLV design, the text associates the mirror with the prestigious Shangfang office and praises its own craftsmanship. It invokes Daoist transcendentals who eat elixir foods and roam at will all around the earth and atmosphere, petitioning higher powers in the divine bureaucracy to grant the owner the same joy.

⁵⁶ On the significance of the TLV mirror design and its relation to correlative cosmology, see Loewe 1979: ch. 4. A lacquered *liubo* gameboard of the Han dynasty is illustrated in Chen Zhenyu 1996: pl. 198.

⁵⁷ Jade Springs, like many Daoist terms, admits of several interpretations. It refers to the numinous springs in the Daoist paradises that flow with waters that grant immortality. And in Daoist texts on ritual and physiological microcosmology, the Jade Springs are the salivary glands.

尚方作鏡真大巧 *The Shangfang (office) made this mirror of truly great craftsmanship;*
上有仙人不知老 *On its surface are transcendentals who are unfamiliar with old age.*
渴飲玉泉飢吃棗 *When thirsty they drink from the Jade Springs,⁵⁷ when hungry they eat jujubes;*
浮與天下遨四海 *They drift beneath the heavens and ramble the Four Seas.*
樂兮 *What pleasure!*

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The word “pleasure” or “delight” (*le* 樂), the second-to-last character in this inscription, appears in many mirror inscriptions. A standard cliché describing transcendents’ lives in Han dynasty mirror inscriptions is “pleasure without end” (*le wuji* 樂無極). Convenient as filler for leftover space, the formula evokes the bliss of the immortals and the mirror owners’ desire to join them.

Multiple inscription formulas of the Han dynasty express the quest for immortality, using a varied vocabulary rich in synonyms and metaphors. Some mirrors request longevity “greater than metal or stone” (*shou yu jin shi* 壽於金石). Other standards are “may you live ten thousand years” (*wan sui* 萬歲), and “may you prolong your life” (*chang sheng* 長生). The inscription on a mirror in the Freer Gallery of Art claims it can “prolong a person’s destined life span” (*ling ren chang ming* 令人長命).⁵⁸

New styles of mirror that appear in the Eastern Han dynasty show continuity with the decorative schemes and inscriptional formulas of the Western Han. One Eastern Han mirror pattern features a smooth overall surface with designs in concentric circles. A finely cast, nearly black mirror in the Cotsen Collection (PLS. 64–65) has a quatrefoil around the large hemispherical central boss, with four characters placed as decorative motifs between the leaves of the quatrefoil. Surrounding the quatrefoil are eight linked arcs and a striated band containing eight equidistant spirals.

Using another standard formula, the brief inscription reflects the need to produce male descendants for the patrilineal family. The four-character phrase *chang yi zisun* 長宜子孫 means literally “may your sons and grandsons continue for a long time.” We might more fluently translate this as “may your descendants continue forever,” a wish for eternal continuity of the descent line.

Other new styles devised by craftsmen around the middle of the Eastern Han dynasty show more direct and detailed Daoist influence. The new icon or pictorial mirror depicts scenes of human figures and horse-drawn carriages in relief. Icon mirrors appeared first in the Zhejiang area south of the Yangzi River. The designs are divided into quadrants and viewed by turning the mirror in one’s hands while reading the lower sections, one scene after another, in succession. A mirror in the Cotsen Collection (PLS. 68–69) closely resembles an icon mirror excavated from a Han tomb at Shaoxing 紹興 in Zhejiang Province.⁵⁹ Two seated figures are placed opposite each other, each surrounded by three attendants; between them on one side are a carriage pulled by five horses and on the other side, ten horses, five with riders. The two figures represent the Queen Mother of the West (*Xiwangmu* 西王母) and the Royal Father (or Patriarch) of the East (*Dongwangfu/gong* 東王父/公), powerful deities in Han dynasty and later Daoism. They represent the ultimate yin and yang as well as the western

58 This mirror (FGA 9.340) and its inscription are discussed and illustrated in Cahill 1986: 65, fig. 5.

59 See Wang Zhongshu 1982: fig. 148.

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and eastern directions, another example of cosmology in mirror design. The Queen Mother of the West, the more important of the deities, was worshiped in both elite and popular cults. Daoists believed she governed access to immortality and contact between the human and divine realms. The chariot pulled by horses might represent the legendary visit of the early Zhou dynasty King Mu 穆王 to the Queen Mother at the Turquoise Pond in her paradise on the mythical Mount Kunlun 崑崙. The mirror is an aid to devotion, meditation, and visualization, as well as a reminder of stories about the great gods.

The inscription on the icon mirror repeats another standard Han dynasty formula that expresses the fears and desires of the owner. It describes a time of great peace and prosperity characterized by deliverance from enemies, rest for the hardworking people, good weather, and bumper harvests. It requests longevity for the owner's parents and strength from heaven. Han dynasty Daoist schools promised their believers such a utopian world, while Confucian thinkers interpreted peace and prosperity as the result of good rule by a government that possessed the mandate of heaven. According to correlative cosmology, seasonal weather and rich harvests were responses of nature to good order among humans. This inscription, located in a ring around the central design, reads:

后 (or 石) 氏作鏡 *Mr. Hou (or Shi) made (this) mirror;*
四夷服 *The four enemy tribes have submitted.*
多賀國家 *We congratulate our country and its families many times over;*
人民息 *The people are at rest.*
胡虜殄滅 *The enemy tribes of the west and northwest are scattered and annihilated,*
天下復 *And all under heaven is restored.*
風雨節時 *Winds and rains follow their seasonal course,*
五穀熟 *(Allowing) the five grains to ripen.*
長保二親 *For a long time (may you) preserve your two parents,*
得天力 *And obtain the strength of heaven.*
傳告孫 *Report this widely to your descendants,*
出樂無極 *Producing pleasure without end.*

Another icon mirror in the Cotsen Collection (PL. 70) labels the figures, identifying the key deities as the Queen Mother of the West and the Royal Patriarch of the East and their attendants as minor attendant goddesses known as Jade Girls (*yunü* 玉女). Where the mirror discussed above has horses and a horse-pulled chariot, this one

has a tiger and a dragon, counterparts of the two deities as symbols of the West and East, yin and yang. The animals are part of the Queen Mother's iconography in many media during the Han dynasty; she sits on a dragon-tiger throne on a pottery brick from a second-century CE tomb in Sichuan.⁶⁰

A mirror design that emerges near the end of the Han dynasty shows a tiger and dragon confronting each other with mouths open at the top of the image, bodies mingled under the now very large central boss, and legs mixed up at the bottom (PL. 71). This is one of the earliest decorative schemes using the round shape of the mirror as a picture frame around a composition with a clear top and bottom. There is a short inscription between the dragon's legs.

The inscription advertises the name of the shop where it was made: 青羊為誌 “The Blue-green Ram’ is the trademark (of the mirror maker).” Presumably this workshop was located in the city of Chengdu 成都 in Sichuan Province, the city of the Blue-green Ram. According to Daoist scriptures, the founding deity Laozi 老子 met the gatekeeper Yin Xi 尹喜 at the Blue-green Ram shop before they departed to the west. The Blue-green Ram Belvedere, a Daoist temple in Chengdu named to commemorate this legendary event, flourished during the Tang dynasty and thrives again today.

The dragon-tiger design occurs in many versions, some showing a tiny transcendent pounding the elixir of immortality, a bird, a ram, or the dark warrior between the animals' legs. Others, like the one in the Cotsen Collection, place an inscription there. One of the most fascinating versions has human male genitals between the dragon's legs. This design, interpreted as the dragon and tiger mating, refers to the creation of the world through the joining of yin and yang. Each person contains both, and the goal of the Daoist adept is to harmonize the two forces in the body in order to achieve perfection and immortality. The anatomically correct dragon-tiger mirror may also represent ritual sexual practices of Celestial Master Daoists known as “harmonizing the breaths” (*heqi* 和氣).⁶¹

Another design, showing deities and animals in registers, originates at the very end of the Han dynasty and continues for a few centuries afterward. An inscribed mirror in the Cotsen Collection (PL. 72) with this design has fairly high relief. The composition reads vertically. A nearly identical mirror dated 201 CE is in the Donald H. Graham Jr. Collection; another, dated 202 CE, is in the Freer Gallery of Art.⁶²

Short inscriptions appear in two cartouches, one above and one below the central boss. They contain familiar formulas, petitions for high position for the owner: “may your lordship have official responsibilities” (*jun yi ren* 君宜任), and “may (your lordship) hold office” (*yi guan* 宜官).

60 See Little 2000: 154, cat. 24.

61 On the dragon-tiger design and its sexual and cosmological implications, see Wang Chenyi 2002.

62 The mirror in the Donald H. Graham Jr. collection and its inscription are discussed in Cahill 1994: 50, fig. 2. The mirror in the Freer Gallery of Art (FGA 36.4) and its inscription are discussed and illustrated in Cahill 1986: 64, fig. 4.

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The requests for high position that occur so frequently in mirror inscriptions have special implications for Daoists. Daoists of the late Han dynasty pictured the heavens as a divine bureaucracy that paralleled the imperial bureaucracy on earth. A hierarchical imperium of gods presided over the celestial government. Each deity had an office and a place in the system. Many ritual encounters of Daoist priests with deities took the form of bureaucratic interactions. Priests submitted petitions to the gods on behalf of their parishioners, requested acquittal for crimes of past and present generations, and wrote passports for the next world as well as deeds to the underground property required for graves. Formulations such as “may your lordship hold office” that conventionally honor the deceased by suggesting he was worthy of a high position are also prayers for posthumous celestial office. Just as the highest earthly good was a position in the emperor’s government, so the highest good in the world to come was heavenly office. As biographies of virtuous bureaucratic officials close with the posthumous honorific titles granted by the ruler, so the biographies of Daoist transcendents close with recitals of the high-ranking jobs in the celestial bureaucracy they would take up in the afterlife.

Daoists believed that mirrors that invoked or depicted deities had apotropaic powers, protecting the bearer from harm. As mentioned above, mirror designs and inscriptions frequently called upon the gods of the four directions, among the most powerful and ancient of Chinese deities, to safeguard the believer. Directional deities were paired with other figures important to Han rulers and peasants alike, such as the Yellow Thearch, ruler of heaven and god of war, health, and immortality. Heroes of the cult of immortality also accompanied them.

A long inscription around the rim of the Cotsen mirror names the images: the Five Thearchic Rulers, the Heavenly Emperor, the transcendent musician Bo Ya 伯牙, the Yellow Thearch, the Vermilion Bird, the Dark Warrior, the White Tiger, and the Blue-green Dragon. The animals of the four directions are discernible; the others may be among the twelve figures in human form arranged in registers. The anthropomorphic figures on the mirror look nearly identical. These are not portraits of individuals intended to be clearly distinguishable, but types: general all-purpose deities defined by their position in the composition, the use to which the owner puts them, and the names given in the inscription.

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吾作明鏡 *I made a bright mirror,*
宮煉三商 *In the palace refining the three metals.*
彫刻容像 *I carved and sculpted faces and figures:*
五帝主天皇 *The Five Thearchic Rulers and the Heavenly Emperor.*
伯牙彈琴 *Bo Ya strums the zither,*
黃帝避凶 *And the Yellow Thearch averts misfortune.*
朱鳥玄武 *The Vermilion Bird, the Dark Warrior,*
白虎青龍 *The White Tiger, and the Blue-green Dragon (all are here).*
君宜高宜樂宜□ *May your lordship have high position and pleasure and [last character missing].*

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Han dynasty mirror inscriptions often refer to their own fabrication. The inscription quoted above employs the terms “make” (*zuo* 作) and “refine” (*lian* 煉). Other words referring to making mirrors that appear in inscriptions include “fashion” (*zao* 造), “regulate” (*zhi* 治), “combine” (*he* 合), “harmonize” (*he* 和), “fuse” (*ye* 冶), and “complete” (*cheng* 成). The same technical vocabulary appears in Daoist alchemical classics, recipes for the elixir of immortality, and meditation manuals. Interpreted metaphorically, the terms all apply to processes by which an adept perfects himself through creating, refining, fusing, harmonizing, and completing.

The expression “in the palace refining the three metals (literally: the three *shang* elements)” (*gong lian san shang* 宮煉三商) above is a variant of a standard formula. The formula appears on another mirror in the Cotsen Collection (PLS. 73–74): 吾作明鏡/幽煉三商 “I made this bright mirror, in seclusion (*yu* 幽) refining the three metals (*shang* elements).” Elixir alchemists use the term “refine” for successive stages of purification of elixir ingredients through blending and heating. The practitioner secluded himself when he refined metals. The three *shang* metals are those combined to make bronze: copper, tin, and lead. They take the name *shang* from their correspondence, according to correlative cosmology, to the *shang* 商 note in music (the second note in the pentatonic scale), which in turn corresponds to the element metal.

The mention of Bo Ya, a legendary zither player of the sixth century BCE named frequently in mirror inscriptions from the second to the sixth centuries, suggests a desire to invoke and emulate exemplary sages and transcendents. Bo Ya appears in another mirror design of the late Han dynasty, discussed below, sometimes seated and holding a zither. He was famous for his musical skill but also for his friendship and his ability to communicate. His performances combined spontaneity and discipline, traits the Warring States thinker Zhuangzi prized as signs of a great sage. Literati officials of the following centuries idealized Bo Ya as a model of the cultivated literary gentleman.

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Bo Ya first appears in pre-Qin texts, including the collection of essays compiled around the third century BCE by a follower of Confucius called Xunzi 荀子. Bo Ya is mentioned in a chapter that argues for the essential role of education in creating social order. Xunzi cites Bo Ya to argue that talent and virtue lead to material rewards:

*In antiquity, Bo Ya played the zither and the six horses of the emperor's carriage looked up from their feed troughs. No sound is too faint to be heard.... Do good and see if it does not pile up. If it does, how can it fail to be heard of?*⁶³

But the Han mirrors reflect more than rhetoric on the practical advantages of learning. The first full account of the musician and his friend Zhong Ziqi 鍾子期 appears in the *Springs and Autumns of Mr. Lü*:

*Bo Ya strummed the zither; Zhong Ziqi listened to him. Whenever he was strumming the zither with his thoughts on Mount Tai 泰山, Zhong Ziqi would say: "How skillfully you strum the zither! Lofty and majestic like Mount Tai." When in quiet and leisure his thoughts were on flowing water, Zhong Ziqi again would say: "How skillfully you strum the zither! Purling and rippling like flowing water." When Zhong Ziqi died, Bo Ya smashed his zither and severed its strings; to the end of his life he never again strummed on a zither. He thought there was no one left in the world worth strumming a zither for.*⁶⁴

Texts of the Han and later periods repeated this story. The divinely skilled Bo Ya channeled nature to make his music. Music, like Daoist meditation, is a form of self-cultivation. After years of self-discipline, the adept or musician could trust himself to improvise spontaneously and still follow the laws of nature. He appreciated and later deeply mourned the friend who had understood him intuitively. Like an object and its reflection in a mirror, one was perfectly expressive, the other perfectly receptive. Early Daoists admired such perfect and wordless communication.

A mirror design that appeared at the end of the Han dynasty and continued into later eras showed deities and animals in rather high relief surrounded by a ring of semi-circles and seals. The seals contain inscriptions. The casting of these mirrors is often very fine, allowing minute detail. Many examples of this type survive. The Cotsen Collection includes four (PLS. 73–74, 75, 76–77, 78). Beginning at the outside and working inward, the design includes a band of repeating decoration such as cloud scrolls, a band of running animals and asterisms, a sawtooth band (or other band of

⁶³ Watson 1963: 19.

⁶⁴ *Lüshi chunqiu* 14.2, 4a.

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repeated decor), the band of raised semicircles and inscribed seals that gives this design its name, a large central area with deities and animals, a final band of repeated decor resembling beads and disks strung on a necklace, and the knob.

46 The large central zone is divided into quadrants corresponding to the four directions, with the Queen Mother of the West and Royal Patriarch of the East depicted in the western and eastern quarters, respectively. The musician Bo Ya is often illustrated in the north, with the Yellow Thearch in the south. They are seated on animal thrones, attended by transcendents or other deities, and separated by auspicious animals. The deities and mythical animals protect the owner and call good luck into his life.

The square seals contain formulaic inscriptions. Small characters and surface corrosion render many of them illegible. One mirror in the Cotsen Collection (PLS. 73–74) has an inscription forty-eight characters long that raises particularly severe difficulties of decipherment.

Comparison with legible inscriptions on similar mirrors allows us to fill in the blanks. The inscription on a mirror in the Graham Collection begins with the same eight words. That inscription translates: “I have made a bright mirror, in seclusion refining the three metals. I engraved it without limit, matching and making images of all within the myriad boundaries. Bo Ya is performing music, while the flock of deities shows their faces. The hundred germinal essences are preserved together; good fortune and emoluments follow from this. May (the owner) have wealth, noble position, peace and quiet; may his sons and grandsons multiply and prosper. (May he have) extended years and increased longevity. May the master’s life allotment be prolonged.”⁶⁵

Another mirror of this type in the Cotsen Collection (PL. 75) has a shorter, simpler inscription. Like so many Han dynasty inscriptions, it prays for high rank for its owner. Written with one character per seal in ten seals, it reads:

余作鏡 *I made (this) mirror;*
清而明 *It is clear and bright;*
注者公卿 *May its owner (attain the rank of) patriarch or minister.*

In common with several Han through Tang inscription formulas, this one implicitly compares the mirror to the sun and moon. With its clarity and brightness, the mirror is ritually pure and provides illumination. Other inscriptions explicitly identify mirrors with the sun and moon. Another mirror of this design in the Cotsen Collection (PL. 78) repeats a formula of self-praise seventeen times in seventeen identical square seals, four characters per seal. Calling itself the *tianwang ri yue* 天王日月 (“the celestial

65 See Nakano 1994: 51, cat. 62.

king's sun and moon"), the mirror asserts its status as a numinous object, able to guide the owner's self-cultivation in life and illuminate his tomb after death. The sun and moon, important in correlative cosmology, serve as objects of meditation and devotion in Daoist scriptures. In visualization exercises, the adept pictured himself absorbing solar or lunar essences in order to strengthen and eventually perfect his immortal embryo. Han mirrors served as tools of Daoist self-cultivation as well as objects of reflection. These uses continue in the periods that follow.

Three Kingdoms, Jin, and Northern and Southern Dynasties Period

The following centuries—the period of the Three Kingdoms (220–265 CE), Jin (265–420 CE), and Northern and Southern Dynasties (420–589 CE)—were not a great age for mirror innovation. But momentous changes, already brewing at the end of the Han dynasty, took place in society and religion. During the third to sixth centuries, what had been a unified empire split into several smaller kingdoms that were often at war. Regional differences in culture, especially between the north and the south, increased. Early in the fourth century, non-Chinese peoples conquered the Central Plains, prompting mass migration of aristocrats and literati officials to the south.⁶⁶

For intellectuals and members of the elite, many of them unemployed, this period of disunity was also one of anxiety, melancholy, and alienation. It was at the same time a great age for literature and the arts, for conversation and philosophical speculation.⁶⁷ Among members of the official class, a new conception of the ideal man arose. This was the *wenren* 文人 or *literatorus*: the cultivated gentleman. The *wenren* was educated and talented. Although he was qualified to hold office, he did not strive for success or high government position. Instead, he cultivated himself and engaged in artistic pursuits. Unconstrained by convention, he immersed himself in nature and valued authenticity. This ideal has had great staying power in Chinese culture and still influences Chinese intellectuals today.⁶⁸

Many modern historians identify the earlier *wenren* ideal as exclusively Confucian, in opposition to both Daoism and Buddhism.⁶⁹ But when we let people and objects of medieval China speak for themselves, it becomes clear that the literati officials who fashioned the norm of the cultivated gentleman were fascinated with religion. Bronze mirrors from the centuries after the fall of the Han, together with the written record, show a close link between Daoism and the literati ideal.

The centuries between the end of the Han dynasty and the beginning of the Sui witnessed a great transformation in the Daoist religion, partly under the influence of literati officials. The Daoist church evolved from the early schools of the Eastern Han

66 For a general history of this period, see Lewis 2009.

67 For a literary sample of the mood of the times, see Liu Yiqing's 劉義慶 *Shishuo xinyu* 世說新語 (Mather 1976).

68 On the literati ideal in Chinese art, see Laing 1974 and Spiro 1990.

69 During the twelfth century, a Confucian revival known in English as Neo-Confucianism and in Chinese as *lixue* 理學 or the "study of principles" took place. Thinkers of this school claimed superiority to followers of Buddhism and Daoism. They appropriated the image of the *wenren* and claimed the cultivated gentleman as their exclusive model. Later thinkers have uncritically accepted their view of the importance of (Neo-) Confucianism and the insignificance of Buddhism and Daoism in earlier literati official culture.

to the more sophisticated and systematized schools of the Jin, Northern and Southern Dynasties, and Tang periods. The northern aristocrats and officials who fled south at the beginning of the fourth century brought with them the state cult of the holy mountains and waterways, correlative cosmology, and popular northern shamanism and magic. They mingled with the drug-taking southern elite and dabbled in local southern cults. The pantheon of deities and transcendents expanded.⁷⁰ The fusion of northern and southern religious strains among literati officials ultimately led to the creation of the Supreme Clarity and Numinous Treasure schools of Daoism during the fourth and fifth centuries. Supreme Clarity Daoists, who emphasized individual self-cultivation as the path to perfection and immortality, appealed to the elites, while the Numinous Treasure school, although it also emerged in literati circles, emphasized community rituals and gained a broad following among all social classes. During the period of division, great Daoist temples and small shrines punctuated the Chinese landscape; Daoist rituals and devotions became part of everyday life; and Daoist editors first compiled the vast collection of sacred scriptures known as the *Treasure-house of the Way* (*Daozang* 道藏).⁷¹

Buddhism had entered China from India via the Silk Road at the very end of the Han dynasty, and spread throughout all regions and classes of society during the third through the sixth centuries. The once-foreign faith was gradually woven into the fabric of daily life. Buddhist art was everywhere. Buddhism and Daoism interacted continually during this period, exchanging deities, doctrines, and iconography. Nevertheless, only a few direct traces of Buddhism appear in bronze mirror designs during these four centuries. Daoism exerted a much more dominant and pervasive influence.⁷²

The writings of Ge Hong 葛洪 (282–343 CE), a literati official who was also a Daoist, provide a guide to the meanings and uses of mirrors in medieval China. His book, alluringly entitled *The Master Who Embraces the Uncarved Block* (*Baopuzi* 抱朴子), mentions mirrors several times. This work, a compendium of fourth-century science and Daoist lore, defends the cult of the immortals against doubters and argues for the efficacy of religious practices. Ge Hong's heroes spend time in their laboratories, fussing about with metallurgy and chemistry, seeking recipes for the elixir of immortality. He records a recipe for an elixir known as the "Great Method of Mount Min." The Daoist adept "forges yellow copper alloy to make a speculum for gathering water from the moon. It is then covered with mercury and heated with solar essence. Taking this substance over a long period of time will produce immortality."⁷³ Mirrors continue to be associated with the moon and with alchemy.

70 On the cult of the transcendents during this period, see Campany 2002.

71 On the history of Daoism in medieval China, see Robinet 1997 and Bokenkamp 1997.

72 Several articles by Wang Zhongshu have demonstrated the presence of Buddhist imagery on third-century Chinese bronze mirrors. The most comprehensive is Wang Zhongshu 1984. My argument is that while Buddhist images are present on medieval mirrors, they do not dominate the designs or their meanings.

73 *Baopuzi* 4.10b, translated in Ware 1966: 83–84.

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Ge Hong also discusses the use of mirrors as tools for meditation and visualization. An entry in the *Baopuzi* explains:

A bright mirror nine inches or more in diameter is used for looking at oneself with something on the mind. After seven days and nights a god or spirit will appear.... When four mirrors are used, a large number of gods are seen to appear: sometimes pell-mell, other times riding dragons or tigers and wearing hats and clothes of many colors, different from those seen in ordinary life. There are books and illustrations to document all of this. If you wish to follow this procedure you must first learn secretly the names and titles of the gods you wish to summon and also know what clothes and hats they wear. Otherwise when they arrive you could forget which gods they are, or they could harm you through fright. Most of those who wish to hold this ceremony will seek peace and silence in the woods and mountain forests where no external shapes will pass before their eyes and no extraneous sounds will enter their ears. There this procedure is sure to be successful.⁷⁴

Daoist scriptures instruct the practitioner on the exact appearance of deities and on techniques for visualizing them in order to request teachings and blessings. We can use mirrors to help visualize deities, but we must do our homework and memorize their proper forms so as not to invite demons into our minds.

Ge Hong also assures his readers that mirrors can protect the Daoist adept from evil spirits, as they unfailingly reveal the true nature of what they reflect. An adept who enters the mountains to meditate or gather elixir ingredients in the mountains must always equip himself with a mirror to unmask and ward off demons.

The spirits in old objects are capable of assuming human shape for the purpose of confusing human vision and constantly putting human beings to the test. It is only when reflected in a mirror that they are unable to alter their true forms. Therefore in the old days, all (adepts) entering the mountains suspended on their backs a mirror measuring nine inches or more in diameter, so that aged demons would not dare approach them. If they did come to test them, they (the adepts) were told to look in the mirror. If they (the beings encountered) were transcendents or mountain gods, they would look like human beings when viewed in the mirror. If they were birds, animals, or evil demons, their true forms would appear in the mirror. If such a demon comes toward you,

⁷⁴ *Baopuzi* 15.8b–9a, translated in Ware 1966: 255–256.

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*you must walk backward to drive it away. Then observe it. If it is an aged demon it is sure to have no heels. If it has heels, it is a mountain god.*⁷⁵

50 By imitating the capabilities of the mirror, the Daoist adept could throw his form and appear in several places at once. Ge Hong's teacher "used to say that in becoming successful in the (Bright Mirror) procedure, a man would be able to multiply his body to several dozen, all with the same dress and facial expression."⁷⁶ In short, mirrors possess several divine powers connected to Daoist religious practices. The owner could use his mirror in elixir alchemy, meditation, and magic as well as for rectifying his appearance.

Over this long period, bronze casters continued to produce, with small changes, mirrors with designs and inscriptions that originated late in the Han dynasty. Mirrors in the Cotsen Collection showing a confronting dragon and tiger, deities and animals in tiers, and deities and animals surrounded by seals and semicircles all represent types that continued from the late Han well into the following centuries. A few new types were probably developed toward the end of this period. New designs represented in the collection include the zodiac mirror that displays the twelve signs of the cyclical calendar around the rim and a design with running animals in the main decorative zone. As these types continued in production during the following Sui and Tang dynasties, they are discussed in the next section.

The Sui and Tang Dynasties

The era comprising the Sui and Tang dynasties represents another high point in Chinese mirror manufacture, influenced by changes in society and religion that had taken place during the preceding period. The Sui dynasty, like the Qin, was a short unification dynasty that made enormous contributions to infrastructure but ultimately could not survive the backlash resulting from the conquest or find a competent successor to its founder. This section stresses continuity in mirror manufacture between the two dynasties and considers them together.⁷⁷

The Tang dynasty was a period to which modern Chinese people look back with pride. Tang rulers presided over a golden age of poetry, religion, science, and art. With a succession of mostly effective emperors on the throne, a huge economy, and vast territory, China experienced a great age of prosperity and international prestige. For much of this period, government rested upon a secure tax base in agriculture and trade; a well-organized imperial bureaucracy ran the country; a mighty army kept peace along ever-expanding borders; and subjects of the emperor enjoyed a relatively high quality of life. The principal capital city of Chang'an, home to the imperial Li 李 family and

⁷⁵ *Baopuzi* 17.2a, translated in Ware 1966: 281.

⁷⁶ *Baopuzi* 18.4a, translated in Ware 1966: 306.

⁷⁷ For a general history of this period, see Twitchett and Fairbank 1979.

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center of government and commercial activity, was the biggest city in the world, with well over a million inhabitants. Chang'an was also the most sophisticated and cosmopolitan urban center of its time.

Tang dynasty wealth and artistic achievement were linked both to advances in native industries and to contact with other peoples along the Silk Road. During the seventh to tenth centuries, commercial activity and intellectual exchange along the trade routes increased in volume and importance. Influences extended from Persia, India, and points west across China to Korea and Japan in the far east, creating an international Silk Road culture that was a forerunner of the global culture of today.

Buddhism and Daoism flourished together during the Tang dynasty. Buddhism was by now fully domesticated. Leaders of the Supreme Clarity school of Daoism appropriated elements from the Daoist Numinous Treasure school and from Buddhism to forge a diverse religion that appealed to aristocrat and peasant alike. The imperial Li family favored Daoism, but both religions counted imperial family members and court officials as well as farmers and craftsmen among their followers. Elites still considered the two religious traditions compatible with government service and Confucian values. Many people practiced elements of both Buddhism and Daoism. Since neither religion was monotheistic, they did not demand exclusivity from their believers. Daoists and Buddhists continued to borrow texts, deities, doctrines, and iconographic images from each other. As Tang people mingled the two religions in their daily lives, so designs on mirrors mixed decorative elements derived from both.

The third great period of innovation in mirror design, after the Warring States and Han, took place during the Sui and Tang dynasties. Many new mirror types evolved, techniques of ornamentation increased, and new shapes appeared.⁷⁸ The new designs track cultural changes. Some, like moon mirrors showing the Daoist goddess Chang'e 嫦娥 and other lunar residents, demonstrate a continuing interest in mythology and Daoism. Others incorporate Buddhist symbols such as the lotus. Still others, like those depicting mythical animals and grapevines, show the influence of images and products that came to China from the west along the Silk Road. An increased interest in secular subjects is evident from inscriptions that openly appreciate female beauty and from decorative schemes of birds and flowers in auspicious pairs associated with harmonious marriage.

Tang dynasty mirrors evolved in social role as well as in appearance. Several inscriptions identify mirror users as women. Some art historians argue that Tang mirror makers abandoned the Daoist and cosmological themes of earlier eras, creating purely secular tokens of love or objects of conspicuous consumption. But the mirror designs and

78 A few mirrors from earlier periods departed from the standard round shape. For example, there are a small number square mirrors in the Warring States. But the experiments of Tang craftsmen went beyond anything seen before. They devised new shapes and expanded the notion of what a mirror could look like. Suddenly mirrors could have lobed or petal-shaped perimeters. Some resembled the lotus medallions on the ceilings of Tang palaces and temples. They also made miniatures of every type, called "sleeve mirrors" or "one-inch mirrors."

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inscriptions themselves suggest that, despite changes in fabrication and appearance, Tang mirrors continued to be meaningful as well as gorgeous and precious objects. Craftsmen did not have to strip mirrors of religious significance to invest them with secular concerns. Medieval Chinese people did not consider the sacred and secular as mutually exclusive. One did not have to renounce sexuality and family life to take up religion; both went together naturally in a healthy and balanced life. Tang mirrors became even more multivalent and multipurpose than earlier mirrors. Alongside their roles as symbols of status and marital felicity, they retained their old didactic and spiritual functions. Religious significance remained central to their identity and value.

Like earlier mirrors, Tang dynasty mirrors provided maps of the Chinese universe. They illustrated and embodied ideals of social and cosmic order. Although the culture they mapped had undergone transformations, mirrors continued to link Daoism to the literati ideal. Throughout the Tang dynasty, Daoism remained part of the mental world of the cultivated gentleman. In addition to revealing the owner's wealth and aesthetic sensibilities, the mirror still served as a condensed reference to self-cultivation practices, a reminder of stories of saints and sages, a Daoist chart of the universe, a potent defense against evil spirits, a focal point for meditation, and a magnet for good luck. Individual motifs derived from the iconographic vocabulary of Buddhism appear, for the most part as decorative elements incorporated into programs that are still predominantly Daoist in interpretation. Mirror images and inscriptions track the beliefs and practices of Tang dynasty Daoists, along with the contemporary self-image of the *wenren*.

Among the most charming images that appear on the backs of Tang mirrors are various creatures, plants, and mountains. Beginning in the sixth century, the twelve animals of the Chinese zodiac appear in a new and popular pattern. On an inscribed mirror in the Cotsen Collection (PLS. 82–83), these animals, a mix of natural and mythical species, march in clockwise sequence around the wide outer band. The twelve animals are the rat, ox, tiger, hare, dragon, snake, horse, ram, monkey, cock, boar, and dog. In Chinese cosmology, these creatures correspond to the twelve divisions of the celestial equator known as the twelve earthly branches (*dizhi* 地支). The twelve branches were used in Chinese calendrical calculations. They also correlate with the twelve directions (the four directions subdivided). Inside the zodiac band, the mirror sports an inner ring of eight mythical animals known as *bixie* 辟邪 or averters-of-evil. Embodying cycles of time and all points of the compass, the design allowed its owner to control time's passage symbolically so as to live forever.

A poetic inscription located in a ring around the central zone associates this mirror with the moon, a theme familiar since the Han dynasty. Tang mirrors are more

frequently compared to the moon than to the sun, although both associations are still present.⁷⁹ The inscription links the small, private world of the inner chambers with the vast world of the night sky, offering us the mirror as an object of both vanity and contemplation. Both meanings of self-reflection are present: observing the self in narcissistic pleasure, and scrutinizing the self for purposes of self-cultivation. The male voice of the poem's narrator participates, in his imagination turning an erotic gaze on his beloved as she removes the mirror from its case and starts to apply her makeup in the intimate space of her luxurious, secluded bedroom. Two mirror cases made of lacquered hide that are roughly contemporary with this mirror survive in the Shōsōin 正藏院 Treasury in Nara, Japan.⁸⁰

The poem opens with an account of the numinous processes that created the mirror out of precious and rare substances, likening mirror casting to compounding the elixir of immortality or refining the Daoist adept. It compares the mirror to the moon in the heavens, using a favorite Daoist term for the sky, “the void.” Stopping the moon as it moves across the celestial void means arresting the forward movement of time and the process of aging. The poem closes with the claim that the mirror contains the owner's whole world. Its design and inscription imply that the mirror encloses the entire cosmos:

鍊形神冶 *Of refined shape and divine fusing,*
瑩質良工 *Lustrous material and excellent workmanship,*
如珠出匣 *Like a pearl emerging from its case,*
似月停空 *(This mirror) resembles the moon stopping in the void.*
當眉寫翠 *On your eyebrows, (you may use it to) draw in kingfisher blue;*
對臉傅紅 *Opposite your cheeks, apply rouge.*
綺窗繡幌 *Your fine white silk window and embroidered curtains:*
俱含影中 *All are contained in its reflection.*

Another mirror in the Cotsen Collection (PL. 81) combines the animals of the four directions with the twelve zodiac animals, doubling its claim to control space and time. While the blurry casting of this mirror raises questions about its authenticity, the design is well attested.⁸¹

Another Cotsen Collection mirror (PLS. 86–87) shows the animals of the four directions in semi-enclosed panels, running around the main design field, with four small mountains in V-shapes between them. These four conventionally rendered mountains, together with the large central boss, make up the set of Five Marchmounts or holy mountains of the four cardinal directions and the center, suggesting that the

⁷⁹ Medieval Japanese mirrors, in contrast, are strongly identified with the sun. This fits their use as symbols of the Japanese imperial family that claimed descent from the sun goddess Amaterasu.

⁸⁰ See Shōsōin Office 1965: pls. 60–61.

⁸¹ See Little 2000: 140, cat. 15.

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owner controls the known world. Under the central boss is a splayed animal skin resembling the monster pinned down by the wheel of *samsara* (this world of suffering) in the Buddhist mandala known as the Wheel of Life. The monster in the Buddhist mandala stands for the three great causes of rebirth and suffering: ignorance, desire, and hatred. Subduing it leads to progress on the path to enlightenment. Craftsmen making medieval Daoist and Buddhist art regularly borrowed images from one another, producing hybrid designs like this one.

The inscription refers to the mirror as a potent Daoist implement. Spirit-filled mountains gave up the rare and precious materials used in its making, while Daoist deities guarded the bronze-casting furnace. Daoist alchemists used the same furnace, while adepts visualized it. The mirror is once again likened to the moon and a pearl. Its shape, brilliance, and clarity resemble the qualities of a celestial luminary. The poem closes with wishes for the owner to see nothing but beautiful reflections in it, and for abundant blessings to come her way.

靈山孕寶 *Numinous mountains were pregnant with (and yielded their) treasures;*
神使觀爐 *Divine attendants watched over the (casting) furnace.*
形圓曉月 *(The mirror's) shape is round like the moon at dawn;*
光清夜珠 *It is radiant and clear like a pearl in the night.*
玉臺希世 *Its jade stand is rare in this world;*
紅妝應圖 *(Using it,) rouge may be properly drawn (on your face).*
千嬌集影 *May a thousand beauties assemble their reflections (in it);*
百福來扶 *May a hundred blessings come (to your) support!*

The decor and an inscription on another piece in the Cotsen Collection (PL. 84) illustrate the multiplicity of readings possible for mirrors made during the Sui–Tang transition. The mirror combines meanings associated with correlative cosmology, Daoism, Buddhism, the emperor, and wedded bliss. The twelve zodiac animals circle the rim, while the center field contains two averters-of-evil, a humanoid monster, and a prancing horse with a flaming jewel over its back. The horse and jewel refer to the “treasure” of Buddhist teachings that traveled from India to China; the lotus petals radiating out from the central boss are Buddhist motifs found in many Tang decorative arts. The inscription in a band inside the zodiac ring opens with praise for the mirror:

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仙山並霽 *Transcendent mountains are equally numinous (as this mirror);*
智水參名 *Wise rivers are comparably famous.*
花舞丰彩 *The dance of its decorations is rich and colorful;*
晝夜流明 *Day and night, its brightness flows forth.*
龍盤五瑞 *The dragon coils around five treasures;*
鸞舞雙情 *Simurghs dance in paired passion.*
博山並壽 *(May you) have longevity equal to that of mountain ranges;*
始驗明樂 *(Then you) will begin to experience bright happiness!*

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The opening couplet refers to a saying attributed to Confucius: “The benevolent love the mountains; the wise love the waterways.” Daoists also love the mountains, numinous in themselves as well as habitats for deities and transcendentals, sources of divine treasures and elixir ingredients, and sacred spaces for ascetic and meditative practice. Like the sun and the moon, the mirror shines day and night. It bears imperial regalia in the form of jade disks of office decorated with royal dragons. It portrays dancing simurghs, legendary birds who transported Daoist transcendentals. Paired simurghs express wishes for a passionate and harmonious marriage for the couple reflected in the mirror. The poem closes with a petition for longevity and the brilliant pleasures experienced by the transcendentals.

Beginning in the mid-eighth century, some Tang mirror designs allow a single auspicious animal to fill the whole field. The phoenix stands proudly alone with wings spread open on one example (PL. 116). The phoenix in heraldic pose, a favorite decorative motif during the Tang dynasty, was depicted in many media and found along the Silk Road from Persia and Turfan in the west through China to Korea and Japan in the east. Phoenixes appear in roundels on ceramic vessels and in textile patterns, such as a weft-patterned twill silk armrest cover in the Shōsōin Treasury.⁸² The frame provided by the mirror rim makes it the equivalent of a roundel.

A solitary prancing dragon coiled around the large central knob that doubles as his jewel covers the whole surface of another mirror (PL. 117). Auspicious clouds surround him. The dragon, that most yang of animals, has auspicious connections through correlative cosmology with spring, wood, new life, rain, and the eastern direction. The dragon also symbolizes the Tang emperor, especially the great Daoist ruler posthumously known as Xuanzong 玄宗 (r. 713–756).

A related mirror in the Cotsen Collection (PL. 118) shows the imperial dragon dancing above a pond in the lower part of the picture. This is a moon mirror, one of many Tang designs featuring the moon palace of the goddess Chang’e. The high

⁸² See Shōsōin Office 1965: pl. 101.

gods punished Chang'e with eternal exile to the moon palace for stealing the elixir of immortality that was intended for her husband. Although Chang'e gained immortality, hers was a cold and lonely existence. Her only companions were a cinnamon tree, a toad, and a rabbit pounding the elixir of immortality. She is celebrated in Asia today at the mid-autumn full moon festival, when people eat moon cakes and tell her story. Here the full moon occupies the top of the picture, over the boss, with the rabbit to the right and the moon toad to the left of the cinnamon tree. Two birds on either side of the boss face each other, holding ribbons in their beaks as they fly toward the moon. The knotted ribbons, of a type used to hold official seals, signify high position. The name for the ribbons, *shou* 綬, is a homonym for *shou* 壽, longevity, expressing the usual wish for long life. Paired birds holding ribbons appear as the main decorative motif on "marriage mirrors" that convey blessings for a happy marriage. The paired birds appear in other media: a pair of marquetry ducks flies upward with streaming garlands in their beaks on the plectrum guard of a lute in the Shōsōin.⁸³ This composition, devised in the late eighth century, refers nostalgically to the peace and prosperity of the vanished era of the emperor Xuanzong, whose birthday at the time of the mid-autumn full moon had been celebrated with moon mirrors and poems about the moon.⁸⁴

Images on a small number of Tang mirrors are executed in mother-of-pearl inlay. Craftsmen inlaid mother-of-pearl, turquoise, and amber to decorate a mirror in the Cotsen Collection (PL. 104) with a pattern influenced by Persian and Indian arts. The floral design resembles a more finely worked mirror in the Shōsōin that probably dates to the mid-eighth century.⁸⁵

An unusual mirror in the Cotsen Collection (PLS. 105–106) features mother-of-pearl, amber, and turquoise inlay (see FIG. 4). Designed to be read vertically as a single scene, it nevertheless retains the division of the surface into quadrants characteristic of mirror design since the Warring States period. The focus and center of the picture is a foreigner, instantly recognized by his beard and clothing. He dances on a mat, accompanied by three Chinese musicians on one side and observed by a Chinese audience of three on the other. Behind him is a pavilion with a fenced garden. He resembles the figure performing a spinning dance on a platform in Tang dynasty murals of the western paradise of the Buddha Amitabha located inside the Mogao Caves 莫高窟 at Dunhuang 敦煌, in Gansu Province. Murals in the same cave temples portray encounters between foreigners and Chinese people.⁸⁶ The exotic westerner is a well-known theme of Tang dynasty art, portrayed in numerous clay tomb figurines.⁸⁷ Another foreigner with twirling sleeves dances on the back of an elephant painted on the plectrum guard of a lute in the Shōsōin Treasury.⁸⁸

83 See Shōsōin Office 1965: pl. 7.

84 The link between this design and Xuanzong appears in Eugene Wang 2005.

85 See Shōsōin Office 1965: pl. 59.

86 See Whitfield et al. 2000: 14.

87 See Mahler 1959.

88 See Shōsōin Office 1965: pl. 5.



FIGURE 4:
Line Drawing of PLS. 105–106

The Tang dynasty mirror most favored by Chinese collectors depicts mythical animals and grapevines in fairly high relief.⁸⁹ The Cotsen Collection contains several examples (PLS. 92–93, 94–95, 96). Often beautifully cast with a silvery sheen, they are not inscribed. The design shows the direct influence of products from the west imported into China via the Silk Road. The sinuous vines with their clusters of grapes look distinctly Hellenistic. Grape seeds first arrived in China during the Han dynasty, brought back to the capital by the legendary General Zhang Qian 張騫 and planted there. But the fruit and its wine remained obscure in China until the beginning of the

⁸⁹ On this mirror type, see Thompson 1968.

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Tang dynasty, when a new wave of expansion into Central Asia took place. As a result, grapes and grape wine were reintroduced and became well known. Grapes are still an important product of the oasis city of Turfan on the ancient and modern Silk Road. Grapevines and grape clusters had been used earlier in textile patterns; perhaps mirror designers borrowed the motif from weavers.⁹⁰ The animal and grapevine mirror has a turning, swirling aesthetic characterized by rounded, twisting projections that give the impression of movement.

One related mirror in the Cotsen Collection displays swirling vines, phoenixes, and a flying Daoist transcendent (PL. 100). The image of the transcendent is a Buddhist-Daoist hybrid. The androgynous figure's appearance calls to mind *apsarases*, minor deities imported from India with Buddhism. Groups of them fly around the ceilings of the cave temples at Dunhuang, singing, dancing, and throwing flowers in honor of the Buddha.⁹¹ This transcendent's slender, graceful body with its forward-leaning posture and flowing draperies suggests motion. In one hand, s/he carries a tray with a plant offering, perhaps the elixir of immortality, while stretching the other hand toward a cartouche that wishes "(May you have) great good fortune" (*da ji* 大吉).

Some Tang mirrors are charts of the universe, Daoist mandalas that represent the world in miniature. Their designs fill the whole central zone and are intended to be viewed from above, like a chart or map laid out on a table. They select from the same vocabulary of symbols as other mirrors, but the compositions are more abstract, concentrated, and esoteric. The average Tang person would not have been able to explicate them. These symbols include the eight trigrams (*bagua* 八卦) from the Zhou dynasty divination manual called the Classic of Changes (*Yijing* 易經), earthly stems and heavenly branches of the traditional Chinese calendrical counting system, twelve animals of the Chinese zodiac, animals of the four directions, Five Marchmounts, round heaven, square earth, sun, moon, stars, constellations, lunar lodgings, and magic squares. These mirrors encode correlative cosmology; they are the descendants of Han dynasty mirrors that replicated celestial diagrams, the *liubo* gameboard, and the four directional animals. The mirrors are microcosms that correspond to the macrocosm. Such mirrors were sacred objects, used for meditation and visualization, protection from dangerous forces, and divination. Several such cosmograms survive today.

One fascinating design, of which there are a round and a square version in the Cotsen Collection (PLS. 111–112, 113), shows five mountains in schematic outline. This calls to mind an important protective talisman that existed in many forms in the Daoist canon: the *Mountain Chart of the Veritable Forms of the Five Marchmounts* (*Wuyue zhenxing shantu* 五嶽真形山圖). The five holy mountains of ancient China

⁹⁰ On grapes in Tang dynasty China, see Schafer 1963: 141–145.

⁹¹ See Whitfield et al. 2000: 50–51.

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were Mount Tai 泰山 in the east, Mount Hua 華山 in the west, Mount Song 嵩山 in the center, Mount Heng 恆山 in the north, and Mount Heng 衡山 (written with another character) in the south. Mountains were central to Daoist legend and lore, these mountains most of all: they represented the whole earth, and they connected the human realm to the heavens above and underworlds below. Cults to the powerful spirits of these mountains predated the Daoist religion that absorbed them. Like the talisman of the five mountains, this mirror protected the believer. The round version (PLS. 111–112) is especially fine, with its silvery surface, convincingly realized images of deer and mountain sheep, and pair of Daoist transcendents: one surfing on a cloud and the other riding a crane while holding a pot of the elixir of immortality.⁹²

Another mirror in the Cotsen Collection (PL. 110) pairs a chart of the cosmos with an inscription that makes cosmic claims. Concentric squares make up the main field of the design. The principal motifs are graphic representations of the Five Marchmounts. The square knob in the center represents Mount Song, with the mountains of the four directions arrayed around it. Each mountain is decorated with interlocking T-shapes, representing the true and spiritually effective form of the mountain. Between the mountains are four square fields inscribed with four characters each. Around the outside of the mountains flow the waters of the cosmic sea. The outermost square shows the eight trigrams, symbols ascribed talismanic powers by Daoists.

The eight trigrams are the building blocks of the sixty-four hexagrams or potential fortunes of the *Classic of Changes*. Although the system originated independently, and the *Changes* enjoys high esteem as one of the core Five Classics of Confucianism, Daoists appropriated the trigrams by the fifth century CE. They provided visual symbols of cosmic flux that Daoists adapted to explain cosmological principles of transformation. Adherents of the Supreme Clarity school used them in visualization exercises. Their arrangement on the Cotsen mirror represents the numerological and talismanic chart of the Prior Heavens (*xiantian* 先天). Daoists believed that the legendary sage emperor Fu Xi 伏羲 found the diagram when it emerged from the Yellow River on the back of a dragon-horse. It depicts the state of primordial chaos at the beginning of the cosmos, before yin and yang were differentiated to become active agents in the world. So this mirror represents the original Dao: the time of pure potential before creation.⁹³ Daoist texts pair this diagram with another that emerged from the Luo 洛 River on the back of a tortoise: the chart of the Later Heavens (*houtian* 後天). That arrangement of the trigrams shows the unfolding of the world of phenomenal reality after the differentiation of yin and yang. A mirror in the New York Museum of Natural History shows the Later Heaven arrangement of the eight trigrams.⁹⁴

92 On the importance of mountains in Daoist art, see Little 2000: ch. 3.

93 See Little 2000: fig. 14, p. 138.

94 See Little 2000: 141, fig. 16.

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The inscription on the Cotsen mirror testifies to its power to contain and reflect the world. Its sixteen characters can be read in two ways. Taking the four characters inside each square as a line yields this self-description of the mirror:

天日寫洞 *Like the sun in heaven, it outlines and penetrates;*
地月規鑿 *Like the earth's moon, it circumscribes and mirrors.*
含貞萬百 *(This mirror) contains and divines the ten thousand (things) and hundred (deities);*
象明物靈 *It makes images of and sheds light on the numina of things.*

Reading the inscription by taking one character from the same corner of each square in sequence (called *tiaodu* 跳讀, “reading by jumping”) gives an alternative self-description:

天地含象 *Heaven and earth contain images;*
日月貞明 *The sun and moon perform divinations and shine.*
寫規萬物 *(The mirror) outlines and circumscribes the ten thousand things,*
洞鑿百靈 *Penetrates and mirrors the one hundred numina.*

The second reading is preferred; it keeps together standard two-word phrases such as “heaven and earth” and “ten thousand things” and preserves the rhyming scheme. The inscription asserts the mirror’s spiritual potency, comparing it to heaven, earth, sun, moon, and instruments of divination. The last statement is extraordinary: the mirror, like the Dao, has the power to outline (create) all the world’s phenomena and reveal all deities and spirits.

This mirror may be compared to the Daoist mandala depicted on the back of a badly broken mirror excavated at Shangyu 上虞 in Zhejiang in 1973.⁹⁵ It features the sun, moon, and five planets (the traditional Chinese “Seven Luminaries”) along with the four directional animals, four anthropomorphic figures, the Big Dipper, and the polar star in the central zone.⁹⁶ Three rings of inscriptions surround this field. The innermost ring contains the graphs for the twenty-eight lunar lodges, stations of the moon among the asterisms of the night sky that the Chinese used for calendrical and astronomical calculations. The second ring has graphs for the twelve branches or zodiac animals, and the outside ring has the eight trigrams punctuating eight four-syllable verses. The complete inscription also appears in the Daoist canon in a scripture known as *Illustration of the Treasure Mirror for Lengthening Life, from the Supreme Clear Realm* (*Shangqing changsheng baojian tu* 上清長生寶鑿圖), a text associated

95 See Schafer 1978–1979 and Cahill 2005: 38–39.

96 On the connections between Daoism and astronomy during the Tang dynasty, see Schafer 1977.

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with Sima Chengzhen 司馬承禎 (647–735 CE), a Supreme Clarity school Daoist patriarch who was also a Tang courtier. The poem reads:

百鍊神金 *One hundred times refined, divine metal –*
九寸圓形 *(Is made into) a nine-inch round shape (this mirror).*
禽獸翼衛 *Birds and beasts guard it with outstretched wings;*
七曜通靈 *The Seven Luminaries communicate with the numina.*
鑒抱天地 *Its beams embrace heaven and earth,*
威伏魔精 *Terrifying hidden demons.*
名山仙佩 *Transcendents hang it at their belts, on their famous mountains,*
奔輪上清 *As they speed their wheels toward the Supreme Clear Realm.*

61

Refined like a Daoist adept, the mirror is protected by divine animals and in turn protects its owner. It functions as a celestial light, brightly embodying and linking heaven and earth, exposing and exorcising demonic beings. Immortals wear it as an accessory as they ascend to heaven. Here is direct evidence of the use of mirrors in Daoist religious practice.

Mirror designs and inscriptions also refer to Daoist tales. Narrative mirrors use the entire surface as a picture plane like a hanging scroll or mural. A single key scene embodying its main message alludes to a story familiar to the Tang viewer. This method of representation, typical of Han through Tang dynasty pictorial art, has been called “monoscenic” or “epitomizing.” The stories have didactic intentions, teaching viewers how to perfect themselves. They preach disciplined self-cultivation as a means of becoming one with nature and achieving immortality.

Several exemplary tales were current in Tang dynasty mirror designs. One famous tale describes the meeting of Confucius and Rong Qiqi 榮啟期. The classic version of the story of Confucius and Rong Qiqi appears in the “Heaven’s Gifts” chapter of a third-century CE Daoist classic known as the *Liezi* 列子 after the name of its purported author. In one of a series of encounters during which Confucius learns important life lessons from Daoist sages, he visits the aged recluse Rong Qiqi in his hermitage and asks the old man the reasons for his happiness. Mirrors that illustrate this story are given the name “Three Pleasures,” after the three joys the old hermit explains to Confucius.

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When Confucius was roaming on Mount Tai, he saw Rong Qiqi walking in the moors of Cheng, in a rough fur coat with a rope around his waist, singing as he strummed a lute. “Master, what is the reason for your joy?” asked Confucius.

Rong Qiqi replied, “I have many joys. Of the myriad things that heaven begot, mankind is the most noble, and I have the luck to be human: this is my first joy. Of the two sexes, men are ranked higher than women, therefore it is noble to be a man. I have the luck to be a man: this is my second joy. People are born who don’t live a day or a month, who never get out of their swaddling clothes. But I have already lived to be ninety: this is my third joy. For all men poverty is the norm and death is the end. Abiding by the norm, awaiting my end, what is there to be concerned about?”

“Good!” said Confucius. “He is a man who knows how to console himself.”⁹⁷

The wise old recluse’s calm acceptance of life and death impresses Confucius. Several Tang mirrors depicting this theme survive. One in the Cotsen Collection (PL. 114) shows Confucius on the left holding a staff and dressed in a scholar’s cap and robes. He interviews Rong Qiqi, who wears deer- or leopard-skin robes and carries a *qin* 琴 (Chinese table zither). A framed inscription in three registers at the top of the scene identifies the story. The characters closest to each figure name that figure. On the left side, next to Confucius, the inscription reads: 孔夫子問曰 “Confucius inquires, saying.” On the right (near Rong Qiqi), it says: 榮啟期答曰 “Rong Qiqi responds, saying.” Any Tang-dynasty viewer could then supply the story.

Rong Qiqi, probably a fictional character, had been an important model of the *wenren* for artists and writers since the fourth century CE. He appears alongside the Seven Sages of the Bamboo Grove in stone carvings on the walls of royal and aristocratic tombs around Nanjing.⁹⁸ Similar compositions appear in Tang dynasty art. A gorgeous Tang mirror inlaid with mother-of-pearl, excavated near Luoyang in 1955, shows musicians and drinkers seated in a garden.⁹⁹ A similar scene decorates the head of a *qin* made of lacquered paulownia wood with affixed gold and silver sheets in the Shōsōin.¹⁰⁰ On Tang mirrors, Rong Qiqi continued to represent the ultimate in wisdom, naturalness, tranquility, and liberation from the fear of death.

After the Tang dynasty, mirror production seems to have declined in quality and quantity, first in the south and later in the Central Plains. At the same time, the prestige of the mirror as a status symbol, family treasure, and religious object waned. But our real problem with post-Tang mirrors is ignorance; they have hardly been studied.

97 Adapted from Graham 1960: 24.

98 For a study of these tombs, see Spiro 1990.

99 See Five Thousand Years of Chinese Art Editorial Committee 1993, vol. 2: color pl. 65, pl. 227.

100 See Shōsōin Office 1965: pl. 9.

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The few scholars who have investigated later mirrors have found that China's northern neighbors continued to invent new designs and put mirrors to new uses. Under the Liao (916–1125 CE), for example, mirrors were placed on the ceilings of tombs to represent literally the sun and moon in the sky.¹⁰¹ There is much still to be learned about the later mirrors.

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CONCLUSIONS

MIRRORS PRESENT A CONTINUOUS MATERIAL RECORD of Chinese culture from the Warring States through the Tang dynasty. During the long period that Chinese craftsmen made bronze mirrors, a succession of distinct new styles of decoration arose. These reflect historical changes in religion and society. But several continuities rise above stylistic differences. Mirrors of all periods have close relations to arts in other media. They have a round format and decorative schemes divided into quadrants and characterized by interplay between square and circular elements. The aesthetic pleasure of their designs results from tension between figure and ground and between two and three dimensions. They combine words with images, a particular characteristic of Chinese art. In the realm of meaning, mirrors retain their connections to correlative cosmology, Daoism, and the literati ideal. They reveal compatibility between Confucian and Daoist ideals. They incorporate elements from Buddhism, but Daoism remains the dominant influence. They become progressively more multipurpose, retaining old meanings and functions while picking up new ones, reflecting the complex people who made and used them. Part of their hold on the viewer comes from uniting contradictory elements in meaning as well as design: religious and secular concerns, the individual and the cosmos, the transient and the eternal, time and space, the living and the dead.

101 See Schulten 2005.

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ACKNOWLEDGMENTS

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A Note on Conventions

Since none of the mirrors has a dated inscription or a provenance that includes scientific excavation or a long history of ownership, dates and attributions are based on comparison with known examples and may be subject to revision in the future after rigorous materials analysis has been completed.

We have standardized the titles, in both Chinese and English. The title describes the design. The titles in English and Chinese are not exact equivalents, as the traditions of naming in the two languages have very different histories. For the titles in English, other relevant information is prefaced to the name of the design, in the following order: presence of inscription or miniaturization, shape other than round, and material other than bronze. For the Chinese titles, presence of an inscription is noted before the name of the design; miniaturization is noted following the name.

Chinese words are given in pinyin, Korean in McCune-Reischauer,
and Japanese in Hepburn romanization.

Dates are in BCE (= B.C.) and CE (= A.D.) form.

Mirrors are placed in chronological order, according to the period when the style first appeared.

Thickness is given in terms of two measurements: height at rim and height at knob.

The metric system is used for all measurements.

Characters that cannot be read at all are each represented by a box □.

Characters that are unreadable but identified by comparison with other inscriptions are inside a box.

Characters that are non-standard or missing have been emended to their standard forms.

Words supplied by the translator are placed in parentheses.

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Plates

PLATE 2

鋸緣星紋鏡

Mirror with Sawtooth Rim

COLLECTION NUMBER: O-0803
Qijia culture (ca. 2100–1700 BCE)
diameter: 11.40 cm
overall height (knob): 0.79 cm
overall height (rim): 0.29 cm
weight: 200 g

Read Only/No Download



actual size



PLATE 3

重弦輻射紋鏡

Mirror with Sawtooth Bands

COLLECTION NUMBER: O-0427
Shang dynasty (ca. 1600–1046 BCE)
diameter: 6.30 cm
overall height (knob): 0.73 cm
overall height (rim): 0.13 cm
weight: 40 g

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6.30 cm





70

PLATES 4-5

透雕四鳥紋鏡

Square Double-tier Mirror with Four Opposed Birds

COLLECTION NUMBER: O-0424
Warring States period (450-221 BCE)
length: 8.10 cm; width: 8.10 cm
overall height (knob): 0.70 cm
overall height (rim): 0.27 cm
weight: 90 g

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8.10 cm x 8.10 cm

PLATE 6

透雕蟠龍虺紋鏡

Double-tier Mirror with Two Interlaced Dragons and Four Serpents

COLLECTION NUMBER: O-0800

Warring States period (450–221 BCE)

diameter: 8.26 cm

overall height (knob): 1.40 cm

overall height (rim): 0.43 cm

weight: 135 g

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8.26 cm



PLATE 7

透雕四虺紋鏡

Square Double-tier Mirror with Four Serpents

COLLECTION NUMBER: O-0295
Warring States period (450–221 BCE)
length: 7.90 cm; width: 7.90 cm
overall height (knob): 0.70 cm
overall height (rim): 0.38 cm
weight: 115 g

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7.90 cm x 7.90 cm

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76

PLATE 8

透雕蟠獸紋鏡

Double-tier Mirror with Interlaced Mythical Animals

COLLECTION NUMBER: O-0360

Warring States period (450–221 BCE)

diameter: 15.70 cm

overall height (knob): 1 cm

overall height (rim): 0.49 cm

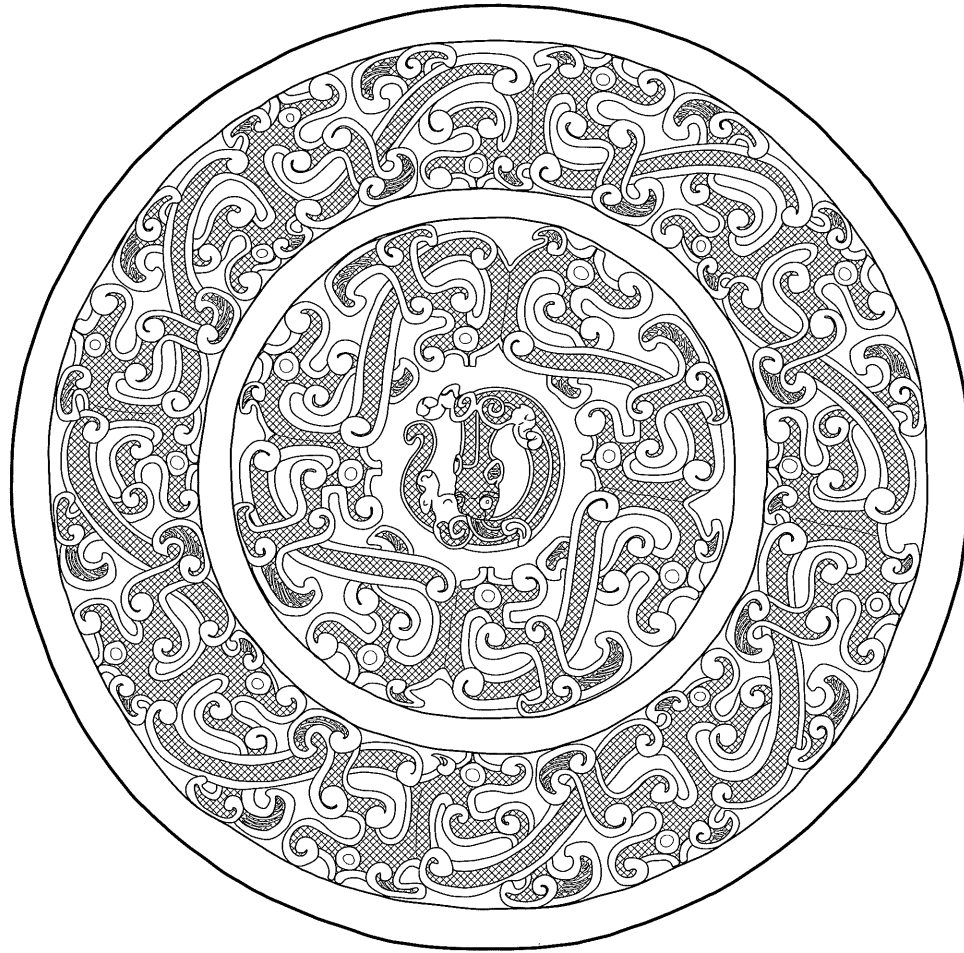
weight: 445 g

Read Only/No Download



actual size





PLATES 9-10

透雕蟠螭紋鏡

Double-tier Mirror with Interlaced Dragons

COLLECTION NUMBER: O-0648
Warring States period (450-221 BCE)
diameter: 15.20 cm
overall height (knob): 1.40 cm
overall height (rim): 0.37 cm
weight: 515 g

Read Only/No Download



┆

actual size

┆

Read Only/No Download

80

PLATE 11

嵌玉綠松石對夔鏡

**Mirror Inlaid with Jade and Turquoise,
Showing Opposed *Kui* Dragons**

COLLECTION NUMBER: O-0423

Warring States period (450–221 BCE)

diameter: 8.60 cm

overall height (knob): 1.20 cm

overall height (rim): 0.62 cm

weight: 130 g

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8.60 cm



PLATE 12

絢紋鏡

Mirror with Fine-patterned Ground

COLLECTION NUMBER: O-0884

Warring States period (450–221 BCE)

diameter: 9.80 cm

overall height (knob): 0.60 cm

overall height (rim): 0.19 cm

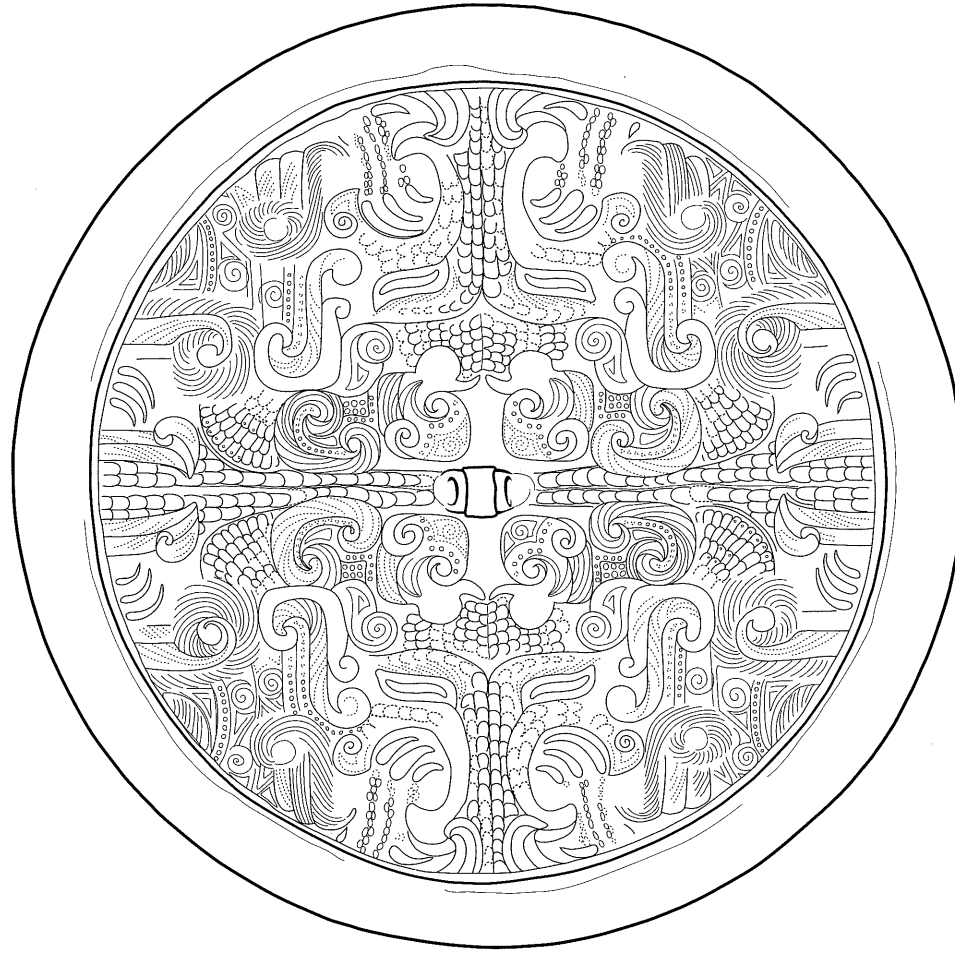
weight: 60 g

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9.80 cm





PLATES 13-14

饕餮紋鏡

**Mirror with Adorsed *Taotie* Masks
on Fine-patterned Ground**

COLLECTION NUMBER: O-0200

Warring States period (450-221 BCE)

diameter: 12.10 cm

overall height (knob): 0.56 cm

overall height (rim): 0.24 cm

weight: 185 g

Read Only/No Download



┆

actual size

┆

PLATE 15

饕餮紋鏡

Square Mirror with Adorsed *Taotie* Masks on Fine-patterned Ground

COLLECTION NUMBER: O-0421
Warring States period (450–221 BCE)
length: 12.10 cm; width: 12.10 cm
overall height (knob): 0.66 cm
overall height (rim): 0.23 cm
weight: 185 g

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12.10 cm x 12.10 cm

PLATE 16

十一山字鏡

**Mirror with Eleven Mountain (*shan* 山) Motifs
and Petals on Fine-patterned Ground**

COLLECTION NUMBER: O-0128

Warring States period (450–221 BCE)

diameter: 30.20 cm

overall height (knob): 1.10 cm

overall height (rim): 0.80 cm

weight: 2030 g

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90

PLATES 17-18

四山字鏡

Mirror with Four Mountain (*shan* 山) Motifs, Petals,
and Feathers on Fine-patterned Ground

COLLECTION NUMBER: O-0420
Warring States period (450-221 BCE)
diameter: 16.50 cm
overall height (knob): 0.75 cm
overall height (rim): 0.59 cm
weight: 235 g

Read Only/No Download



┆

actual size

┆

PLATE 19

四山字鏡

Mirror with Four Mountain (*shan* 山) Motifs and Petals on Fine-patterned Ground

COLLECTION NUMBER: NO-1504
Warring States period (450–221 BCE)
diameter: 12.10 cm
overall height (knob): 0.51 cm
overall height (rim): 0.50 cm
weight: 130 g

Read Only/No Download



actual size



PLATE 20

葉羽紋鏡

Mirror with Petals and Feathers on Fine-patterned Ground

COLLECTION NUMBER: NO-1506
Warring States period (450–221 BCE)
diameter: 11.40 cm
overall height (knob): 0.57 cm
overall height (rim): 0.34 cm
weight: 80 g

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┆

actual size

┆

Read Only/No Download

96

PLATE 21

葉羽紋鏡

Mirror with Petals and Feathers on Fine-patterned Ground

COLLECTION NUMBER: O-0646

Warring States period (450–221 BCE)

diameter: 13.30 cm

overall height (knob): 0.63 cm

overall height (rim): 0.42 cm

weight: 100 g

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T

13.30 cm

T

PLATE 22

蟠鳳菱紋鏡

Mirror with Four Interlaced Phoenixes and Four Lozenges on Fine-patterned Ground

COLLECTION NUMBER: O-0458

Warring States period (450–221 BCE)

diameter: 10.20 cm

overall height (knob): 0.69 cm

overall height (rim): 0.23 cm

weight: 80 g

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10.20 cm



Read Only/No Download

100

PLATE 23

蟠鳥紋鏡

Mirror with Interlaced Birds on Fine-patterned Ground

COLLECTION NUMBER: O-0279

Warring States period (450–221 BCE)

diameter: 14.90 cm

overall height (knob): 0.83 cm

overall height (rim): 0.48 cm

weight: 235 g

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┆

actual size

┆

102

actual size

PLATE 24

蟠螭菱紋鏡

Mirror with Interlaced Dragons and Lozenges on Fine-patterned Ground

COLLECTION NUMBER: O-0833

Warring States period (450–221 BCE)

diameter: 23.20 cm

overall height (knob): 1.30 cm

overall height (rim): 1 cm

weight: 950 g

T

Read Only/No Download



104



reflective side textile imprint

PLATES 25-26

蟠螭菱紋鏡

**Mirror with Interlaced Dragons and Lozenges
on Fine-patterned Ground**

COLLECTION NUMBER: O-0778
Warring States period (450-221 BCE)
diameter: 18.30 cm
overall height (knob): 0.90 cm
overall height (rim): 0.80 cm
weight: 520 g

Read Only/No Download



┆

actual size

┆

PLATE 27

蟠螭菱紋鏡

Mirror with Interlaced Dragons and Lozenges on Fine-patterned Ground

COLLECTION NUMBER: O-0180
Warring States period (450–221 BCE)
diameter: 22.50 cm
overall height (knob): 0.87 cm
overall height (rim): 0.65 cm
weight: 795 g

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108

26.70 cm

PLATE 28

蟠鳥菱紋鏡

**Mirror with Interlaced Birds and Lozenges
on Fine-patterned Ground**

COLLECTION NUMBER: O-0129

Warring States period (450–221 BCE)

diameter: 26.70 cm

overall height (knob): 1.30 cm

overall height (rim): 0.86 cm

weight: 1810 g

T

Read Only/No Download



110



reflective side

PLATES 29-30

四鳥紋鏡

Mirror with Four Birds on Lozenge-shaped Mountains on Fine-patterned Ground

COLLECTION NUMBER: O-0457
Warring States period (450-221 BCE)
diameter: 9.40 cm
overall height (knob): 0.63 cm
overall height (rim): 0.17 cm
weight: 60 g

Read Only/No Download



9.40 cm



112

27 cm

PLATE 31

四獸紋鏡

**Mirror with Four Mythical Animals
on Fine-patterned Ground**

COLLECTION NUMBER: O-0096
Warring States period (450–221 BCE)
diameter: 27 cm
overall height (knob): 1.30 cm
overall height (rim): 0.93 cm
weight: 2170 g

T

Read Only/No Download



PLATE 32

四獸紋鏡

**Mirror with Four Mythical Animals
on Fine-patterned Ground**

COLLECTION NUMBER: O-0127
Warring States period (450–221 BCE)
diameter: 27 cm
overall height (knob): 1.30 cm
overall height (rim): 0.87 cm
weight: 2175 g

Read Only/No Download





PLATES 33-34

八獸紋鏡

Mirror with Four Large and Four Small Mythical Animals on Fine-patterned Ground

COLLECTION NUMBER: O-0398
Warring States period (450-221 BCE)
diameter: 24 cm
overall height (knob): 1.40 cm
overall height (rim): 0.78 cm
weight: 884 g

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PLATE 35

鳥鳳龍紋鏡

Mirror with Birds, Phoenixes, and Dragons on Fine-patterned Ground

COLLECTION NUMBER: O-0131
Warring States period (450–221 BCE)
diameter: 22.40 cm
overall height (knob): 1.20 cm
overall height (rim): 0.50 cm
weight: 655 g

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120



reflective side textile imprint

28.10 cm

PLATES 36-37

鳥鳳龍紋鏡

Mirror with Birds, Phoenixes, and Dragons on Fine-patterned Ground

COLLECTION NUMBER: O-0407
Warring States period (450-221 BCE)
diameter: 28.10 cm
overall height (knob): 1 cm
overall height (rim): 0.50 cm
weight: 1065 g

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122

PLATE 38

龍鳳連弧紋鏡

**Gilded Mirror with Quatrefoil, Four Coiled Dragons
and Four Interlaced Phoenixes, and Joined Arcs
on Fine-patterned Ground**

COLLECTION NUMBER: O-0720

Warring States period (450–221 BCE)

diameter: 19.10 cm

overall height (knob): 1.10 cm

overall height (rim): 0.34 cm

weight: 505 g

Read Only/No Download



T

actual size

T

124

PLATE 39

蟠虺紋鏡

Mirror with Five Interlaced Serpents on Patterned Ground

COLLECTION NUMBER: O-0304

Warring States period (450–221 BCE)

diameter: 10.64 cm

overall height (knob): 0.90 cm

overall height (rim): 0.17 cm

weight: 85 g

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actual size



PLATE 40

蟠螭紋鏡

Mirror with Interlaced Dragons on Patterned Ground

COLLECTION NUMBER: O-0750

Warring States period (450–221 BCE)

diameter: 10.20 cm

overall height (knob): 1 cm

overall height (rim): 0.20 cm

weight: 105 g

Read Only/No Download



10.20 cm



128

PLATE 41

蟠螭紋鏡

Mirror with Interlaced Dragons on Patterned Ground

COLLECTION NUMBER: O-0293

Warring States period (450–221 BCE)

diameter: 10.20 cm

overall height (knob): 0.77 cm

overall height (rim): 0.21 cm

weight: 105 g

Read Only/No Download



10.20 cm



130



reflective side

PLATES 42-43

透雕連弧鏡

Two-part Gilt Mirror with Joined Arcs

collection number: O-0245
Warring States period (450-221 BCE)
diameter: 8.90 cm
overall height (knob): 1.60 cm
overall height (rim): 0.88 cm
weight: 210 g

Read Only/No Download



T

8.90 cm

T



PLATES 44-45

透雕彩繪四虺紋鏡

Square Double-tier Lacquered Mirror with Four Serpents

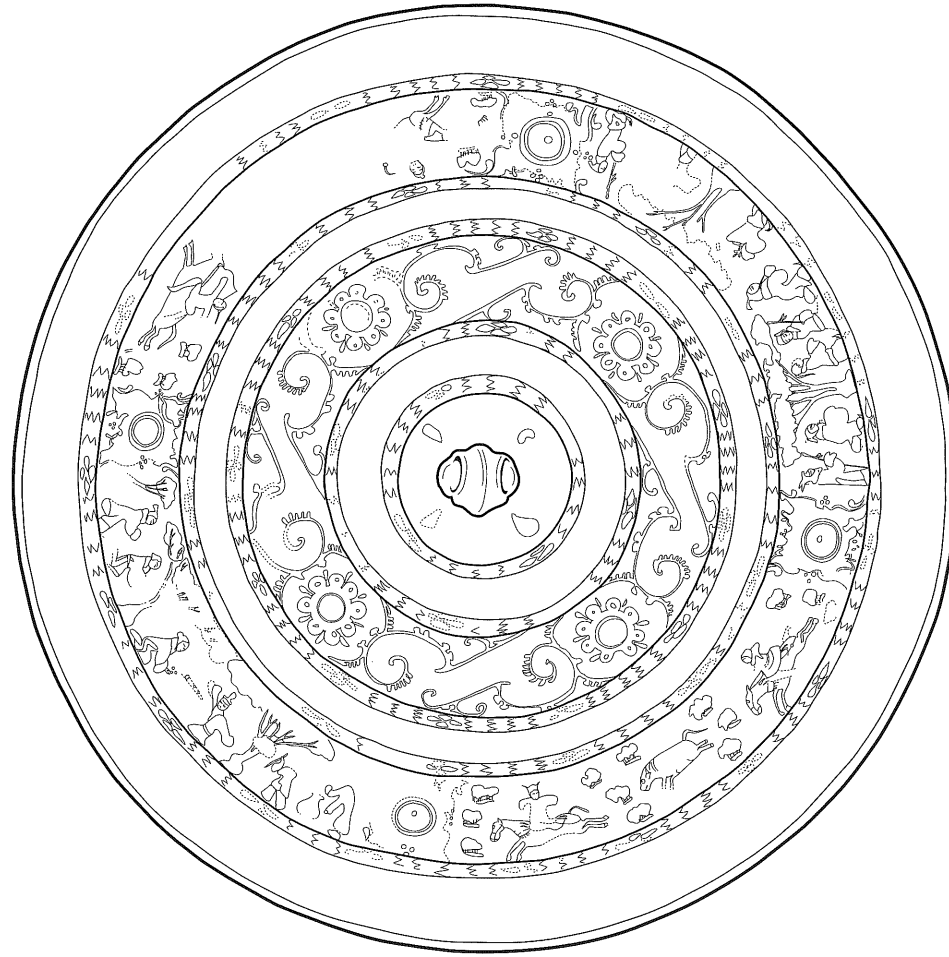
COLLECTION NUMBER: O-0185
Warring States period (450-221 BCE)
length: 12.50 cm; width: 12.50 cm
overall height (knob): 0.60 cm
overall height (rim): 0.26 cm
weight: 270 g

Read Only/No Download



actual size





actual size

PLATES 46-49

彩繪騎馬人物紋鏡

Lacquered Mirror with Painted Riders
and Figures in Landscape

COLLECTION NUMBER: O-0278

Warring States period–Western Han dynasty (450 BCE–8 CE)

diameter: 22.90 cm

overall height (knob): 1.20 cm

overall height (rim): 0.73 cm

weight: 830 g

Read Only/No Download



Read Only/No Download



Read Only/No Download

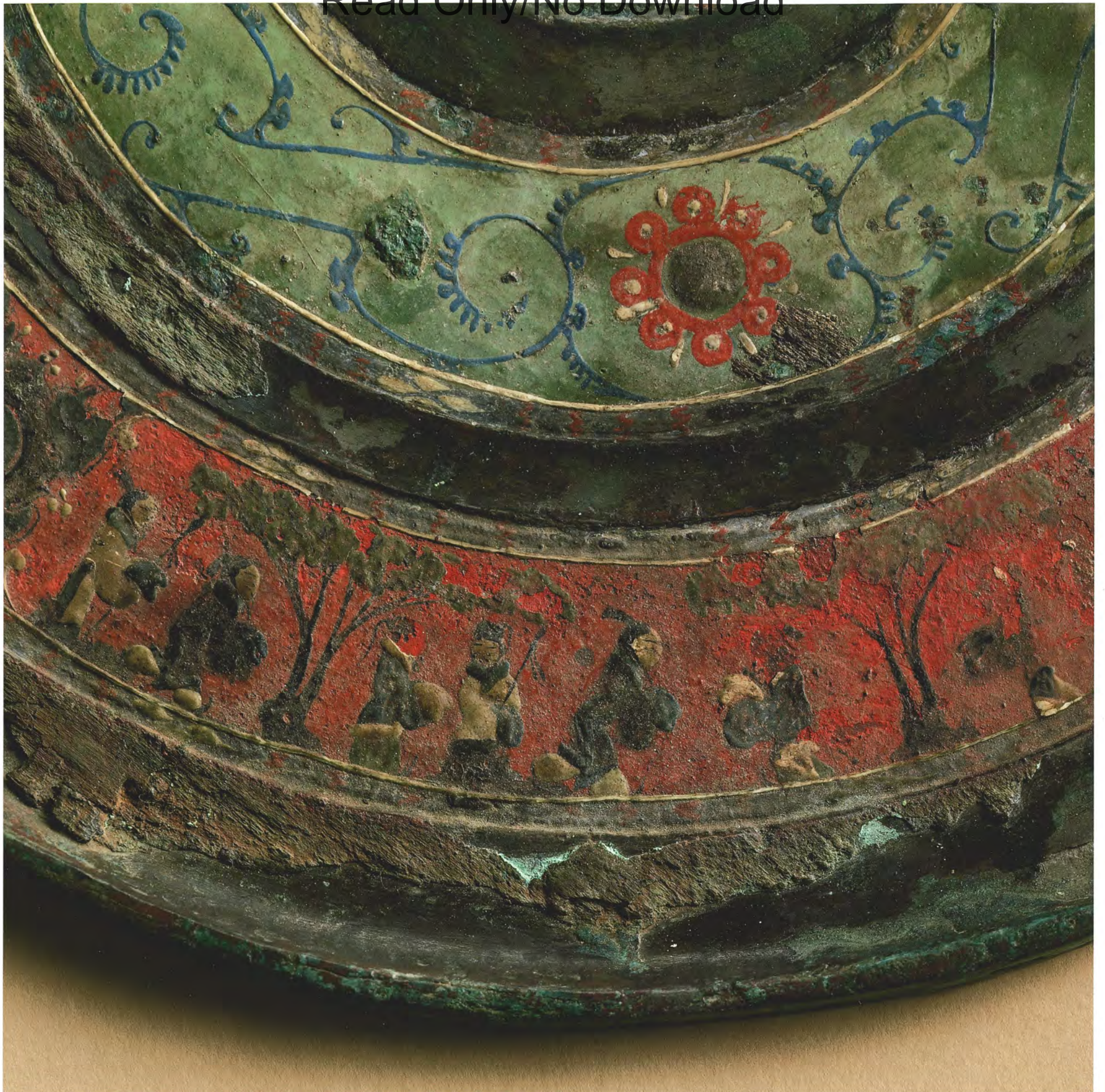


PLATE 50

彩繪雙鳥紋鏡

Flat Lacquered Mirror with Pair of Birds

COLLECTION NUMBER: O-0422

Warring States period–Western Han dynasty (450 BCE–8 CE)

diameter: 9.30 cm

overall height (knob): 0.35 cm

overall height (rim): 0.16 cm

weight: 60 g

Read Only/No Download



┆

9.30 cm

┆



PLATES 51-54

彩繪人物刺繡鏡

**Mirror with Adhered Embroidered and Painted Textile
Showing Figures in Landscape**

COLLECTION NUMBER: O-0186

Warring States period–Western Han dynasty (450 BCE–8 CE)

diameter: 16.50 cm

overall height (knob): 0.61 cm

overall height (rim): 0.20 cm

weight: 185 g

Read Only/No Download



┆

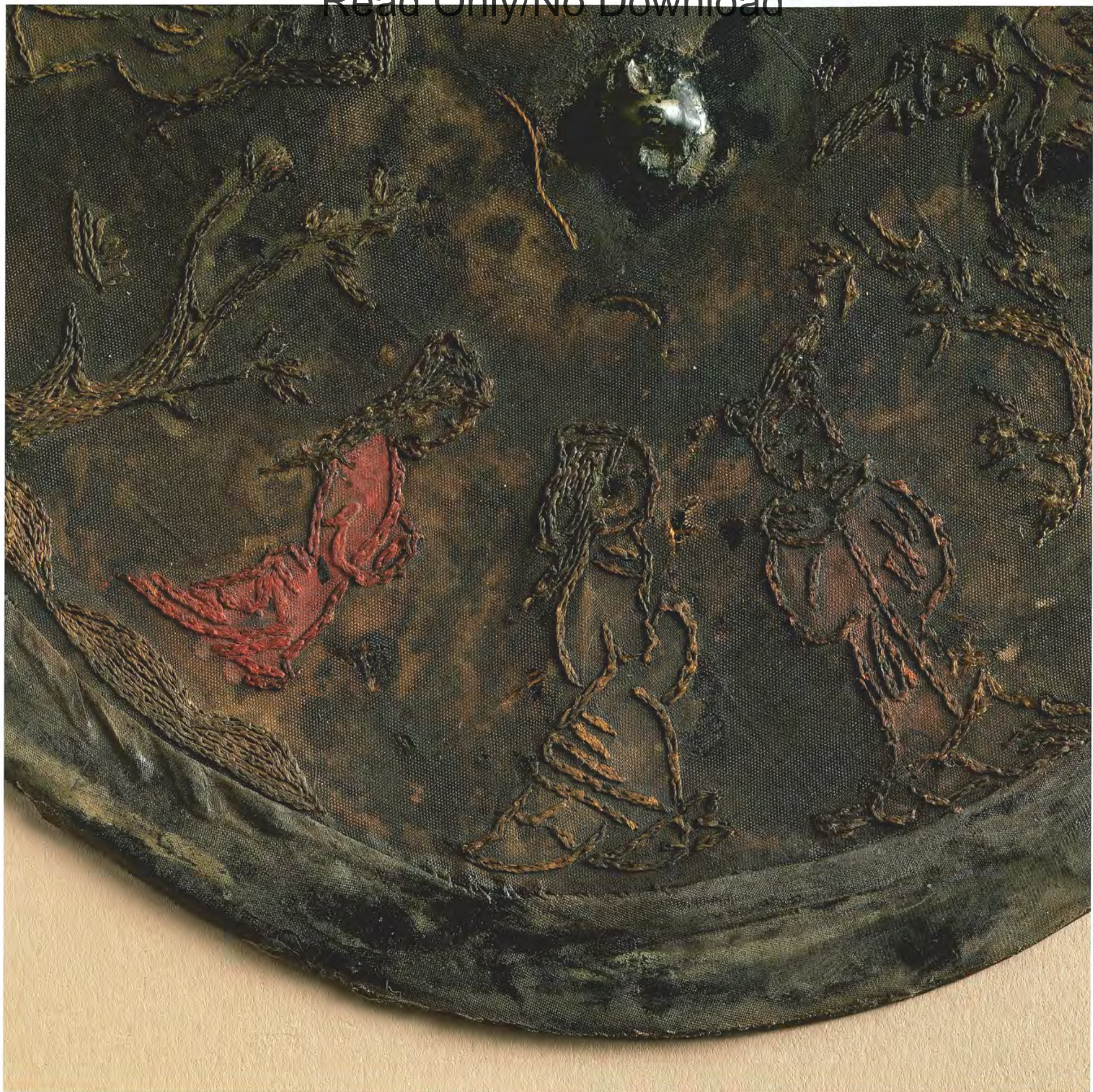
actual size

┆

Read Only/No Download



Read Only/No Download





144

PLATES 55-56

鬥獸紋鏡

Mirror with Two Warriors Wielding Swords and Shields, and Two Leopards on Fine-patterned Ground

COLLECTION NUMBER: O-0460

Qin dynasty (221-207 BCE)

diameter: 10.20 cm

overall height (knob): 0.75 cm

overall height (rim): 0.25 cm

weight: 100 g

Read Only/No Download



10.20 cm



146

PLATE 57

九圓九鈕鏡

Mirror with Eight Raised Circles

COLLECTION NUMBER: O-0201

Western Han dynasty (206 BCE–8 CE)

diameter: 10.20 cm

overall height (knob): 1 cm

overall height (rim): 0.21 cm

weight: 120 g

Read Only/No Download



actual size



PLATE 58

銘草葉星連弧紋鏡

Inscribed Mirror with Quatrefoil, Grass Motifs, Stars, and Linked Arcs

COLLECTION NUMBER: O-0313

Western Han dynasty (206 BCE–8 CE)

diameter: 22.50 cm

overall height (knob): 1.40 cm

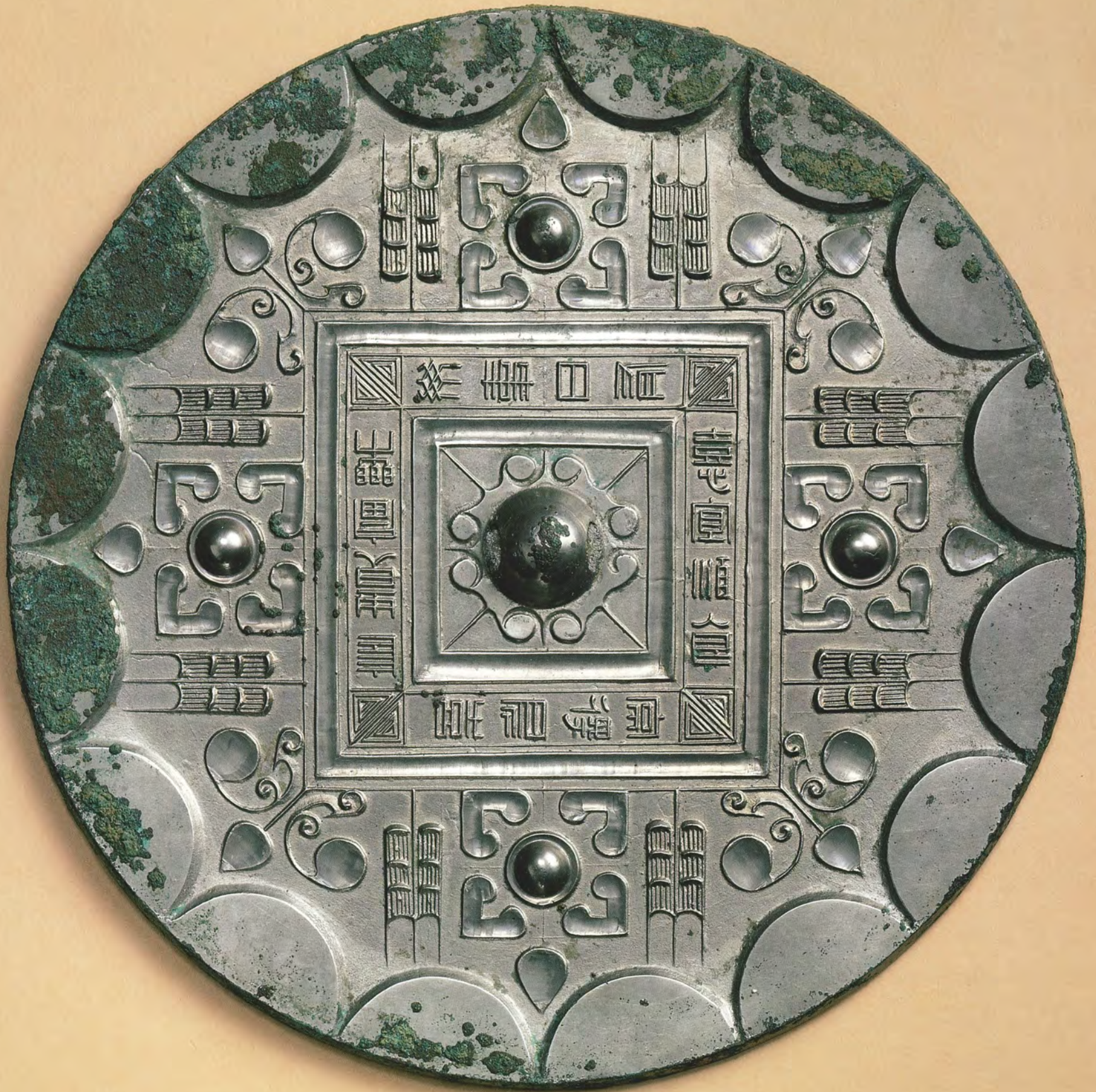
overall height (rim): 0.54 cm

weight: 1350 g

ON SIDES OF SQUARE AROUND QUATREFOIL

長貴福	<i>(May you) enjoy noble status and blessings for a long time;</i>
樂無事	<i>(May you) have pleasure without incident;</i>
日有熹	<i>(May) you have delight every day;</i>
宜酒食	<i>May (you have plentiful) wine and food;</i>
常得君喜	<i>(And may you) regularly obtain lordly delights.</i>

Read Only/No Download



Read Only/No Download

150

PLATE 59

星雲連弧紋鏡

Mirror with Linked Arcs, Quatrefoils, and Constellations

COLLECTION NUMBER: O-0779

Western Han dynasty (206 BCE–8 CE)

diameter: 15.90 cm

overall height (knob): 1.70 cm

overall height (rim): 0.64 cm

weight: 590 g

Read Only/No Download



actual size



Read Only/No Download

152

PLATE 60

星獸連弧紋鏡

Mirror with Linked Arcs, Stars, and Interlaced Animals

COLLECTION NUMBER: O-0179

Western Han dynasty (206 BCE–8 CE)

diameter: 16.20 cm

overall height (knob): 1.50 cm

overall height (rim): 0.51 cm

weight: 515 g

Read Only/No Download



actual size



T

154

12.20 cm

PLATE 61

帶柄鄂爾多斯式鏡

Ordos-style Mirror with Handle and Two Horse Heads

COLLECTION NUMBER: O-0885

Contemporary with Western Han dynasty (206 BCE–220 CE)

length: 12.20 cm; width: 7.10 cm

thickness: 0.64 cm

weight: 100 g

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Read Only/No Download



7.10 cm



156

PLATE 62

博局草葉連弧紋鏡

TLV Mirror with Grass Motifs and Linked Arcs

COLLECTION NUMBER: O-0883
Han dynasty (206 BCE–220 CE)
diameter: 13.70 cm
overall height (knob): 1.60 cm
overall height (rim): 0.38 cm
weight: 270 g

Read Only/No Download



┆

actual size

┆

PLATE 63

銘博局鳥獸紋鏡

Inscribed TLV Mirror with Mythical Animals

COLLECTION NUMBER: O-0856

Han dynasty (206 BCE–220 CE)

diameter: 13.80 cm

overall height (knob): 1.10 cm

overall height (rim): 0.45 cm

weight: 320 g

AROUND THE RIM

商方作鏡真大巧
上有仙人不知老
渴飲玉泉飢吃棗
浮與天下遊四海
樂兮

The Shangfang (office) made this mirror of truly great craftsmanship;

On its surface are transcendents who are unfamiliar with old age.

When thirsty they drink from the Jade Springs, when hungry they eat jujubes;

They drift beneath the heavens and ramble the Four Seas.

What pleasure!

Read Only/No Download



actual size





detail of mirror stand

PLATES 64–65 (see frontispiece for an overall image of stand and mirror)

IN THE CENTER

鏡座

Stand for Inscribed Mirror with Quatrefoil and Linked Arcs

COLLECTION NUMBER: O-0399b
metal: Eastern Han dynasty (25–220 CE)
wood: Modern
width: 36.50 cm; depth: 26.67 cm
height: 36.50 cm
weight: 2391 g

銘連弧紋鏡

Inscribed Mirror with Quatrefoil and Linked Arcs

COLLECTION NUMBER: O-0399a
Eastern Han dynasty (25–220 CE)
diameter: 28.30 cm
overall height (knob): 1.30 cm
overall height (rim): 0.54 cm
weight: 1660 g

長宜子孫 *May your sons and grandsons continue for a long time.*

Read Only/No Download





actual size

PLATE 66

IN THE CENTER

銘連錢鋸齒紋鏡

長宜子孫 *May your sons and grandsons continue for a long time.*

Inscribed Mirror with Eight Linked Coins

COLLECTION NUMBER: O-0775a
Eastern Han dynasty (25–220 CE)
diameter: 7.60 cm
overall height (knob): 0.96 cm
overall height (rim): 0.38 cm
weight: 90 g



PLATE 67

鏡袋

**Silk Brocade Weave
Pouch with Character
yi 宜 “May you...”**

COLLECTION NUMBER: O-0775b
Radiocarbon dated to 1765 ± 40 years B.P.
(calibrated age 208–264 CE)
length: 9.50 cm; width: 9 cm

紛袋

**Silk Plain Weave
Powder Pouch**

COLLECTION NUMBER: O-0775c
Radiocarbon dated to 1635 ± 40 years B.P.
(calibrated age 338–536 CE)
length: 18.50 cm; width: 12.50 cm

紛扑

Wool Powder Puff

COLLECTION NUMBER: O-0775d
length: 8 cm; width: 6.50 cm

漆木盒

Lacquered Wood Box

COLLECTION NUMBER: O-0775f
length: 9 cm; width: 6.50 cm
overall height: 4.20 cm



164

actual size

PLATES 68-69

銘人物車馬畫像鏡
Inscribed Icon Mirror

COLLECTION NUMBER: O-0246
 Eastern Han dynasty (25-220 CE)
 diameter: 22.90 cm
 overall height (knob): 1.80 cm
 overall height (rim): 1.20 cm
 weight: 1440 g

AROUND THE RIM

后 (or 石) 氏 作 鏡
 四 夷 服
 多 賀 國 家
 人 民 息
 胡 虜 殄 滅
 天 下 復
 風 雨 節 時
 五 穀 熟
 長 保 二 親
 得 天 力
 傳 告 孫
 出 樂 無 極

Mr. Hou (or Shi) made (this) mirror;
 The four enemy tribes have submitted.
 We congratulate our country and its families many times over;
 The people are at rest.
 The enemy tribes of the west and northwest are scattered and annihilated,
 And all under heaven is restored.
 Winds and rains follow their seasonal course,
 (Allowing) the five grains to ripen.
 For a long time (may you) preserve your two parents,
 And obtain the strength of heaven.
 Report this widely to your descendants,
 Producing pleasure without end.

Read Only/No Download



PLATE 70

銘神人神獸畫像鏡

Inscribed Icon Mirror

COLLECTION NUMBER: O-0226
Easter Han dynasty (25–220 CE)
diameter: 18.70 cm
overall height (knob): 2 cm
overall height (rim): 0.82 cm
weight: 900 g

NEXT TO THE FIGURES

東王公 *The Royal Patriarch of the East*
玉女 *Jade Girl*
西王母 *Queen Mother of the West*
玉女 *Jade Girl*

Read Only/No Download



T

actual size

T

168

PLATE 71

銘龍虎紋鏡

Inscribed Mirror with Confronting Dragon and Tiger

COLLECTION NUMBER: O-0877

Eastern Han dynasty–Three Kingdoms period (25–265 CE)

diameter: 10 cm

overall height (knob): 1.20 cm

overall height (rim): 0.68 cm

weight: 295 g

BETWEEN THE FIGURES

青羊為志 *The “Blue-green Ram” is the trademark (of the mirror maker)*

Read Only/No Download



10 cm



銘重列神獸紋鏡

Inscribed Mirror with Deities and Animals in Registers

COLLECTION NUMBER: O-0349

Eastern Han dynasty–Three Kingdoms period (25–265 CE)

diameter: 12.10 cm

overall height (knob): 0.90 cm

overall height (rim): 0.41 cm

weight: 250 g

AROUND THE RIM

吾作明鏡
宮澂三商
彫刻容像
五帝主天皇
伯牙彈琴
黃帝避凶
朱鳥玄武
白虎青龍
君宜高宜樂宜

I made a bright mirror,

In the palace refining the three metals.

I carved and sculpted semblances and images:

The Five Thearchic Rulers and the Heavenly Emperor.

Bo Ya strums the zither,

And the Yellow Thearch averts misfortune.

The Vermilion Bird, the Dark Warrior,

The White Tiger, and the Blue-green Dragon (all are here).

May your lordship have high position and pleasure and [...].

IN THE CARTOUCHES IN THE CENTER

君宜任
宜官

May your lordship have official responsibilities.

May (your lordship) hold office.

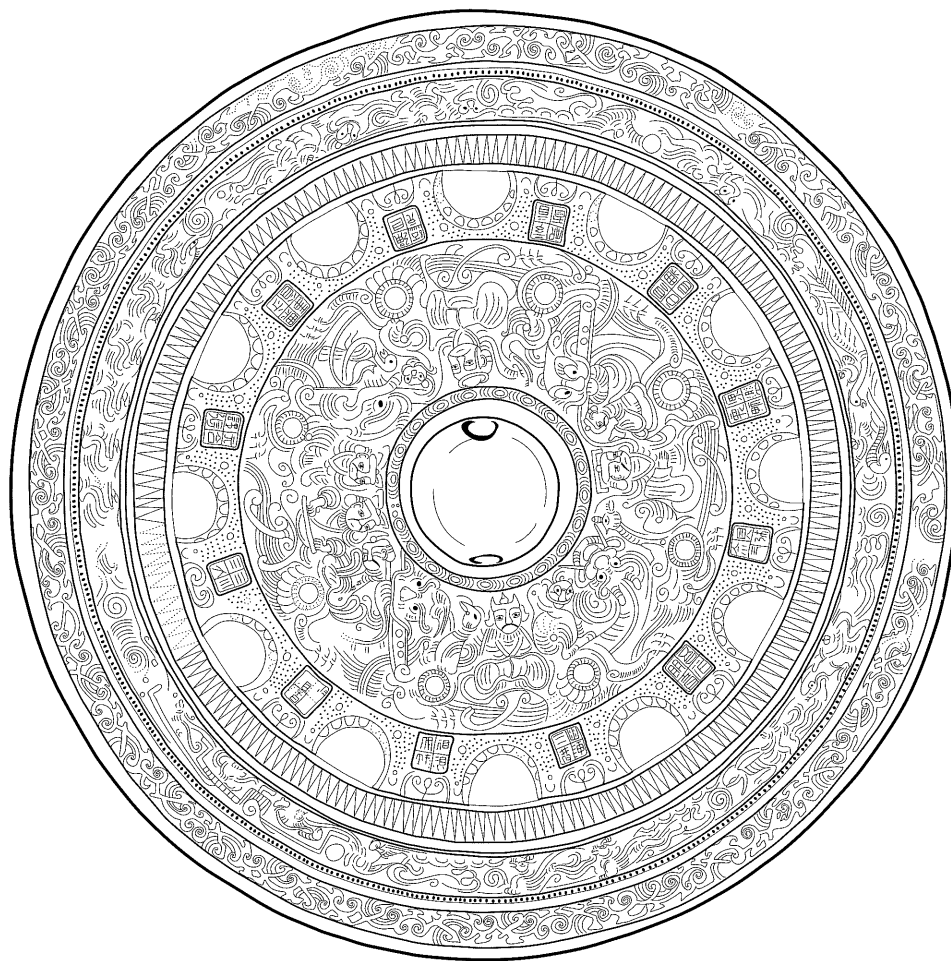
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actual size

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IN TWELVE SQUARE SEALS, FOUR CHARACTERS PER SEAL.
PRELIMINARY READING

PLATES 73-74

銘半圓方枚神人神獸紋鏡

Inscribed Mirror with Deities and Animals Surrounded
by Ring of Seals and Semicircles

COLLECTION NUMBER: O-0133
Eastern Han dynasty–Jin dynasty (25–420 CE)
diameter: 12.80 cm
overall height (knob): 1.20 cm
overall height (rim): 0.59 cm
weight: 495 g

吾作明鏡	<i>I made (this) bright mirror,</i>
幽澗三商	<i>In seclusion refining the three metals.</i>
得德無極	<i>Obtaining virtue without limit,</i>
彫刻無疆	<i>I carved and sculpted without boundaries.</i>
三山以入	<i>(When you) use it to enter the three (transcendent) mountains,</i>
六合設張	<i>The six directions will be established and spread out (before you).</i>
樂方康食	<i>Delight in recipes and gain health from (the prescribed) diet,</i>
通距統象	<i>So as to comprehensively attain all the semblances.</i>
序道祇靈	<i>Follow the Way and attend the deities,</i>
是樂百匡	<i>This delights and brings one hundredfold aid.</i>
陳樂眾神	<i>Set forth music for the flock of deities,</i>
其師命長	<i>And (as the mirror's) master, your life will be lengthened.</i>

Read Only/No Download



12.80 cm



PLATE 75

銘半圓方枚神人神獸紋鏡

Inscribed Mirror with Deities and Animals Surrounded by Ring of Seals and Semicircles

COLLECTION NUMBER: O-0843

Eastern Han dynasty–Jin dynasty (25–420 CE)

diameter: 12.20 cm

overall height (knob): 1.10 cm

overall height (rim): 0.51 cm

weight: 375 g

IN TEN SQUARE SEALS, ONE CHARACTER PER SEAL

余作鏡 *I made (this) mirror;*

清而明 *It is clear and bright;*

注者公卿 *May its owner (attain the rank of) patriarch or minister.*

Read Only/No Download



12.20 cm



PLATES 76-77

銘半圓方枚神人神獸紋鏡

Inscribed Mirror with Deities and Animals Surrounded
by Ring of Seals and Semicircles

COLLECTION NUMBER: O-0233

Eastern Han dynasty-Jin dynasty (25-420 CE)

diameter: 14.30 cm

overall height (knob): 1.40 cm

overall height (rim): 0.54 cm

weight: 405 g

IN TWELVE SEALS, TWO CHARACTERS PER SEAL

五帝昔成盛	<i>The Five Thearchs formerly prospered,</i>
建師四方	<i>Establishing and populating the four quadrants.</i>
富貴陽遂燧	<i>(May this) blessed and noble speculum</i>
利父宜兄	<i>Benefit your (fore-)fathers and be appropriate for your older brothers.</i>
仕至三公	<i>(May your) responsibilities reach those of the Three Patriarchs,</i>
與主齊長	<i>And your longevity equal that of the (Five Thearchic) Rulers.</i>

Read Only/No Download



T

14.30 cm

T

Read Only/No Download

178

PLATE 78

銘半圓方枚神人神獸紋鏡

Inscribed Mirror with Deities and Animals Surrounded by Ring of Seals and Semicircles

COLLECTION NUMBER: O-0744

Eastern Han dynasty–Jin dynasty (25–420 CE)

diameter: 15.30 cm

overall height (knob): 1.30 cm

overall height (rim): 0.52 cm

weight: 560 g

IN SEVENTEEN SQUARE SEALS, FOUR CHARACTERS PER SEAL, ALL IDENTICAL

天王日月 *(This mirror represents) the celestial kings' sun and moon.*

Read Only/No Download



T

actual size

T

180

PLATE 79

彩繪二童紋鏡

Mirror with Painted Scene of Boys Playing

COLLECTION NUMBER: O-0815

Three Kingdoms period–Northern and Southern dynasties (220–589 CE)

diameter: 14.30 cm

overall height (knob): 0.92 cm

overall height (rim): 0.30 cm

weight: 300 g

Read Only/No Download



14.30 cm



182

PLATE 80

嵌玻璃四靈鏡

Mirror Inlaid with Glass, Showing Animals of the Four Directions

COLLECTION NUMBER: O-0832

Northern and Southern dynasties–Sui dynasty (420–618 CE)

diameter: 15.60 cm

overall height (knob): 1.60 cm

overall height (rim): 0.71 cm

weight: 590 g

Read Only/No Download



┆

actual size

┆

184

PLATE 81

四靈十二生肖紋鏡

Mirror with Animals of the Four Directions and Chinese Zodiac Animals

COLLECTION NUMBER: O-0774

Sui dynasty (581–618 C.E.)

diameter: 21 cm

overall height (knob): 1.80 cm

overall height (rim): 0.90 cm

weight: 915 g

Read Only/No Download



actual size



actual size

PLATES 82-83

銘瑞獸十二生肖紋鏡

Inscribed Mirror with Eight Mythical Animals and Chinese Zodiac Animals

COLLECTION NUMBER: O-0363
 Sui dynasty-Tang dynasty (581-907 CE)
 diameter: 23.50 cm
 overall height (knob): 2.70 cm
 overall height (rim): 1.70 cm
 weight: 2640 g

IN RING AROUND CENTRAL ZONE

鍊形神冶	<i>Of refined shape and divine fusing,</i>
瑩質良工	<i>Lustrous material and excellent workmanship,</i>
如珠出匣	<i>Like a pearl emerging from its case,</i>
似月停空	<i>(This mirror) resembles the moon stopping in the void.</i>
當眉寫翠	<i>On your eyebrows, (you may use it to) draw in kingfisher blue;</i>
對臉傅紅	<i>Opposite your cheeks, apply rouge.</i>
綺窗繡幌	<i>Your fine white silk window and embroidered curtains:</i>
俱含影中	<i>All are contained in its reflection.</i>

Read Only/No Download



PLATE 84

銘瑞獸十二生肖紋鏡

Inscribed Mirror with Four Mythical Animals and Chinese Zodiac Animals

COLLECTION NUMBER: O-0232
Sui dynasty–Tang dynasty (581–907 CE)
diameter: 22.20 cm
overall height (knob): 1.90 cm
overall height (rim): 1.30 cm
weight: 2200 g

IN RING AROUND CENTRAL ZONE

仙山並霈	<i>Transcendent mountains are equally numinous (as this mirror);</i>
智水參名	<i>Wise rivers are comparably famous.</i>
花舞丰彩	<i>The dance of its decorations is rich and colorful;</i>
晝夜流明	<i>Day and night, its brightness flows forth.</i>
龍盤五瑞	<i>The dragon coils around five treasures;</i>
鸞舞雙情	<i>Simurghs dance in paired passion.</i>
博山並壽	<i>(May you) have longevity equal to that of mountain ranges;</i>
始驗明樂	<i>(Then you) will begin to experience bright happiness!</i>

Read Only/No Download



Read Only/No Download

190

PLATE 85

瑞獸紋鏡

Mirror with Rings of Mythical Animals

COLLECTION NUMBER: O-0857

Sui dynasty–Tang dynasty (581–907 CE)

diameter: 14.60 cm

overall height (knob): 1.40 cm

overall height (rim): 1.40 cm

weight: 885 g

Read Only/No Download



actual size





PLATES 86-87

銘四靈五嶽紋鏡

Inscribed Mirror with Animals of the Four Directions
and the Five Marchmounts

COLLECTION NUMBER: O-0193

Sui dynasty-Tang dynasty (581-907 CE)

diameter: 18.70 cm

overall height (knob): 1.20 cm

overall height (rim): 0.67 cm

weight: 835 g

AROUND THE RIM

靈山孕寶	<i>Numinous mountains were pregnant with (and yielded their) treasures;</i>
神使觀爐	<i>Divine attendants watched over the (casting) furnace.</i>
形圓曉月	<i>(The mirror's) shape is round like the moon at dawn;</i>
光清夜珠	<i>It is radiant and clear like a pearl in the night.</i>
玉臺希世	<i>Its jade stand is rare in this world;</i>
紅妝應圖	<i>(Using it,) rouge may be properly drawn (on your face).</i>
千嬌集影	<i>May a thousand beauties assemble their reflections (in it);</i>
百福來扶	<i>May a hundred blessings come (to your) support!</i>

Read Only/No Download



T

actual size

T

PLATE 88

六獸葡萄紋鏡

Mirror with Six Mythical Animals and Grapevines

COLLECTION NUMBER: O-0231

Sui dynasty–Tang dynasty (581–907 CE)

diameter: 17.80 cm

overall height (knob): 1.60 cm

overall height (rim): 0.90 cm

weight: 1247 g

Read Only/No Download



T

actual size

T

196

PLATE 89

鳳鳥寶相花紋鏡

Gilt Eight-lobed Mirror with Vines and Birds

COLLECTION NUMBER: O-0426

Tang dynasty (618–907 CE)

diameter: 10.50 cm

overall height (knob): 0.94 cm

overall height (rim): 0.66 cm

weight: 270 g

Read Only/No Download



10.50 cm



Read Only/No Download

198

PLATE 90

鳳鳥寶相花紋鏡

Silvered Eight-lobed Mirror with Vines, Birds, and Mythical Animals

COLLECTION NUMBER: O-0792

Tang dynasty (618–907 CE)

diameter: 18.40 cm

overall height (knob): 1.50 cm

overall height (rim): 0.70 cm

weight: 1088 g

Read Only/No Download



actual size

Read Only/No Download

200

PLATE 91

飛鳥瑞獸葡萄紋寸鏡

Miniature Silvered Eight-lobed Mirror with Vines, Birds, and Mythical Animals

COLLECTION NUMBER: O-0308

Tang dynasty (618–907 CE)

diameter: 5.80 cm

overall height (knob): 0.70 cm

overall height (rim): 0.53 cm

weight: 65 g

Read Only/No Download



5.80 cm



202



reflective side

PLATES 92-93

鳳鳥瑞獸葡萄紋寸鏡

**Miniature Square, Silvered Mythical Animal
and Grapevine Mirror**

COLLECTION NUMBER: O-0647
Tang dynasty (618-907 CE)
length: 6.40 cm; width: 6.10 cm
overall height (knob): 0.96 cm
overall height (rim): 0.88 cm
weight: 170 g

Read Only/No Download



6.40 cm × 6.10 cm



204

PLATES 94-95

瑞獸葡萄紋鏡

Mythical Animal and Grapevine Mirror

COLLECTION NUMBER: O-0234

Tang dynasty (618-907 CE)

diameter: 14.50 cm

overall height (knob): 1.20 cm

overall height (rim): 1.40 cm

weight: 1600 g

Read Only/No Download



actual size



Read Only/No Download

206

PLATE 96

瑞獸葡萄紋鏡

Square Mythical Animal and Grapevine Mirror

COLLECTION NUMBER: O-0742

Tang dynasty (618–907 CE)

length: 9.10 cm; width: 9.10 cm

overall height (knob): 1.20 cm

overall height (rim): 1.20 cm

weight: 520 g

Read Only/No Download



9.10 cm × 9.10 cm

208

PLATE 97

瑞獸葡萄十二生肖紋鏡

Mythical Animal and Grapevine Mirror with Outer Ring of Zodiac Animals

COLLECTION NUMBER: O-0753

Tang dynasty (618–907 CE)

diameter: 14.60 cm

overall height (knob): 1.90 cm

overall height (rim): 1.40 cm

weight: 1500 g

Read Only/No Download



actual size



210



reflective side

PLATES 98-99

犬葡萄紋鏡

Mirror with Canines and Grapevines

COLLECTION NUMBER: O-0874

Tang dynasty (618-907 CE)

diameter: 9.50 cm

overall height (knob): 1.10 cm

overall height (rim): 0.74 cm

weight: 240 g

Read Only/No Download



9.50 cm

PLATE 100

IN CARTOUCHE BY TRANSCENDENT

銘鳳花仙瑞獸紋鏡

大吉 *(May you have) great good fortune.*

Inscribed Eight-lobed Mirror with Phoenixes, Mythical Animal, and Daoist Transcendent

COLLECTION NUMBER: O-0134
Tang dynasty (618–907 CE)
diameter: 26.70 cm
overall height (knob): 2.10 cm
overall height (rim): 1.40 cm
weight: 3730 g

Read Only/No Download





PLATES 101-102

博山寸鏡

Gilt Eight-pointed Miniature Mirror with Raised Mountains

COLLECTION NUMBER: O-0321

Tang dynasty (618-907 CE)

diameter: 6.40 cm

overall height (knob): 1.30 cm

overall height (rim): 0.70 cm

weight: 110 g

Read Only/No Download



6.40 cm



Read Only/No Download

216

PLATE 103

嵌螺鈿花鏡

Eight-lobed Mirror Inlaid with Mother-of-Pearl in Floral Pattern

COLLECTION NUMBER: O-0312

Tang dynasty (618–907 CE)

diameter: 7.90 cm

overall height (knob): 0.76 cm

overall height (rim): 0.56 cm

weight: 160 g

Read Only/No Download



7.90 cm



218

PLATE 104

嵌螺鈿綠松石琥珀花鏡

Mirror Inlaid with Mother-of-Pearl, Turquoise, and Amber in Floral Pattern

COLLECTION NUMBER: O-0418

Tang dynasty (618–907 CE)

diameter: 7 cm

overall height (knob): 0.62 cm

overall height (rim): 0.27 cm

weight: 70 g

Read Only/No Download



7 cm





220

PLATES 105-106

嵌螺鈿綠松石琥珀人物鏡

**Eight-lobed Mirror Inlaid with Mother-of-Pearl,
Turquoise, and Amber Showing Scene of Musicians
and Foreign Dancer**

COLLECTION NUMBER: O-0649

Tang dynasty (618-907 CE)

diameter: 9.10 cm

overall height (knob): 0.79 cm

overall height (rim): 0.35 cm

weight: 160 g

Read Only/No Download



9.10 cm



reflective side

222

PLATES 107-108

嵌玻璃綠松石珠花鏡

**Two-part Mirror with Gilt Copper Granulation,
Inlaid with Glass, Turquoise, and Pearl in Floral Pattern**

COLLECTION NUMBER: O-0865

Tang dynasty (618-907 CE)

diameter: 9.50 cm

overall height (knob): 1.10 cm

overall height (rim): 0.88 cm

weight: 255 g

Read Only/No Download



9.50 cm



Read Only/No Download

224

PLATE 109

銀平脫花鳥紋鏡

**Flat Mirror with Adhered, Cut and Chased Silver Sheet
Showing Interlaced Birds and Vines**

COLLECTION NUMBER: O-0879

Tang dynasty (618–907 CE)

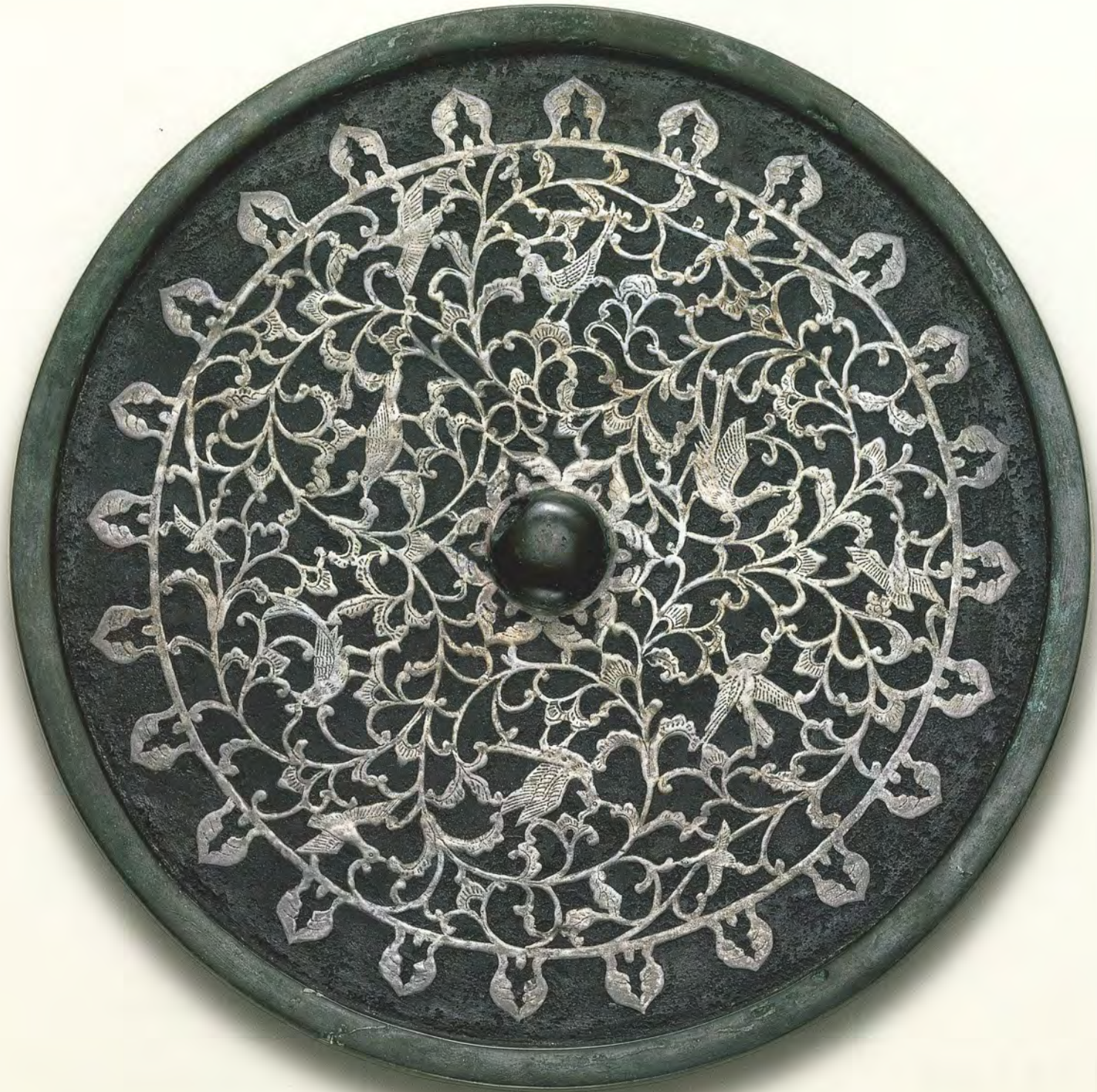
diameter: 19.40 cm

overall height (knob): 1.10 cm

overall height (rim): 0.57 cm

weight: 860 g

Read Only/No Download



T

actual size

T

PLATE 110

銘五嶽八卦日月星紋鏡

Inscribed Cosmic Mirror with Five Marchmounts, Eight Trigrams, Sun, Moon, and Constellations

COLLECTION NUMBER: O-0425

Tang dynasty (618–907 CE)

diameter: 16.50 cm

overall height (knob): 1.10 cm

overall height (rim): 0.69 cm

weight: 910 g

IN SQUARE CARTOUCHES

READING THE FOUR CHARACTERS IN EACH SQUARE AS A LINE

天日寫洞 *Like the sun in heaven, it outlines and penetrates;*
地月規鑿 *Like the earth's moon, it circumscribes and mirrors.*
含貞萬百 *(This mirror) contains and divines the ten thousand (things) and hundred (deities);*
象明物靈 *It makes images of and sheds light on the numina of things.*

PREFERRED READING, FROM THE SAME CORNER OF EACH SQUARE IN SEQUENCE
(TIAO DU, 跳讀, "READING BY JUMPING")

天地含象 *Heaven and earth contain images;*
日月貞明 *The sun and moon perform divinations and shine.*
寫規萬物 *(The mirror) outlines and circumscribes the ten thousand things,*
洞鑿百靈 *Penetrates and mirrors the one hundred numina.*

Read Only/No Download



┆

actual size

┆



PLATES 111-112

五嶽仙獸鳥紋鏡

Mirror with Five Marchmounts, Daoist Transcendents,
Birds, Animals, and Plants

COLLECTION NUMBER: O-0305

Tang dynasty (618-907 CE)

diameter: 21 cm

overall height (knob): 1.50 cm

overall height (rim): 0.41 cm

weight: 1150 g

Read Only/No Download



T

actual size

T

Read Only/No Download

230

PLATE 113

五嶽鳥紋鏡

Square Mirror with Five Marchmounts, Birds, and Plants

COLLECTION NUMBER: O-0135

Tang dynasty (618–907 CE)

length: 12.70 cm; width: 12.70 cm

overall height (knob): 0.99 cm

overall height (rim): 0.45 cm

weight: 465 g

Read Only/No Download



actual size



Read Only/No Download

232

PLATE 114

銘三樂紋鏡

Inscribed Mirror with Three Pleasures Narrative

COLLECTION NUMBER: O-0782

Tang dynasty (618–907 CE)

length: 14 cm; width: 14 cm

overall height (knob): 1 cm

overall height (rim): 0.32 cm

weight: 365 g

IN CARTOUCHE (READING FROM EACH SIDE TO THE CENTER)

FROM LEFT (NEAR Confucius)

孔夫子問曰 *Confucius inquires, saying...*

FROM RIGHT (NEAR Rong Qiqi)

榮啟期答曰 *Rong Qiqi responds, saying...*

Read Only/No Download



┆

actual size

┆

234

PLATE 115

四靈花蕊紋鏡

Mirror with Animals of the Four Directions

COLLECTION NUMBER: O-0876

Tang dynasty (618–907 CE)

diameter: 12.40 cm

overall height (knob): 1.10 cm

overall height (rim): 0.50 cm

weight: 400 g

Read Only/No Download



12.40 cm



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PLATE 116

鳳鏡

Eight-lobed Mirror with Phoenix

COLLECTION NUMBER: O-0752

Tang dynasty (618–907 CE)

diameter: 15.90 cm

overall height (knob): 1.10 cm

overall height (rim): 0.50 cm

weight: 605 g

Read Only/No Download



actual size



238

PLATE 117

龍鏡

Six-lobed Mirror with Dragon

COLLECTION NUMBER: O-0255

Tang dynasty (618–907 CE)

diameter: 8.90 cm

overall height (knob): 0.72 cm

overall height (rim): 0.38 cm

weight: 150 g

Read Only/No Download



┆

8.90 cm

┆

240

PLATE 118

月鏡

Moon Mirror with Birds and Dragon

COLLECTION NUMBER: O-0743

Tang dynasty (618–907 CE)

diameter: 18.90 cm

overall height (knob): 1.30 cm

overall height (rim): 0.63 cm

weight: 1100 g

Read Only/No Download



┆

actual size

┆

242

PLATE 119

雙獅紋鏡

Square Mirror with Pair of Lions

COLLECTION NUMBER: O-0867

Tang dynasty (618–907 CE)

length: 14.80 cm; width: 14.80 cm

overall height (knob): 1.20 cm

overall height (rim): 0.56 cm

weight: 650 g

Read Only/No Download



actual size



244



reflective side details

PLATES 120-124

銘蓮花人物鏡

**Inscribed Mirror with Lotus Boss and Narrative Roundels,
with Buddha Image Engraved on Reflective Side**

COLLECTION NUMBER: O-0323

Tang dynasty (618-907 CE)

diameter: 33 cm

overall height (knob): 1.30 cm

overall height (rim): 0.89 cm

weight: 2900 g

FIVE CHARACTERS ON LOTUS PETALS AT CENTER

兩存長同心 *May the two of you preserve the same mind for a long time.*

33 cm

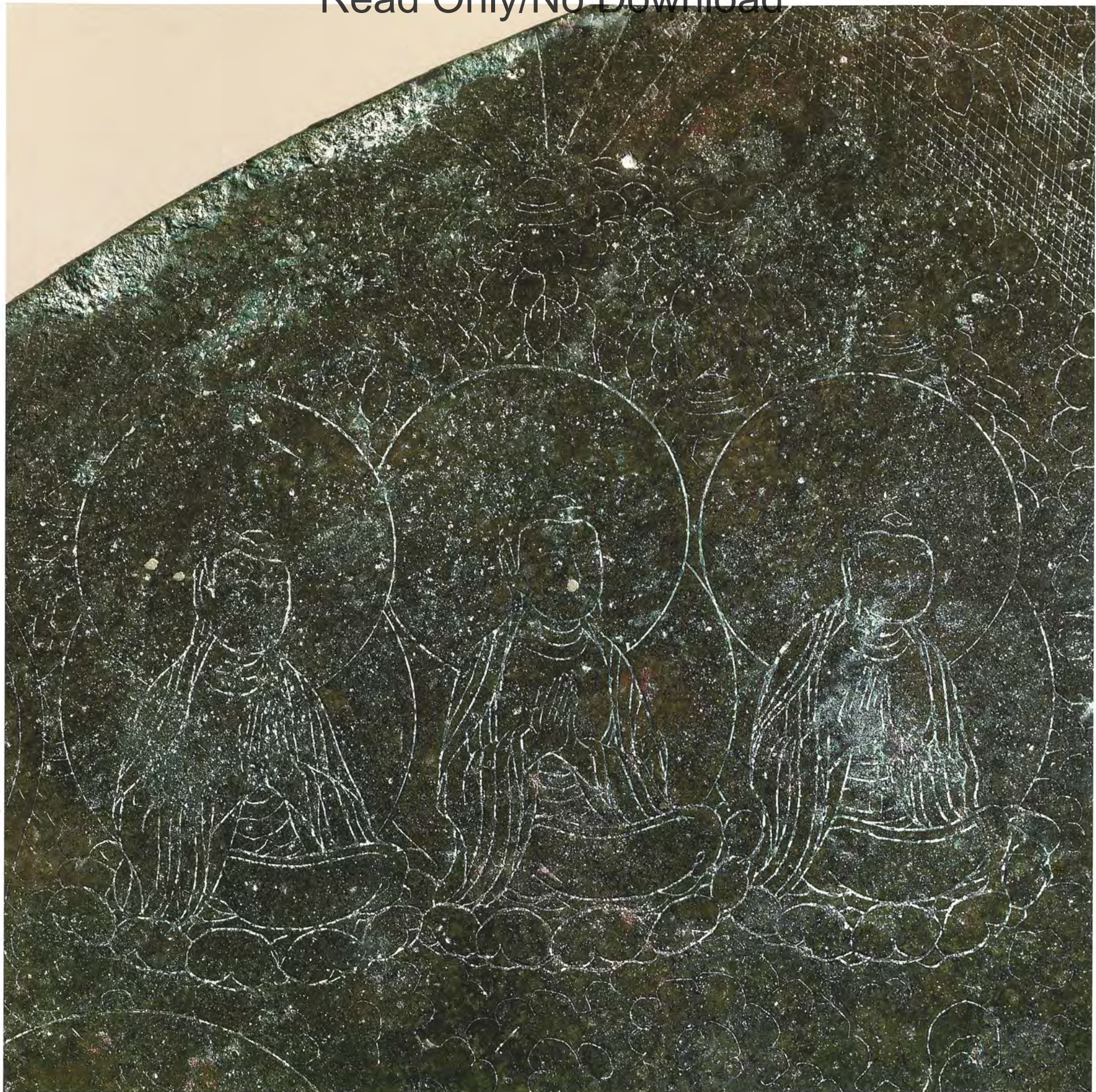
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Read Only/No Download

248

PLATE 125

雙魚紋鏡

Mirror with Two Fish on Wave Pattern

COLLECTION NUMBER: O-0751

Jin dynasty (1115–1234 CE)

diameter: 15.90 cm

overall height (knob): 1.10 cm

overall height (rim): 0.71 cm

weight: 745 g

Read Only/No Download



actual size



Read Only/No Download

250

PLATE 126

人物蓮花鳳紋鏡

Eight-lobed Mirror with Figures, Lotus Flowers, and Phoenixes

COLLECTION NUMBER: NO-1505

Korean, Koryŏ dynasty (936–1392 CE)

diameter: 14 cm

overall height (knob): 0.70 cm

overall height (rim): 0.30 cm

weight: 185 g

Read Only/No Download



actual size



252

PLATE 127

菊花紋鏡

Mirror with Chrysanthemum Design

COLLECTION NUMBER: O-0291

Korean, Koryŏ dynasty (936–1392 CE)

diameter: 11.40 cm

overall height (knob): 1.10 cm

overall height (rim): 0.80 cm

weight: 315 g

Read Only/No Download



11.40 cm



Read Only/No Download

254

PLATE 128

Mirror of Fast-cooled or Beta Bronze

COLLECTION NUMBER: O-0835

Cambodian, Khmer kingdom (11TH–13TH CENTURY CE)

diameter: 16.50 cm

overall height (knob): 0.98 cm

overall height (rim): 0.71 cm

weight: 575 g

Read Only/No Download



actual size





reverse side

PLATES 129-130

銘花鳥紋寸鏡

Inscribed Miniature Eight-lobed Mirror
with Bird and Floral Design

COLLECTION NUMBER: O-0292

Japanese (1915-1955)

diameter: 8.70 cm

overall height (knob): 0.90 cm

overall height (rim): 0.75 cm

weight: 195 g

IN TWO CARTOUCHES ON THE REFLECTIVE SIDE OF THE MIRROR

大所電報通
信社創立十
五週發紀年
新聞博覽會

純民作

*News exposition held in commemoration of the fifteenth anniversary of the establishment
of the Otokoro Telegraphic Communication Company.*

Junmin made (the mirror).

Read Only/No Download



8.70 cm



258

PLATE 131

彩繪鳥花鳥紋鏡

Square, Flat Mirror with Painted Design of Flowers and Birds

COLLECTION NUMBER: O-0322

Modern (20TH CENTURY CE)

length: 19.10 cm; width: 19.10 cm

overall height (knob): 1.30 cm

overall height (rim): 0.57 cm

weight: 100 g

Read Only/No Download



T

actual size

T

Read Only/No Download

z6o

PLATE 132

商式鏡

Shang Dynasty Style Mirror

COLLECTION NUMBER: O-0804

Modern (20TH CENTURY CE)

diameter: 6.70 cm

overall height (knob): 0.98 cm

overall height (rim): 0.13 cm

weight: 35 g

Read Only/No Download



6.70 cm

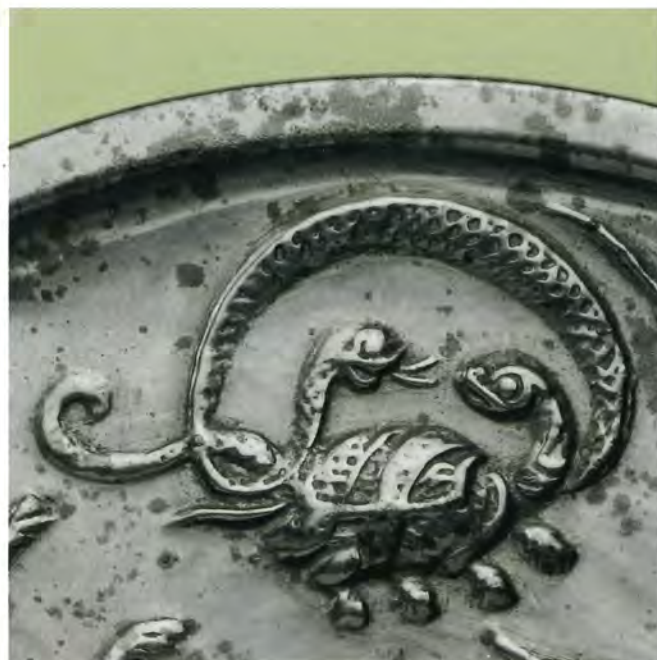


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The Lloyd Cotsen Study Collection of Chinese Bronze Mirrors
Volume II: Studies



Lothar von Falkenhausen, *editor*

**The Lloyd Cotsen Study Collection of Chinese Bronze Mirrors
Volume II: Studies**

with contributions by

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cover illustration and page 6
**Square Mirror with Adorsed Taotie Masks
on Fine-patterned Ground**
COTSEN COLLECTION NUMBER: O-0421
Warring States period (450 BCE–221 CE)
length: 12.10 cm width: 12.10 cm
overall height (knob): 0.66 cm
overall height (rim): 0.23 cm

frontispiece
**Silvered Eight-lobed Mirror
with Vines, Birds, and Mythical Animals**
COTSEN COLLECTION NUMBER: O-0792
Tang dynasty (618–907 CE)
diameter: 18.40 cm
overall height (knob): 1.50 cm
overall height (rim): 0.70 cm
weight: 1088 g

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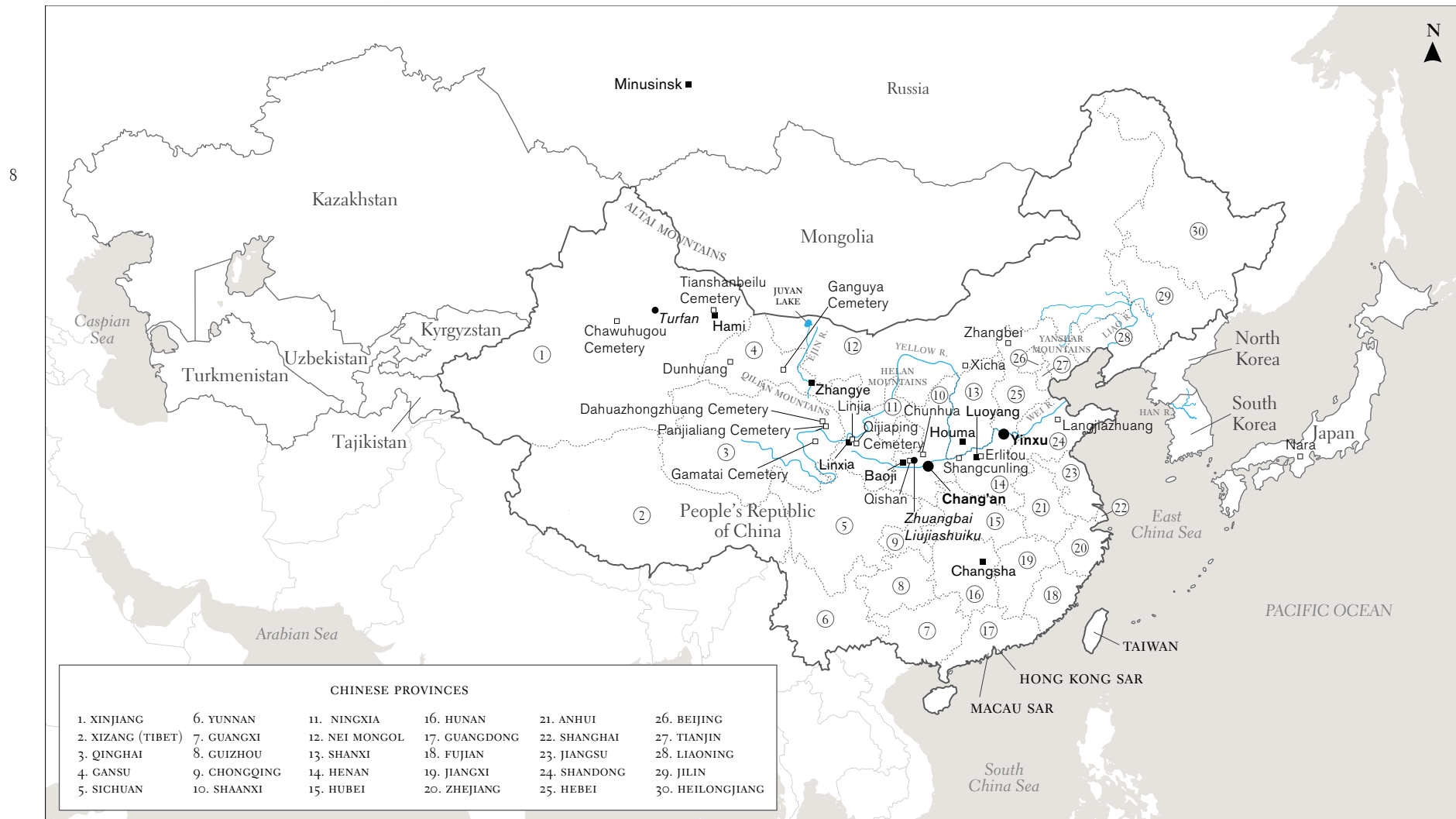
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Introduction

CREATED OVER A TIME SPAN OF FOUR MILLENNIA and exhibiting tremendous stylistic and geographical variety, Chinese bronze mirrors number in the tens if not hundreds of thousands. In the face of such abundance, collecting is above all selecting. The Lloyd Cotsen Study Collection of Chinese Bronze mirrors (hereafter: Cotsen Collection), which consists of ninety-four pieces, is thus the outcome of a series of considered choices—choices that were guided by the self-assured personal taste, and sustained by the long-term intellectual agenda, of one individual. The collection is unabashedly idiosyncratic. Precisely for this reason, it is memorable and strong. It is an artifact in its own right that deserves to be appreciated as such. The present two-volume publication is intended to be its monument. Volume 1 documents the collection from the collector's perspective, presenting high-quality illustrations of the mirrors in their approximate chronological sequence. Volume 2, a set of eleven scholarly essays, addresses them as a study collection. Guided by the conviction that this particular constellation of mirrors may lead to substantive insights that cannot easily be obtained otherwise, the contributing authors were invited to use the materials in Volume 1 as a point of departure for freewheeling explorations of topics of their own choice. The results, which are presented herein, are as preliminary as they are stimulating.

While each of the following chapters contributes in its own way to an improved understanding of Chinese material culture in its wider East Asian connections, it is emphatically not the intention of this book to provide a definitive digest of all that can currently be known about the mirrors in the Cotsen Collection. This would be, in any case, an impossible task. Each individual mirror, as a discrete and autonomous materialization of human agency, forms a node in an infinite network of aesthetic and ideational connections that no single study could ever hope to reveal exhaustively.

Like a collector's decision on what to include in a collection, a scholar's decision on what to study also involves conscious choices. And in both cases, the selection process is limited by accidental factors. A collector, even when economic constraints are absent, can choose only from what happens to be available on the market. For the scholar, the lack of known provenience for objects acquired in this fashion tragically precludes a number of important avenues of inquiry. Nevertheless, the essays assembled in this book exemplify a variety of methodologies and approaches one may fruitfully employ in the study of such material. The absorption, scheduled for 2012, of the Cotsen Collection into the much more comprehensive holdings of the Shanghai Museum, and the juxtapositions that it will make possible, will undoubtedly open up many additional research questions beyond the horizons of the present work.

For new scholarship to render earlier work obsolete is normal, especially in such a fast-developing field as the study of Chinese material culture. As a case in point, the present volume takes the opportunity to correct some inaccuracies in Volume 1, which was printed and distributed to the contributors before they wrote their chapters. Let me highlight some points on which the information has been updated.

(1) The long congratulatory inscriptions on several Han-dynasty (206 BCE–220 CE) mirrors in the collection, for which provisional translations were given in Volume 1, have been extensively retranslated and commented on by K. E. Brashier (this volume, pp. 100–119). Moreover, Guolong Lai (this volume, pp. 184–197) points out that the inscription on mirror O-0323 (see v. 1: PLS. 120–124) should be read in the opposite direction, which obviously yields an entirely different meaning.

(2) Some mirrors have been redated. For instance, Lai (this volume, pp. 184–197), convincingly assigns mirror O-0323, which was originally considered a Tang (618–907 CE) specimen, to the Liao dynasty (907–1125 CE). The reader of this Introduction may also notice that some of the dates given for mirrors discussed therein are different from those given in Volume 1.

(3) David A. Scott's extensive technical studies have revealed that a number of mirrors presented as originals in Volume 1 are forgeries (for an enumeration, see below). But since these were copied by direct impression from authentic mirrors, Suzanne E. Cahill (this volume, pp. 130–159) justifiably continues to include them as proxies for their models in an art-historical discussion. Other pieces, especially the silk-backed mirror O-0186 (see v. 1: PLS. 51–54) discussed in several chapters of this book, remain controversial; Hanmo Zhang (this volume, pp. 74–87) demonstrates that its unique silk backing, if authentic, cannot date earlier than the Han period, whereas Scott (this volume, pp. 198–233) has found the metallography of its body consistent with

a Warring States-period date, which would also correspond to its overall shape. Several other specimens that either are forgeries or deserve to be ranked among the greatest masterpieces of the Chinese mirror-making tradition will be discussed further below in this Introduction.

The Cotsen Collection differs from mirror collections housed in museums, which usually strive for a more representative coverage of known mirror types.² It also differs greatly from other private collections of comparable size published during recent decades,³ among which it stands out for the judiciousness and courage of the choices made in its assembly. As a consequence, the topical emphases of the following eleven chapters are different from comparable preexisting publications.⁴ In the remainder of this Introduction, I shall attempt to relate the findings presented herein to the idiosyncrasies of the Cotsen Collection and to the intellectual agenda that one may infer from them. This discussion will not always follow the order of the chapters in the book.

CHRONOLOGICAL COVERAGE

THE COTSEN COLLECTION is unusual in how it defines the beginning and end of the time range of its concern. Most collections of Chinese mirrors—museum as well as private—begin with the Warring States period (ca. 450–221 BCE), when mirrors first became part of the repertoire of the long-established bronze-casting workshops in the core territory of the early Chinese dynasties. But the Cotsen Collection extends its scope to more than a millennium before that time: it contains two mirrors from the early part of the Bronze Age, when mirrors were made in regional cultures beyond the northern and northwestern margins of the early Chinese kingdoms of the Shang (ca. 1600–ca. 1046 BCE) and Zhou (ca. 1046–256 BCE) dynasties and only occasionally imported into China proper. Li Jaang (this volume, pp. 34–49) documents this earliest stage in the history of Chinese mirrors and traces their derivation from metallurgical traditions in central Eurasia that predate the great Bronze Age of China. She shows how the inhabitants of the Shang and Zhou kingdoms adopted bronze mirrors very gradually and, it seems, hesitantly. The sudden rise to prominence of mirrors during the Warring States period coincided with a social and religious transformation in the course of which bronze, traditionally restricted to the aristocratic elite, became more generally available and came to be employed increasingly for items of personal, as opposed to ritual, use. At the same time, personal items were being more frequently buried in tombs, thus enhancing the likelihood for mirrors to be archaeologically recoverable.⁵



FIGURE 1

FIGURE 1: Mirror with auspicious decor, excavated at Chaoyang, Mengjin (Henan). Luoyang Municipal Museum. Diameter 9.7 cm. Yuan dynasty, thirteenth to fourteenth century CE. From *Zhongguo Qingtongqi Quanji* Bianjiweiyuanhui 1998: pl. 205.

On the late end of its time range, the Cotsen Collection largely eschews the allure of mirrors made during the most recent millennium of Chinese history: it ends, by and large, with the Tang period, with the aforementioned Liao mirror O-0323 (see v. 1: PLS. 120–124) discussed by Guolong Lai (this volume, pp. 184–197) constituting one of a small number of later outliers. This mirror is unusual in its style as well as its manufacturing technique, which is characterized by the repeated use of medallion-size stamps. It is, moreover, without parallel in the collection in that it features Buddhist imagery, which, also uniquely, is incised on the reflecting side, transforming what may originally have been an item of personal use into a religious object. Such a reuse of mirrors appears to have been a pan-East Asian custom during the post-Tang period.⁶

Mirror O-0323 is, by any standard, one of the most significant items in the collection, but also one of the most exceptional. It stands apart from the vast majority of bronze mirrors made in China from the Song (960–1279 CE) through the Qing (1644–1911 CE) dynasties, which feature elaborate ornamental compositions, vernacular imagery (often multigure narrative scenes), or magic diagrams or inscriptions of Taoist derivation (FIG. 1). The Cotsen Collection self-consciously does not document these later developments, concentrating instead on the technical and artistic advances leading to the apogee of Chinese mirror production under the Tang.

GEOGRAPHICAL SPREAD

THE CONNOISSEURIAL INTERESTS of most collectors of Chinese bronze mirrors, and the collecting scope of most Chinese museums, are limited to items from the core area of Chinese civilization. But Chinese mirrors did not develop in isolation from the rest of Eurasia. Li Jaang (this volume, pp. 34–49) makes this very clear for the initial stages in the history of mirrors, and connections with other cultures and places remained important after mirrors had become, during the Warring States period, a quintessential component of Chinese culture. In particular, they became a favorite item of external trade after the opening of the Silk Routes at the end of the second century BCE. Han mirrors have been found throughout central Eurasia,⁷ as well as among the Northeast Asian neighbors of China. As a case in point, the Eastern Han-period (25–220 CE) mirror O-0775a (see v. 1: PL. 66), which forms an ensemble with a lacquered box and several cosmetic items that usually do not preserve as well in the climatic conditions of China proper, was in all likelihood found somewhere in present-day Xinjiang or even farther west, quite possibly outside the area under the direct political reach of the

Han empire.⁸ Charlotte Horlyck (this volume, pp. 120–129) addresses another aspect of this diffusion when she discusses the cultural context and function of Chinese mirrors imported into the Korean peninsula during the Han dynasty, and their local recycling and imitation. In Japan, as well, the study of the very numerous archaeologically excavated mirrors imported from China during the Han through Northern and Southern Dynasties (220–589 CE) period, and their local imitations, has produced a large and highly sophisticated body of scholarship.⁹

Even though it is now impossible to be certain about whether any of the Chinese-style mirrors in the Cotsen Collection were found outside of China (and if so, where), Horlyck's study of early Chinese mirrors found in Korea accentuates the fact that the scope of the collection deliberately extends to, and indeed beyond, the margins of the Chinese culture area. Among the items assigned to the Han period in Volume 1, two are of clearly "alien" associations. Mirror O-0885 (see v. 1: PL. 61) is unusual both for its oval shape and for its attached handle with "animal-style" ornament; it must either have come from somewhere in the northern Steppes, then under the domination of the Xiongnu 匈奴 empire, or have been made in Han China for the steppe market. Mirror O-0201 (see v. 1: PL. 57) is decorated with eight small raised-line circles surrounding a larger central circle enclosing the handle. It is perhaps an abstracted adaptation, by a mirror maker working outside the mainstream of the Chinese bronze-casting tradition, of a Han cosmological pattern that involves a similar concentric arrangement of nine roundels (two very distinct versions of this may be seen, e.g., in mirrors O-0856 and O-0775a; see v. 1: PLS. 63, 66). This interpretation, however, is not entirely certain, and the mirror may conceivably date to an earlier time. In any case, it is highly atypical, and the analysis of its metallic composition (see David Scott, this volume, pp. 201, 202) has confirmed its exceptionality.

Charlotte Horlyck's second essay (this volume, pp. 160–169) speaks to the radiance of Chinese cultural and artistic influence throughout East Asia during the Tang dynasty. The Cotsen Collection comprises several fine specimens of a rare type of Tang mirrors inlaid with lacquer and mother-of-pearl (mirrors O-0312, O-0418, and O-0649; see v. 1: PLS. 103, 104, 105–106). At the time, such specimens were taken to Korea and Japan, where several specimens have been handed down through the ages in such collections as the Shōsōin 正倉院 treasury in Nara. Horlyck compellingly discusses how this importation came to stimulate the independent production of similar specimens in Unified Silla-period 統一新羅 (669–935 CE) Korea, thus usefully linking the specimens in the collection to wider East Asian cultural developments.

Even though, as mentioned, the collection by and large stops with the Tang, it does contain several later mirrors that may serve to document the genesis of significant independent mirror-manufacturing traditions in East Asian countries beyond China during the post-Tang period. The above-discussed Liao mirror O-0323 (see v. 1: PLS. 120–124) could potentially be seen in such a light, given that it was made under a dynasty of Mongolic-speaking Khitan rulers. The same could be said of the Jin-dynasty (1115–1234 CE) mirror O-0751 (see v. 1: PL. 125), made under the régime of the Jurchen, speakers of a Tungusic language. But there are good reasons for considering the Liao and Jin dynasties as part of the “Chinese” dynastic sequence, side by side with the contemporaneous Han-“Chinese” Song dynasty; and it is virtually certain that the two mirrors were made by ethnically Han-“Chinese” craftsmen operating in the Liao and Jin realms. Hence, most comprehensive collections of Chinese mirrors—museum as well as private—contain Liao and Jin specimens, though in the past these were sometimes labeled as Song by authors intent on delegitimizing the “alien” northern régimes.

By contrast, the Cotsen Collection is unusual in including several mirrors made in places that were unambiguously beyond the frontiers of “China”: one specimen from the Korean kingdom of Koryŏ 高麗 (918–1392 CE) (mirror NO-1505; see v. 1: PL. 126; technical analysis has revealed another Koryŏ-style mirror, O-0291 [see v. 1: PL. 127], as a recent forgery); one assigned (with some reservations) to the ancient Khmer kingdom of Angkor (802–1431 CE) (mirror O-0835; see v. 1: PL. 128); and one unusual specimen made in early twentieth-century Japan (mirror O-0292; see v. 1: PLS. 129–130). With the possible exception of the Khmer(?) mirror, each of these—though unmistakably non-Chinese in their stylistic and metallurgical details—displays a strong aesthetic debt to Tang-period Chinese prototypes.

TOPICAL EMPHASES

THE COTSEN COLLECTION has particular strengths in the Warring States and Sui (581–618 CE)-to-Tang periods, each represented by approximately thirty mirrors (the exact number is debatable, given the somewhat fluid stylistic boundaries and the possible presence of inauthentic pieces). The Warring States holdings in particular significantly exceed, both proportionally and in absolute terms, the representation of that period in any comprehensive survey of Chinese mirrors published to date. By comparison, the Han period, which in the view of many connoisseurs—especially of inscription-minded antiquarians—represents the climax of Chinese mirror production, is relatively deemphasized, with about a dozen specimens.

Such emphases and deemphases are, no doubt, a reflection of the collector’s preferences. They stem from a desire to document technological progress and relationships with non-bronze media, two areas in which significant innovations occurred during the Warring States and Sui–Tang periods. Conversely, there seems to be somewhat less of an interest in the ideologically charged diagrams often seen on Han mirrors, their often lengthy inscribed texts, and their complex iconography. Nevertheless, the two chapters on Han mirrors—by Lillian Lan-ying Tseng (this volume, pp. 88–99) and K. E. Brashier (this volume, pp. 100–119)—have an important place in the present book, for the attitudes and ideas they describe continued to prevail during later periods and can in part be traced back to earlier epochs. This is true, in particular, of the nexus between mirror iconography and cosmological beliefs as well as immortality cults. Such a nexus is ably brought out by Tseng in her discussion of mirror O-0226 (see v. 1: PL. 70), which depicts the popular deity known as Queen Mother of the West (Xiwangmu 西王母). More broadly, this nexus is pervasively explicit in the inscriptions occurring on many Han mirrors, which (as already noted above) are the subject of Brashier’s chapter.

In the course of his philological study, Brashier makes an important observation that can also be applied to the analysis of the visual and technical features of mirrors: he points out that in putting together the inscriptions, the scribes did not start *de novo* each time, but manipulated modular units of text. Such practices have their exact parallel in the decision-making processes of mirror designers across all periods on the choice and placement of units of decor.¹⁰ In this book, a case study of such pictorial modularity may be found in Hanmo Zhang’s discussion (this volume, pp. 74–87) of Eastern Han-period (25–220 CE) mirrors representing the story of the hero Wu Zixu 伍子胥; Zhang finds that the narrative elements of the story were arranged and rearranged in different ways depending on spatial context and intended purpose. The various constellations of immortality motifs discussed by Tseng may also be viewed in this light.

Another contribution stressing the religious significance of mirrors and the magical power of their designs is Li Min’s chapter on mirror O-0425 (see v. 1: PL. 110), a splendid specimen of a Tang-period Hanxiang 含象 mirror. In addition to contextualizing its décor in the Taoist cosmology of its period, Li plumbs the historical sources to recount an episode during the Song period in which one Hanxiang mirror was instrumentalized as a symbolic token of dynastic legitimacy at a time of political crisis. This is but one instantiation of the multifarious cultural roles of antique mirrors as heirlooms subsequent to their time of manufacture. In the case of the Hanxiang mirror, the story can be told with the help of texts; sometimes, as in the Liao mirror O-0323

(see v. 1: PLS. 120–124) discussed by Guolong Lai, it is evident from the mirror itself; alternatively, it can be potentially revealed by an analysis of a mirror's archaeological context.

Since the original context of deposition of the mirrors in the Cotsen Collection is unknown, the closest approximation to telling their stories from an archaeological point of view is by drawing analogies with similar specimens that do have secure archaeological provenience. This requires a great deal of searching, because archaeologically provenienced mirrors are typically reported together with various sorts of other materials, often in obscure publications, and little effort has been made so far to collect a corpus systematically. In this book, the chapters by Li Jaang and Colin Mackenzie make great strides toward such a goal. Mackenzie's contribution (this volume, pp. 50–73) does justice to the prominence of Warring States-period mirrors in the collection by establishing the position of each specimen in a fine-tuned stylistic sequence. Additionally, by defining the styles and material characteristics of various local mirror-manufacturing traditions, he is able to provide their approximate geographical contexts. Mackenzie's study is a model of a sophisticated application of the core methods of art-historical analysis, and it makes an important contribution to mirror studies in general. Li Jaang's chapter on the epochs preceding the Warring States is similarly comprehensive and judicious, reaching even farther geographically, albeit based on a much smaller amount of surviving evidence. Providing comparable archaeologically based treatments for the later specimens in the Cotsen Collection would have exceeded the space available in this book, given the exponentially larger amount of evidence surviving from the Han through Tang periods; the chapters by Jaang and Mackenzie stand as a challenge to future scholars to produce work of a similar nature for the subsequent stages in the development of mirrors in China.¹¹

Building on her magisterial synthesis of Chinese mirrors in Volume 1, Suzanne E. Cahill (this volume, pp. 130–159) addresses the main body of the collection—Chinese mirrors from the Warring States through the Tang period—in a new light. Her aim is to explore the persistent commonalities between the decorative motifs seen on mirrors and those of another category of artifacts much more rarely encountered in the archaeological record: textiles. This is a topic central to the interests of Lloyd Cotsen, who has built a vast collection of textiles from all over the world, including China. Cahill substantiates her arguments about parallels between mirror and textile decor largely with examples drawn from the rich holdings of the Cotsen Textiles Collection, many of which are here published for the first time.

As Cahill sensibly points out, many of the observable parallels between mirrors and textiles are an outgrowth of a common aesthetics that influenced the artistic production



FIGURE 2

FIGURE 2: Double-tier mirror in the Sengoku Tadashi collection, Japan. Diameter 10.6 cm. Warring States period, fourth to early third century BCE. From *Zhongguo Qingtongqi Quanji* Bianjiweiyuanhui 1998: pl. 16.

in all media; but some are specific to the mirror–textiles relationship. In particular, it has long been proposed that the ornaments on many Warring States-period mirrors were adapted from the woven and embroidered patterns on textiles. Only fairly recently, however, have archaeological discoveries of textiles made it possible to verify this idea. As a result, today we are in a position to compare the mirror patterns with those on some actual textiles from the period; as Cahill shows, the similarities are indeed extensive.¹²

One particularly exciting outcome from the research on the Cotsen Collection reported on in this book has been the discovery of the likely explanation of these similarities. The decisive piece of evidence was found by David Scott in the course of his technical analysis on one of the two-tier mirrors in the collection (this volume, pp. 211–212). Consisting of a plain reflecting plate and an ornamental back plate (usually featuring openwork decoration, sometimes additionally inlaid with gemstones and/or precious metals), two-tier mirrors are the aesthetically and technically most complex among mirrors of the Warring States period, and they were no doubt the most expensive at the time (FIG. 2). Upon detaching the back plate of mirror O-0360 (see v. 1: PL. 8) from its reflecting plate, Scott recovered traces of silk backings that had originally been inserted between the two plates. When intact, their colorful woven or embroidered designs contrasted with the openwork pattern of the cast-bronze plate, enhancing the dazzling visual effect of the mirror. The textile-like cast ornamentation seen on the reverse sides of the less expensive and much more numerous single-tier mirrors undoubtedly intended, albeit with simpler means, to allude to the appearance of these luxurious double-tier mirrors. Whether it was created by impressing actual textiles into the casting molds of the mirrors remains controversial; Scott (this volume, p. 212) considers this possible, while Mackenzie (this volume, p. 68) expresses skepticism.

An alternative to single-tier mirrors with textile patterns on the reverse side were plain single-tier mirrors with attached ornamented silk backings. The Cotsen Collection possesses one of only two known specimens of this kind, mirror O-0186 (see v. 1: PLS. 51–54), which is the subject of Hanmo Zhang’s chapter in this volume (pp. 74–87) and is also discussed by Scott (pp. 212–230), Mackenzie (p. 61), and Cahill (p. 146). Unfortunately, no comparable specimens with secure archaeological provenience are known, and as Zhang shows, the authenticity of mirror O-0186, or at least of its silk backing, is not beyond doubt. Through an extraordinary feat of detective work, Zhang has managed to discover the likely source of the decoration on its silk backing in an Early Western Han-period lacquer vessel that was excavated in the 1970s, and he has compellingly identified the story represented therein, which, interestingly, has parallels in some well-known mirrors from the Eastern Han period that

postdate the lacquer vessel (and the textile backing of mirror O-0186, if authentic) by at least three centuries. This in turn allows him to draw important inferences concerning the transmission of popular stories over the course of the Han period. Zhang argues convincingly that performative enactments of these stories—e.g., as skits or as dances—account for their wide currency within a largely illiterate population. His article provides a splendid example of how visual evidence, when interpreted with the appropriate methodologies, can contribute substantial insights into those aspects of culture that are traditionally the concern of philologists.

CONNOISSEURIAL STANDARDS

ANOTHER DEFINING CHARACTERISTIC of the Cotsen Collection is its quest for the unusual—for masterworks of arresting visual appeal. Anyone who has perused Volume 1 and compared it with other bronze-mirror catalogues can hardly fail to realize that this criterion took priority over the desire for completeness. Thus, while a number of mirrors in the collection have close parallels elsewhere, the collection does not comprise—or apparently aim to comprise—a specimen of every major mirror type; instead, there is an unusually large number of unique pieces. Indeed, the closest equivalent to Volume 1 among comparable publications is not the catalogue of any one existing collection—museum or private—but the “Bronze Mirrors” volume (v. 16) of the series *Complete Collection of Chinese Bronzes* (hereafter “Bronze Mirrors”),¹³ which assembles a *musée imaginaire* of the most significant Chinese mirrors in existence all over the world. This compilation embodies the standards of quality to which the Cotsen Collection aspires.¹⁴ As the following comparisons will make clear, the Cotsen Collection—save for the already noted near-absence of post-Tang specimens—comes close to giving physical reality to, and sometimes trumps, what “Bronze Mirrors” was able to bring together only on paper.

The structure of the Cotsen Collection may be described as a series of clusters anchored by a dozen or so superstar specimens. Some of the latter are accorded extended discussion in the following chapters; they include the silk-backed mirror O-0186 (see v. 1: PLS. 51–54) from the Warring States period and the Buddhist mirror O-0323 (see v. 1: PLS. 120–124) from the Liao period—neither of which has an equivalent in “Bronze Mirrors”—and the Eastern Han mirror depicting the Queen Mother of the West (O-0226; see v. 1: PL. 70) and the Tang Hanxiang mirror O-0425 (see v. 1: PL. 110), which do have close equivalents in that book.¹⁵ Other equally important

pieces in the collection, however, for various reasons have not been focused upon in the present work. Although the detailed treatment of those others must await a future occasion, I would like at least to acknowledge some of them briefly here. What follows is a listing of some of my personal favorites, including some pieces that present particularly meaningful challenges to future research. Other viewers are free to make different choices.

(1) The Cotsen Collection comprises a stunning six Warring States-period double-tier mirrors (one of them lacquered; see below).¹⁶ The finest among them is mirror O-0360 (see v. 1: PL. 8), which, as discussed above, is also important for having provided the first evidence for the use of silk in Warring States-period two-tier mirrors. Most of the ornamental back plate of this mirror is taken up by an openwork design consisting of eight writhing felines, their bodies not interlaced (as is frequently seen in the art of this period) but juxtaposed, with only their paws touching the bodies of the adjacent animals. They form two concentric tiers, each composed of four felines; the heads of those of the outer tier are positioned at a 45-degree angle from those of the inner tier, the whole composition thus pointing into eight directions, potentially suggesting a cosmological scheme. The openwork composition is framed by a band of geometric motifs inlaid in precious metals. This frame is flat, but the bodies of the openwork felines are unusual for being executed in molded relief. None of the six two-tier mirrors included in “Bronze Mirrors” (FIG. 2)¹⁷ exhibits a similar degree of three-dimensional and technological complexity.

(2) Lacquered mirrors are so rare that there are none included in “Bronze Mirrors,” but the Cotsen Collection comprises two specimens: O-0422 (see v. 1: PL. 50), a round single-tier mirror of as-yet unascertained authenticity,¹⁸ and O-0185 (see v. 1: PLS. 44–45), a square double-tier mirror from the Warring States period that should be included among the superstars of the collection. Its decoration is comparable to that of contemporaneous square double-tier mirrors—including two in the Cotsen Collection (O-0424 [v. 1: PLS. 4–5]; O-0295 [see v. 1: PL. 7]) and three in “Bronze Mirrors”¹⁹—in that the openwork motif consists of two opposed pairs of animals, in this case outward-facing dragons. The lacquer painting, in red on black, accentuates their sinuous bodies. The square frame surrounding the openwork composition is also enhanced by a painted décor, reproducing a geometric pattern that is more commonly seen on bronzes with metal inlay. On the four corners of the frame are small bosses made of a different material, possibly silver.

(3) Virtually without parallel, mirror O-0423 (see v. 1: PL. 11) is a plain bronze mirror with a jade inset. This jade piece—a *bi* 璧 disk with an openwork ornament



FIGURE 3



FIGURE 4

FIGURE 3: Mirror inlaid with jade and glass, allegedly from Jincun, Luoyang (Henan). Harvard University Art Museums (ex Winthrop collection). Diameter 12.2 cm. Warring States period, fourth to early third century BCE. From *Zhongguo Qingtongqi Quanji Bianjiweiyuanhui* 1998: pl. 34.

FIGURE 4: Painted mirror from Hongmiaopo, Xi'an (Shaanxi), excavated in 1963. Xi'an Municipal Museum. Diameter 27.5 cm. Western Han period, second to first century BCE. From *Zhongguo Qingtongqi Quanji Bianjiweiyuanhui* 1998: pl. 44.

in the shape of large clouds—takes the place of the ornamented back plate of a two-tier mirror. To judge by its three-dimensional molded relief and the details of its incised ornamentation, this *bi*, if authentic, would date to the very end of the Warring States period at the earliest, or possibly to Qin or Western Han. The interstices in the openwork are filled with a brownish organic substance, which takes the place of the silk backings on two-tiered mirrors (future testing may verify whether it is an actual textile remnant). In the center of the *bi*, the mirror additionally has a turquoise (or turquoise-colored glass) knob, further singling out this mirror as an item of extravagant luxury. While the bronze part of the mirror is unproblematic in both shape and metallography (see Scott, this volume, p. 231), considerable further art-historical research will be required before it can be decided whether the jade *bi* is genuine. That mirrors could be inlaid with jade and glass is uncontroversial; one comparable piece on record is a famous mirror in the Harvard University Art Museums (ex Winthrop Collection), possibly from the alleged Eastern Zhou royal tombs at Jincun, Luoyang (Henan) 河南洛陽金村, which features two concentric jade rings alternating with a ring and a knob made of magnificent millefiori glass, but its jade components lack openwork decoration (FIG. 3).²⁰

(4) Mirror O-0278 (see v. 1: PLS. 46–49) is an extremely rare instance of a mirror with painted décor. The painted portions form three concentric zones that are framed and separated by narrower unpainted bands. The inner and the outer zones show narrative scenes on red ground, whereas the middle zone, in a highly effective complementary-color contrast, features a floral motif on green. While the décor of the inner zone is not sufficiently preserved to be decipherable, the outer zone features a hunting scene with galloping horses in pursuit of a boar and other animals, as well as standing figures under trees. Whether this alludes to a specific story (in analogy with what Hanmo Zhang argues to be the case in the silk-backed mirror O-0186 [see v. 1: PLS. 51–54]) remains to be elucidated. An extremely similar painted décor may be seen on a Western Han mirror excavated at Hongmiaopo, Xi'an (Shaanxi) 陝西西安紅廟坡,²¹ which notably features the same red-green-red alternation of background colors (FIG. 4). That mirror, however, is of a different type, with the outer zone of the mirror's painted décor bordered by a scalloped edge, contrasting with the straight linear edge in mirror O-0278. Its flatness and mode of spatial division suggest a Warring States-period date for mirror O-0278, but the painting is so close to that of its comparandum from Hongmiaopo that, if authentic, it can date only to the Han period. One may, of course, imagine a scenario in which an undecorated mirror handed down from the Warring States might have been painted in Han times, but one also cannot exclude that



FIGURE 5

the painting on mirror O-0278 was copied from the Hongmiaopo mirror in modern times. Further testing may eventually resolve this issue; for the time being, the jury is still out on this spectacular mirror.

(5) Another highlight is mirror O-0399a (see v. 1: PLS. 64–65, frontispiece), a large Han mirror with an original stand (O-0399b; v. 1: PL. 64) adorned with dragon heads. Of course, it will never be possible to ascertain whether the mirror and the stand actually belonged together in antiquity, but the mirror undeniably fits the stand perfectly. It is, moreover, in a virtually pristine state of preservation. Its design, known in Japan as *uchigyōkamon* 内行花紋, while relatively common from Late Western Han through Eastern Han times (cf. FIG. 5),²² has deep cosmological significance. At the center, a four-petal lotus, a cosmic symbol of long standing in China,²³ provides a basic cardinal orientation. Surrounding it are the revolving Nine Skies: the ring-shaped central sky and a ring of eight scallops representing segments of the others. The thin-line motifs in the interstices between the scallops, as well as (probably) the eight whorls framed by elongated triangles in the outer zone beyond the scalloped band, stand for the system of pillars and ropes linking the Nine Skies to Earth and to one another.²⁴

(6) Mirror O-0815 (see v. 1: PL. 79) is a highly enigmatic piece. The mirror itself, to judge by its shape, may be as early as Warring States in date, but the pictorial scene of pudgy naked boys playing must be considerably later: such infant iconography

FIGURE 5: Mirror with the inscription “Forever to the benefit of sons and grandsons.” Zhejiang Provincial Museum (exact provenience unknown). Diameter 13.8 cm. Eastern Han period, ca. first century CE. From Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pl. 72.



FIGURE 6

is uncommon before the Song period but became firmly established as an auspicious motif thereafter.²⁵ A Song or later date might also be consistent with David Scott's finding (this volume, p. 216) that the figures were made of a ground-up ceramic or mineral paste—such a use of materials seems out of the question in earlier epochs and may be problematic even for the Song. As no comparable specimen is known, it is difficult to be certain. The wood fragments adhering to the mirror surface presumably belong to the coffin in which the mirror had been deposited; if the mirror were inauthentic, they would have to be regarded as an especially clever attempt to lend it an “archaeological” air.

(7) Perhaps the most extraordinary specimen in the collection is mirror O-0832 (see v. 1: PL. 80), which is inlaid with pieces of colored glass. Its main design motif shows the animals of the Four Directions—common from Han through Tang times (FIG. 6)—which are executed in molded relief and exceptionally elegant and lively in their shape. The glass inlay occurs on the knob, on an eight-petal flower surrounding the knob, and on an outer decorative band consisting of sixteen rectangular fields with a round boss in each one. The serrated band that surrounds this band is frequently seen in Eastern Han and Wei–Jin-period mirrors, and it is not out of the question that this mirror could date that early; more likely, however, it dates to the Sui dynasty

or slightly before.²⁶ David Scott, who has subjected this mirror to detailed scientific investigation, suggests (this volume, pp. 213–215) that the glass may have been imported, presumably by way of Silk Routes trade. One might speculate that a Chinese mirror maker was recycling pieces of glass vessels that had been broken in transport.

When this mirror was acquired in 2006,²⁷ it was without any known parallel, but recently, one other unprovenienced mirror with glass inlay has been published (FIG. 7); it is in the Nezu Art Museum in Tokyo (ex Murakami collection).²⁸ Lacking relieved decoration, it features a simpler ornamentation scheme than mirror O-0832, with two main concentric tiers comprising, respectively, four and twelve framed compartments that were once filled with colored glass. Hirokawa Mamoru has speculated that these two tiers may have once contained, underneath the glass covering, painted representations of the animals of the Four Directions and the Twelve Animals of the Chinese Zodiac, comparable to their relieved depictions on the Sui-period mirror O-0774 (see v. 1: PL. 81; cf. also FIG. 6).²⁹ No painting is, however, in evidence on mirror O-0832, which is far better preserved than its Nezu comparandum. The similarity in ornamentation scheme to mirrors like mirror O-0774 has led Hirokawa to suggest, very tentatively, the possibility of a Sui to Early Tang date for the Nezu mirror, which would be compatible with the dating range suggested above for mirror O-0832. If genuine, the two mirrors may conceivably be testimonies of one, presumably short-lived, episode of experimentation at a single workshop. But in the complete absence of comparable provenienced material, one cannot at present exclude the possibility that they are both products of an especially skillful and imaginative modern forger.

(8) Also without parallel is mirror O-0865 (see v. 1: PLS. 107–108), a small mirror that is completely concealed by a gilded silver encasement. The ornamental plate is adorned with an inlaid design of jewels, pearls, and glass, forming a flower surrounded by a band of triangles. At the present state of scholarship, the suggested Tang date is little more than a guess, based on vague similarities between the granulated surface treatment and Tang silverwork.

(9) Among Tang mirrors, specimens inlaid with mother-of-pearl (*luodian* 螺鈿) constitute a rare and especially precious type with which the collection is well supplied. The three examples in the collection, the best of which is mirror O-0649 (see v. 1: PLS. 105–106), with its representation of a dance performance, are discussed by Charlotte Horlyck (this volume, pp. 160–166). Four still grander and more elaborate specimens are included in “Bronze Mirrors.”³⁰ A related but even rarer mirror type is represented by mirror O-0879 (see v. 1: PL. 109), which features an elaborate ornament of birds among vines cut out in openwork from a thin silver sheet in what



FIGURE 7

FIGURE 7: Glass-inlaid mirror in the Nezu Museum of Art, Tokyo. Diameter 18.3 cm. Northern Dynasties to Early Tang, sixth to seventh century CE (?). From Nezu Bijutsukan 2011: 34, no. 42.



FIGURE 8

FIGURE 8: Mirror inlaid in the pingtuo technique, excavated in Xi'an (Shaanxi). Shaanxi Museum of History. Diameter 22.7 cm. Tang dynasty, seventh to eighth century CE. From *Zhongguo Qingtongqi Quanji Bianjiweiyuanhui* 1998: pl. 112.



FIGURE 9

FIGURE 9: Mirror with embossed decoration on inlaid gold-foil sheet. Sengoku Tadashi collection, Japan. Diameter 21.2 cm. Tang dynasty, eighth to ninth century CE. From *Zhongguo Qingtongqi Quanji Bianjiweiyuanhui* 1998: pl. 119.



FIGURE 10

FIGURE 10: Mirror decorated with the Five Marchmounts. Sengoku Tadashi collection, Japan. Diameter 17.7 cm. Tang dynasty, ca. eighth century CE. From *Zhongguo Qingtongqi Quanji Bianjiweiyuanhui* 1998: pl. 172.

is known as the *pingtuo* 平脫 technique. This ornament adheres to the back of an otherwise plain mirror with the help of an organic substance, probably a kind of lacquer, which is now black but may have been of a different color originally. “Bronze Mirrors” includes several *pingtuo* mirrors in which the inlaid ornament is composed of several units that sometimes consist of several different materials (FIG. 8);³¹ mirror O-0879 is admittedly less complex, but highly effective and, if authentic, may rightfully claim a place among these masterpieces.

(10) Another exceptionally precious type of Tang mirror features a thin, embossed sheet of gold or gilded silver inserted on the back of a plain bronze mirror. “Bronze Mirrors” depicts eleven such pieces (FIG. 9),³² and the Cotsen Collection has three, not counting mirror O-0308 (see v. 1: PL. 91), for which David Scott’s technical investigation (this volume, p. 213) has shown that the illusion of an inserted sheet is produced by silvering the decorated back surface of a solid bronze mirror. Mirror O-0426 (see v. 1: PL. 89) is the best of the three. Surrounding a knob adorned with a four-petal flower motif, the main zone of its gilded ornamental sheet features a four-part design of interlaced lotus vines, with a dancing phoenix on a lotus flower in the center of each unit. The eight-lobed outer zone features elegantly drawn clouds alternating with flying birds. Even though this is a new, unmistakably Tang motif with probably quite little adherent cosmological baggage, the use and disposition of the lotus alludes to iconographical continuities with earlier mirror types.

(11) Aside from the Hanxiang mirror O-0425 (see v. 1: PL. 110) discussed by Li Min (this volume, pp. 170–183), the Cotsen Collection comprises two more pristinely preserved Tang-dynasty mirrors with mountain décor linked to Taoist cosmological beliefs: a round one, mirror O-0305 (see v. 1: PLS. 111–112), which is the superstar of this group, and a smaller square one, mirror O-0135 (see v. 1: PL. 113). The decoration is more or less the same on both, showing the Five Peaks (the central peak doubling as the mirror’s knob), enhanced with lively detail of vegetation and figures of deer and immortals; phoenixes are flying among the clouds overhead. This central motif is surrounded by four configurations that seem to depict distant lands (on mirror O-0305) or large clouds (on mirror O-0135). “Bronze Mirrors” depicts an octagonal mirror with a very similar design in a private collection in Japan (FIG. 10); here the motif surrounding the Four Peaks is clearly water, probably the Four Seas.³³

TECHNICAL CONCERNS

THE PLETHORA OF UNIQUE SPECIMENS in the Cotsen Collection is a testimony to the collector’s courage, for, as the preceding discussion has already intimated, their acquisition entails an enhanced risk of falling victim to forgery. With the explosion of private antique collecting in China during recent years, the problem of forgery has taken on enormous proportions; it is particularly severe in the case of mirrors, both because mirrors are relatively easy to forge and because, on account of their smallness and relative affordability, they are particularly popular as collectibles. Scholars and museum curators have been hesitant to publish detailed connoisseurial studies and technical analyses of mirrors for fear that this would only help the forgers to improve their skills. But one aim of the present publication is precisely to improve the connoisseurial standards in mirror studies. In the spirit of treating the Cotsen mirrors as a study collection, the present publication therefore breaks with the usual practice of silently weeding out dubious pieces as “mistakes” and faces the problem of forgery head-on. Forged and questionable specimens are deliberately juxtaposed with authentic ones. As a case in point, two obviously inauthentic mirrors are published in Volume 1: the small mirror O-0804 (see v. 1: PL. 132), which imitates the appearance of Early Bronze Age specimens, and the square mirror O-0322 (see v. 1: PL. 131), brightly painted in a vaguely Tang style. The pigment, when analyzed, was found to contain modern soap; David Scott (this volume, p. 213) considers it possible that the mirror itself is genuine.

Following a practice established in some comparable earlier publications,³⁴ extensive technical studies were conducted on the mirrors in the collection in order to determine how they were made and to distinguish forgeries from originals. The analysis covered such aspects as metallic composition, metallographic structure, inlay, corrosion, and patina, as well as any observable traces of the manufacturing process and use-life of the mirrors. The results are extensively reported on by David Scott (this volume, pp. 198–233). Unsurprisingly, in the course of this research, several additional mirrors in the Cotsen Collection were determined to be recent forgeries: the Warring States-style mirrors O-0421 (see v. 1: PL. 15), O-0129 (see v. 1: PL. 28), O-0096 (see v. 1: PL. 31), O-0127 (see v. 1: PL. 32), and O-0398 (see v. 1: PLS. 33–34); the Eastern Han-style mirror O-0744 (see v. 1: PL. 78); the Tang-style mirror O-0874 (see v. 1: PLS. 98–99); and the Koryō-style mirror O-0291 (see v. 1: PL. 127). As noted, moreover, lingering doubts continue to beset several pieces that, if genuine, would rank among the supreme highlights of the collection.

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There is, as well, a gray zone between authenticity and forgery, represented by mirrors that were made during historical times as archaicizing recreations of earlier mirror types without any intention to defraud their buyers or users. The Eastern Han-style mirror O-0233 (see v. 1: PLS. 76–77) may be such an example; probably dating to the Song dynasty or later, it is a testimony to an abiding antiquarian interest in early mirror types. Another example is the aforementioned Japanese-made mirror O-0292 (see v. 1: PLS. 129–130), which, though Tang-like in its overall appearance, does not actually copy any known Tang mirror type: it is distinctive in the details of its décor as well as its patina. An inscription on the reflecting side (which its painted-on patina renders quite incapable of reflecting—the object is obviously not intended to fulfill the actual function of a mirror) reveals the rather prosaic occasion for its manufacture: the anniversary of a local telegraph company in the island of Kyūshū 九州. The identity of its maker Junmin 純民 (no family name is given) needs further research. Bronze mirrors continue to be made in Japan today by highly skilled artisans, some of whom have been designated as Living National Treasures. Future investigations into the manufacturing technology of Chinese mirrors should endeavor to liaise with this living tradition and to benefit from its many centuries of accumulated expertise.

Gratifyingly, the vast majority of the mirrors in the Cotsen Collection have stood up—at least so far—to technical and art-historical scrutiny. More particularly, one may presently accept as originals—albeit with varying levels of confidence—most of the unique pieces that constitute the core of the collection, and that make it, arguably, one of the most significant collections of Chinese mirrors ever assembled. One hopes that, in their future home at the Shanghai Museum, the Cotsen mirrors will continue to serve as a focus for new and exciting research.

NOTES

1 Guoli Gugong Bowuyuan 1971; 1986; Guo Yuhai 1996; He Lin 2008; Chen Peifen 1987; Shanghai Bowuguan 2005; Sen’oku Hakkokan 1982, 1990, 2006; Nezu Bijutsukan 2011.

2 E.g., Nakano (ed.) 1994; Chou 2000; Guoli Lishi Bowuguan 2001; Zhang Cuo 2008; Nezu Bijutsukan 2011. The Graham Collection documented by Nakano and his collaborators has since been given to the Honolulu Academy of Arts; the Carter Collection catalogued by Chou has entered the Cleveland Museum of Art; the Murakami collection published by the Nezu Art Museum has been donated to that museum; the fate of the Wellington Wang Collection published by the National Museum of History in Taipei is unknown; and the mirrors published by Zhang Cuo are still with the collector.

3 Compare, e.g., the constellation of studies in Nakano (ed.) 1994, as well as in Brown and Chou (ed.) 2005.

4 For this archaeological background, see Falkenhausen 2006.

5 The evidence for this was well presented during the Symposium on East Asian mirrors at UCLA, November 21–22, 2009, by Professor Mimi Yiengpruksawan, to whose monograph on the topic we are eagerly looking forward. Chinese instances of this phenomenon are documented in Wang Shilun 2006.

6 Outside the present-day boundaries of China, Han mirrors have been found, e.g., in the following locations: Noyon Uul (a.k.a. Noin Ula), Mongolia (Trever 1932: pl. 26.3); Arkhangai aimag, Mongolia (Lai 2006); Altyn-assar and Kos 2 on the Syr Darya, Uzbekistan (Levina 1994: 63); Tillya Tepe in northern Afghanistan (Sarianidi 1985: 235, fig. 145); Munchak-tepe, Uzbekistan (Seipel 1996: no. 172); Western Ferghana Valley, Uzbekistan (Litvinskiy 1978: 98–105); Kokepe near Samarkand, Uzbekistan (Khazanov et al. 2001: 49 fig. 10.14, 51 fig. 11.2); North Caucasus

region, Russia (Guščina and Zaseckaya 1994: 48, pl. 12, no. 117); Vinogradnyi, Ukraine (Musée Cernuschi 2001: 144, no. 134); Taganrog, Ukraine (Musée Cernuschi 2001: 231, no. 248). For mirrors found in the European part of the former Soviet Union, see also Guguev et al. 1991; Melyukova 1989: 188, pl. 80, 84; Abbaye de Daoulas 1995, no. 115.

7 On the overall cultural dynamics, see Falkenhausen 2010.

8 For preliminary orientations, see Saitō 1982: 159–161 (Yayoi period), 210–216 (Kofun period). There is no adequate treatment of this topic in any Western language; Okamura 2011 provides an excellent summary of the voluminous and high-quality research done to-date.

9 On the importance of modular techniques in Chinese art generally, see Ledderose 2000, a book that has informed several of the chapters in the present volume.

10 For Liao mirrors—another group of mirrors for which the database is relatively small and thus manageable—a comprehensive archaeological treatment is provided by Liu Shujuan 1997; curiously, however, Liu’s typology does not include mirrors with lotus décor such as the Liao mirror O-0323 in the Cotsen Collection (see v. 1: PLS. 120–124); but that specimen fits more or less in her Middle Liao-period section under the category of “mirrors with Buddhist and Taoist décor.”

11 The most important cache of Warring States-period textiles so far found comes from the Chu 楚 Tomb 1 at Mashan, Jiangling (Hubei) 湖北江陵馬山; see Hubei Sheng Jingzhou Diyu Bowuguan 1985.

12 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998.

13 In addition to the instances mentioned in nn. 14 and 15, cases of virtual identity are between the Qin mirror O-0460 (see v. 1: PLS. 55–56) and a mirror from Shuihudi, Yunmeng (Hubei) in Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pl. 35; the Tang mirror O-0743 (see v. 1: PL. 118) and Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pls. 146–148; the Tang mirror O-0782 (see v. 1: PL. 114) and Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pl. 162 (in these two cases, the decoration is extremely similar, while the overall shape of the comparanda is different). This list could easily be expanded.

14 For a series of parallels to mirror O-0226, see Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pls. 76–87; pls. 79, 81, and 87 are particularly close. As to mirror O-0425, an extremely similar, albeit less pristinely preserved, Hanxiang mirror from Cijian, Luoyang (Henan) 洛陽磁澗 is included in Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pl. 171.

15 One of these seven pieces, mirror O-0424 (see v. 1: PLS. 4–5), has exactly the same décor as a mirror in a private collection in Japan depicted in Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pl. 17; it is, however, apparently not the same piece.

16 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: pls. 15–19, 37.

17 While David Scott’s analysis (this volume, p. 213) has ascertained that the material composition of the paint is consistent with what was available during the Warring States period, the style of the painted decoration arouses suspicion—it appears to attach flourishes seen on Chu lacquered vessels to dragon shapes copied from Han-period jades. This is one instance where an object’s very uniqueness stands in the way of easy authentication.

18 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PLS. 17–19.

19 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PL. 34.

20 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PL. 44.

21 A mirror in the Zhejiang Provincial Museum featuring a somewhat simpler version of this decoration scheme is in Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PL. 72.

22 See Hayashi 1987; countering a common misconception, Hayashi shows that the lotus was in use as an important artistic symbol in China long before it became associated with Buddhism.

23 This explanation follows Sofukawa 1988: 41–44.

24 See the essays in Wicks (ed.) 2002, in particular Bartholomew 2002.

25 Compare a Northern Dynasties specimen with similar Four Animals decor found at Pangjiagou, Luoyang (Henan) 河南洛陽龐家溝, depicted in Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PL. 100–101.

26 This mirror was first presented in spring 2006 at Asiaweek in New York; see Eskenazi 2006.

27 Nezu Bijutsukan 2011: 34, no. 42.

28 Hirokawa 2011: 70.

29 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PLS. 114–117.

30 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PLS. 110–113, 129.

31 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PLS. 118–128.

32 Zhongguo Qingtongqi Quanji Bianjiweiyuanhui 1998: PL. 172.

33 Christman 2000; Chase et al. 1995.

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Long-Distance Interactions as Reflected in the Earliest Chinese Bronze Mirrors

BRONZE MIRRORS were long an integral part of Chinese culture. They first flourished in the Warring States period (CA. 450–221 BCE) and for nearly two thousand years remained the most popular means for viewing one’s reflection. They became an indispensable part of the daily life of Chinese from virtually all stations of life, from emperors to the common people; and they were invested with various special meanings that made them essential components of important ceremonies. But recent archaeological discoveries show that bronze mirrors were by no means first invented in China. Where did they originate? How did they become part of the Chinese tradition? What was their role in people’s lives before their florescence in the Warring States period? What can the mechanisms by which they became acculturated reveal about broader themes in the interactions between Chinese civilization and the world beyond? These questions guide this chapter. In a departure from hitherto dominant trends in the scholarship on early Chinese bronze mirrors¹—which has been constrained by the tendency to think of the ancient world in terms of modern national boundaries and has been confined to reconstructing the chronology and analyzing the style of mirrors—I would like to shift the focus to a much broader region beyond the borders of modern China and to the social meaning of China’s earliest bronze mirrors, for it is not the archaeological object itself that evolves, but the people and the society behind it.

Probing into the earliest stages in the development of bronze mirrors can contribute to illuminating the origins and, perhaps, the nature of the Chinese tradition. In early bronze mirrors, we see the reflection of interactions, directly or indirectly, of the

Central Plains—long regarded as the cradle of Chinese civilization—with the outside world: the northwest (Gansu, Qinghai, and Xinjiang), the “Northern Zone,” and even the faraway Eurasian Steppe. Mirrors are, indeed, an important indicator of the remarkable extent to which peoples of highly distinct traditions and lifeways interacted even in the absence of advanced means of communication, and they can illustrate how Chinese culture was shaped by long-distance interactions. Once we understand the archaeological record of the relationships among these different regions during different periods, we can hope to resolve, or at least advance significantly, the debate over the origin of bronze mirrors in Chinese culture, which has long preoccupied scholars.²

Additionally, among other things, archaeology can reveal the gender, identity, and social status of the mirror users; at different levels of analysis, it can thus relate these objects to their individual owners and to society at large. In arranging the material chronologically, it can, moreover, uncover relationships between the development of mirrors and social change.

THE FIRST CHINESE BRONZE MIRRORS AND THE OPENING TO THE EURASIAN STEPPE: EARLY SECOND MILLENNIUM BCE

THE EARLIEST BRONZE MIRRORS FOUND IN WHAT IS TODAY CHINA belong to the Qijia 齐家 culture (CA. 2200–1700 BCE). The distribution area of the Qijia culture encompassed parts of Gansu province, Qinghai, and Inner Mongolia. The Qijia culture is

particularly significant because of its location—on the pathway between China and the Eurasian Steppe—and because of its pivotal role in the development of metallurgy in early China: it has provided the earliest contexts so far known within the boundaries of what is now China for sustained, as opposed to incidental, usage of metal objects. It significantly predates metallurgy in the Erlitou culture (CA. 1750–1550 BCE) on the Central Plains, the heart of Chinese civilization.³ So far, more than one hundred Qijia copper or bronze objects have been found,⁴ including two mirrors.

The first of these mirrors, which has an undecorated back, was found in 1975 in a tomb at the Qijiaping cemetery, in Guanghe (Gansu) 甘肃广河齐家坪. The cemetery is located on a high terrace near the confluence of two rivers. Most Qijia sites are in hilly terrain, where communication is facilitated by rivers and valleys. Thus, the location of Qijiaping endowed it with great potential for communication. This may partly explain why metal objects, jades, and other elite objects have been found there. The mirror is 6 cm in diameter, with a loop on the non-reflecting side. Unfortunately, no formal report has been published on this find, and no image or detailed information about the tomb has been released.⁵ The second specimen was excavated in 1977 at the cemetery of Gamatai, Guinan (Qinghai) 青海贵南县尕马台. Measuring 8.9 cm in diameter, it was found on the chest of the occupant of a tomb.⁶ The loop at the center on the reverse side was broken, and two holes were drilled at the edge of the mirror. From traces of cords found in the holes, one may infer that the holes were added to attach the mirror by means of cords after the loop was broken. The non-reflecting surface was cast in the pattern of seven triangles filled with parallel lines, which are arranged side by side within two circles, leaving the undecorated area looking vaguely like a seven-pointed star (FIG. 1).⁷ Mirror O-0803 in the Cotsen Collection (see v. 1: PL. 2) has a similar design. The mirror’s style suggests some connection to the Qijia culture area, but we cannot be certain because we have no information on its provenance.

Past research has classified the Qijia culture into three phases: the two tombs where the mirrors were found fall into the late phase, around 1800–1700 BCE.⁸ Later Chinese bronze mirrors inherited and perpetuated the characteristics of the Qijia mirrors: they are circular and have a loop at the center of the back surface for attaching cords as a handling device. Past scholarship has therefore pointed to the Qijia mirrors as the origin of Chinese bronze



FIGURE 1

mirrors.⁹ However, although the Qijia mirrors are the earliest bronze mirrors in the territory of modern China and established the style that became a tradition in Chinese bronze mirrors, these sophisticated mirrors did not just show up in northwest China all of a sudden. They are too mature to be the very first-ever objects of their type. First, the mirrors are cast of an alloy of tin and copper,¹⁰ exhibiting an advanced metallurgical technology that is unlikely to have suddenly arisen without any antecedent stages of metal alloying (see SCOTT, THIS VOLUME). Second, the design and style of the Qijia bronze mirrors are consistent and sophisticated; we are missing any evidence of the experimentation and modification that must have preceded their consolidation. This suggests that there must have been a primitive prototype that predated the Qijia mirrors; but from where?

In my opinion, the missing prototype for Qijia bronze and copper objects cannot be found in China proper. Of course, there are earlier Neolithic sites in China at which some small copper or bronze objects were found, and some scholars have argued that these represent the local origin of metallurgy in China.¹¹ However, the sites are widely scattered, the archaeological contexts are problematic, and the number of objects is too small to draw any firm conclusions. Given their small number, their small size, and their portability, rather than ascribing these objects to local production, it is more reasonable to conclude, at least tentatively, that they may have been brought in from the outside.¹²

FIGURE 1:
Mirror from Tomb 25, Gamatai
cemetery, Guinan (Qinghai) 青海
贵南县尕马台, late Qijia culture
(CA. 1800–1700 BCE). Diameter
8.9 cm. After Wenwu
Bianjiweiyuanhui 1979: 148;
Zhongguo Qingtongqi Quanji
Bianjiweiyuanhui 1998: fig. 1.

But if we look beyond the boundaries of modern China, the puzzle of the origin of bronze mirrors in China can be solved. It is generally known to scholars of Eurasian metallurgy that in the Eurasian Steppe, copper and bronze were utilized and cast much earlier than in the Qijia culture; the technological trajectory leading from the use of pure copper to tin bronze was completed in the Steppe by the time the Qijia culture arose.¹³ Even in China, although most scholars still insist on the local origin of metallurgy, this is beginning to be acknowledged.¹⁴

Furthermore, there are great similarities between the Qijia metal objects and those of many cultures on the Steppe, including the Seima-Turbino, the Okunevo, and the Andronovo.¹⁵ The main categories of bronze and copper objects from the Qijia culture, such as chisels, knives, axes, rings, can all be traced westward to the Steppe, where the prototypes of these objects are to be found and where they underwent systematic development. But parallels of the loop-handle Qijia mirrors are absent from the Steppe. Thus, where is the home of Qijia mirrors to be found?

To answer this question, we need to look at a very broad area and start from the very beginning of the manufacture of bronze mirrors in Central and East Asia, because the loop-handle type of mirror represents a stage in the development of bronze mirrors as a whole.

The very first bronze mirrors—in the form of a disk—were found in southern Turkmenistan in Namazga and date to the Namazga III period (3500–3000 BCE). Around the beginning of second millennium BCE, disk-shaped mirrors also appeared in the Zaman-Baba cemetery (Uzbekistan), a site of Steppe people.¹⁶ The earliest mirror of the loop-handle disk-shaped type was discovered in the graves at Muminabad (Uzbekistan), not far from the Zaman-Baba cemetery. This mirror is regarded as a development of disk-shaped mirrors. Thus, in Central Asia, we can observe the systematic development of bronze mirrors from the disk-shape to the loop-handle type. Although the Zaman-Baba cemetery is in the oasis belt of Uzbekistan, its burial rites showed great similarities with those of the Alakul complex in southern Kazakhstan,¹⁷ which is in the early group of the Andronovo horizon (fl. ca. 1800–1200 BCE).¹⁸ This thus ties the mirror with the people of the Steppe.¹⁹ In view of the similarities between the Muminabad cemetery and the Alakul complex, which dates to 1900–1800 BCE,²⁰ the archaeological context for the first loop-handle mirror

should be no later than this period, which is slightly earlier than the late phase of the Qijia culture. This is right in the middle of the so-called classic phase of the Bactria-Margiana Archaeological Complex (BMAC) (ca. 2000–1800 BCE), when contact between the BMAC and the Steppe became highly visible. Such contact is illustrated, for example, by the widespread diffusion in the BMAC of Steppe pottery, which perhaps may be traced to the first Alakul-Andronovo miners in the Zeravshan Valley.²¹

When mirrors spread northward in the BMAC, they started to become entangled with the expansion of Andronovo people from the Steppe. Some Andronovo people migrated to the BMAC core area, where they became co-resident with the natives; others simultaneously inhabited a vast expanse of the Steppe, from the Caspian Sea to western Siberia.²² When mirrors appeared in the Qijia culture, they were found together with objects that originated in the Steppe. Furthermore, the pattern of successive triangles filled with parallel lines cast on the Gamatai mirror is a common motif on artifacts associated with the Steppe. We can observe the same pattern on the bronze axes,²³ bronze knife-handles,²⁴ bronze disks, and pottery jars on the Steppe, all of which may indicate the aesthetic preferences of the Steppe inhabitants during this time.

Based on evidence that bronze mirrors originated in the BMAC and that there were extensive interactions between the Steppe people and the BMAC as well as the Qijia culture, which are at opposite ends of the Steppe, one can safely conclude that the loop-handle mirrors in the Qijia culture originated in Central Asia and were transported to China by the Steppe people. The small number of bronze mirrors, compared with other metal objects found in the Qijia culture that are directly from the Steppe, might be ascribed to the greater distance of the mirrors' homeland. Related to all this is the fact that coexisting with bronze mirrors in the BMAC were other luxuries, such as lapis lazuli,²⁵ which were spread to other civilizations, such as those in Mesopotamia and India in the third millennium BCE, but occurred in China only after the first century BCE.²⁶ That mirrors appeared in China much earlier than other luxuries may be the result of the Steppe people acting not only as intermediaries between the BMAC and the Qijia culture, but also as a filter, transporting only objects that they favored (or that were favored by the people in whose hands they ultimately ended up).²⁷

Based on the observation that loop-handle mirrors as well as bronze pins with an image of humans found in the Qijia culture (e.g., at Gamatai) were absent from the Steppe, some scholars have concluded that these two types of objects were local innovations of the Qijia culture.²⁸ However, if we look farther into Central Asia, we find both loop-handle bronze mirrors and pins with human-head images, together with their prototypes, in the BMAC.²⁹ This further supports the notion that the origin of Qijia mirrors can be traced to the BMAC.

Occasional interactions between the Gansu Corridor—the center of the Qijia culture—and the Steppe began no later than the third millennium BCE.³⁰ A copper knife identical in style with specimens found in the Steppe was excavated in a house of the Majiayao 馬家窯 culture at the site of Linjia, Dongxiang (Gansu) 甘肅東鄉林家. Other objects from the same house have been radiocarbon-dated to about 3000 BCE.³¹ Sixteen shells of the *Mauritia arabica* (“Arabian cowrie”) were also found at contemporaneous Majiayao sites.³² Researchers have pointed out that they may have come from the Indus Valley through the BMAC and then across the Steppe, via a prehistoric predecessor of the later Silk Route.³³ The earliest wheat and mace heads, originating in the Near East and carried eastward along the Steppe, also made their first appearance in the Gansu Corridor at this time.³⁴

The expansion of the Steppe cultures exerted a great influence on Qijia culture, marked by a burst in the incidence of metal objects from the Steppe, the appearance of horses,³⁵ and a sharp rise in the number of shells.³⁶ And it is in this period that, concomitant with interactions between the Qijia culture and the Erlitou culture, metallurgy appeared in Erlitou, the capital of the first Chinese state. This laid the foundation for the later development of the Chinese bronze tradition.³⁷

But what route connected the Qijia culture with the Steppe? If we map the sites of the earliest exogenous objects mentioned above, from the Majiayao culture to the early Qijia culture, it is obvious that all of them originated in the eastern part of Gansu, to the east of the source of the Ejin River (Heishui 黑水). Based on the distribution of the Seima-Turbino culture in Siberia, Louisa Fitzgerald-Huber pointed out a possible route to the Qijia culture area: along the Altai Mountains in Mongolia, then southward along the Ejin River, and into the Gansu Corridor.³⁸ Heretofore

this supposition has not received sufficient scholarly attention. In view of the distribution of early Qijia sites along the rivers to the east of the Ejin, this route can explain why all the earliest Steppe objects appeared there, east of the Ejin. The Ejin River, the longest north–south waterway in the northwest, originates in the middle of the Gansu Corridor and extends almost into the Eurasian Steppe. It ends in Lake Juyan 居延海—now dry, but until recently well watered—the biggest body of water in the region and a place obviously of great significance to the herders of the Steppe.³⁹ In ancient times, rivers, of course, were especially important arteries of communication. It is possible that the Steppe people communicated with people in Gansu via the Ejin River, starting from Lake Juyan. This speculation is supported by the fact that contemporaneous exogenous archaeological discoveries in Xinjiang and western Gansu, which are no earlier than 2000 BCE, are later than those centered to the east of the Ejin River or near its source, the Qilian Mountains 祁連山, not far from what is today the city of Zhangye 張掖. Finally, even the earliest discoveries in Xinjiang and western Gansu, dating to the early second millennium BCE, are too sparse to substantiate a link to the Steppe, despite the extensive archaeological work done there.⁴⁰

By this time, the Steppe had become a bridge for communication between Central Asia and the Gansu Corridor.⁴¹ In later eras also, it remained an avenue for cultural transmission between China and the west.

Because of the lack of detailed information about the Qijia tombs where bronze mirrors were found, we cannot gain more than a vague understanding of the relationship between the tomb occupants and mirrors. In the BMAC, bronze mirrors were found in the tombs of both men and women. However, according to what we have learned from other cemeteries of the Qijia culture, an association of bronze mirrors with females may not be valid for the Qijia culture. Furthermore, the burial of metal objects in tombs was not necessarily connected with wealth. In fact, wealth might be more consistently expressed by the number of jades and animal bones buried in the tombs. Metal objects, by contrast, sometimes occur even in small tombs. It is possible that the burial of bronze mirrors followed the same logic: that is, their presence may not necessarily indicate wealth.

AFTER THE QIJIA CULTURE: THE EXPANSION OF THE DISTRIBUTION OF BRONZE MIRRORS IN THE NORTHWEST

NORTHWEST CHINA CONTINUED TO SERVE as a pathway between East and West for a very long time, and bronze mirrors, originally from Central Asia, came to be used in the northwest from around the second millennium BCE—that is, after the time of the Qijia mirrors. These later mirrors are far more numerous than Qijia mirrors but they exhibit strong similarities to their predecessors. As new archaeological cultures took shape, the distribution of bronze mirrors expanded, in conjunction with continued interactions with the Steppe.

Starting slightly later than the Qijia culture, but mostly overlapping in time with it, was the Siba culture 四壩 (CA. 1950–1550 BCE), which was distributed mainly in the western Gansu Corridor, but also farther to the west, as far as the Hami region of eastern Xinjiang, adjacent to the Gansu Corridor.

Mirrors have been found in Siba sites in the western portion of the Gansu Corridor, but because most of the excavations have not yet been published, we have no more than a vague idea of them. According to the scant information so far released, the mirrors here have a plain, undecorated back.⁴²

Providing crucial archaeological testimony to the Siba presence in the Hami region is the important cemetery of Tianshanbeilu, Hami (Xinjiang) 新疆哈密天山北路. This cemetery, comprising more than 700 tombs dating from 2000 to 1500 BCE, is one of the earliest archeological sites in northern Xinjiang.⁴³ Although a formal report on this site has not yet been published, some information has been revealed, including images of five bronze mirrors. One is decorated with quadrants of lines radiating outward. The second has a circle of short lines and several dots around the loop. The third is decorated with a deer at the top of the mirror, which may suggest that it belongs to a later period.⁴⁴ The other two mirrors have a plain back. There may be even more mirrors from this cemetery.⁴⁵ Past scholarship has classified this cemetery into four phases. The plain-back mirrors found there fall into the third phase (CA. 1700–1600 BCE) and the mirrors with decorations into the fourth phase (CA. 1600–1500 BCE).⁴⁶ The archaeological context of the Tianshanbeilu mirrors helps to date other mirrors from the northwest that lack such an archaeological context.



FIGURE 2

In the eastern part of the northwest, three decorated bronze mirrors have been discovered from the early Kayue 卡約 culture (CA. 1600–600 BCE),⁴⁷ a local offspring of the Qijia culture distributed along the Huang River 湟水 in present-day Qinghai province 青海. One of them contains concentric circles filled with short radial lines. The second is decorated with several circles.⁴⁸ The third has a similar decoration.⁴⁹ Based on the similarities between these mirrors and the decorated mirrors from the Tianshanbeilu cemetery, they should date to 1600–1500 BCE. Another decorated mirror in this region was found at Linxia (Gansu) 甘肅臨夏. The decoration on the non-reflective side consists of two concentric bands filled by triangles, with the areas between the triangles filled with parallel raised lines (FIG. 2), similar to the motif on the Gamatai mirror. Based on its more advanced technology, the Linxia mirror should be dated to the Kayue culture.⁵⁰ Its date would thus be contemporaneous with the decorated mirrors mentioned immediately above.

The main characteristic of the decorations on mirrors of the northwest is the prevalence of geometric patterns, including circles and lines. But after the Siba culture and the early Kayue culture, bronze mirrors with geometric patterns disappeared from this part of China.

Metal objects from the Siba culture—including awls, pins, axes, knives, earrings, bracelets, and so on—are similar to those of the Qijia culture.⁵¹ They also demonstrate a strong typological

and stylistic connection with the Eurasian Steppe.⁵² Furthermore, bronze mace heads in the form of four rams' heads found in Siba sites, while not seen in the Qijia culture, provide evidence of a connection with the BMAC and even the ancient Near East.⁵³ Arsenical copper, which was widely used in the Siba culture and has been cited to suggest the possible utilization of local metal sourcing and casting,⁵⁴ may also be evidence of contact between the Siba culture and the Steppe, for arsenical copper was also common in the Sintashta culture (CA. 2100–1800 BCE),⁵⁵ a Steppe culture that was formerly considered part of the Andronovo horizon.⁵⁶ Although an ongoing excavation has discovered traces of possible local metal-casting in Zhangye dating to around 2000 BCE,⁵⁷ the evidence discussed above suggests that local metal production may have been limited to duplicating bronze objects from the Steppe.

The metal objects from the Tianshanbeilu cemetery share great similarities with those from the Siba culture in western Gansu;⁵⁸ all these artifacts suggest a tight connection with the Steppe.⁵⁹ In short, the Siba bronze mirrors, like the Qijia mirrors, made their appearance within the context of interactions with the Steppe. Furthermore, the decorated mirrors from the early Kayue culture are similar in style to the Siba mirrors, which suggests that they date within the same range as the Siba mirrors and that they too are products of interaction with the Steppe.

The route for the interactions between the northwest and the Steppe was, once again, along the Ejin River.⁶⁰ Looking at the archaeological discoveries in this area, we can picture the interaction as follows: first, exogenous objects from the Steppe were brought to the Gansu Corridor along the Ejin River in the third millennium BCE and left remains to the east of the source of the Ejin. With the increase in interaction, more articles were introduced to the Qijia culture around the beginning of the second millennium BCE, and local production of copies of exotic objects may have started around then. Slightly later, with the rise of the Siba culture, objects started being disseminated in larger numbers westward along the Gansu Corridor and eventually reached the Hami region, but no farther westward. This route may have been selected because the Hami region is the first oasis along the route from the Gansu Corridor to Dzungaria and the Tarim Basin. The extension of interactions with the Steppe went hand in hand with the expansion of the distribution of mirrors in the northwest.

After the middle of the second millennium BCE, the northwest underwent a decline, as indicated by a substantial reduction in the number of tombs, settlements, and metal objects. Large cemeteries with a profusion of metal objects, comparable to the Tianshanbeilu cemetery, are nonexistent. And the sites that have been discovered appear to be much smaller and more scattered than before.⁶¹ This dark period in the northwest coincided with the rise of the Northern Zone.

THE LATE SHANG PERIOD: THE APPEARANCE OF BRONZE MIRRORS IN THE CENTRAL PLAINS AND THE RISE OF THE NORTHERN ZONE

THE EARLIEST BRONZE MIRRORS IN THE CENTRAL PLAINS have been found at Yinxu, Anyang (Henan) 河南安陽殷墟, the Late Shang (CA. 1300?–1046 BCE) royal capital. The Yinxu discoveries arguably mark the first entry of bronze mirrors into mainstream Chinese culture, for, although archeological evidence reveals interactions between the Qijia culture and the Erlitou culture in the Central Plains,⁶² and objects from Central Asia made their appearance in the Early Shang period (CA. 1600?–1300? BCE),⁶³ there is, at least so far, no evidence that bronze mirrors had been used in the cultures and phases that are directly antecedent to Yinxu (the northwest, while important, is somewhat peripheral). The first mirrors to appear in the Central Plains had not been made in that region, but in regions outside the Shang culture area. They all have geometric-pattern decorations on the non-reflective side. They appeared in China long after they had disappeared from the northwest but during a time when bronze metallurgy had arisen in the Northern Zone.

Before the advent of bronze mirrors, the traditional Chinese way of seeing one's image is usually said to have been to look at one's reflection in the water. This is suggested by the character for the word *jian* 鑒, “to inspect,” which the Oracle-Bone and bronze inscriptions of the Late Shang period write with a pictograph conventionally interpreted as showing a human being looking into a bowl filled with water.⁶⁴ Whether this depicts a common cultural practice at the time cannot be verified today; in any case, archaeology has not so far revealed any alternative means for reflecting oneself until the Warring States period, when bronze mirrors

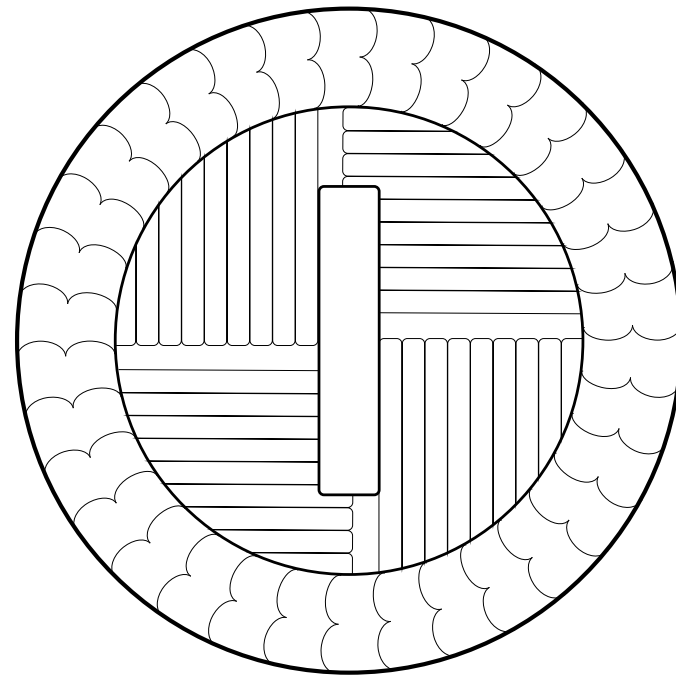


FIGURE 3



FIGURE 4

quite suddenly became abundant. In the Yinxu period, by contrast, they were still rare and exotic luxuries.

Indeed, the mirrors found at Yinxu come from but three elite tombs. The first to be found was from Tomb 1005, one of the royal tombs at the Houjiazhuang 侯家莊 cemetery.⁶⁵ Measuring 6.7 cm in diameter, it is one of only two bronze items left behind by tomb looters (the other being a *yu* vessel). Its back surface is decorated with quadrants of parallel lines and has a bar-shaped loop in the center (FIG. 3).

After the discovery of this mirror in 1934, a debate over its identification arose, with most scholars believing it to be a fitting or a decoration.⁶⁶ This confusion was cleared up in 1976 with the excavation of another, undisturbed royal tomb, Tomb 5 at Yinxu, also known as Fu Hao's tomb 婦好墓, which yielded four bronze mirrors ranging from 7.1 cm to 12.5 cm in diameter. The non-reflective side of one of them is decorated with concentric circles filled with short radial lines (FIG. 4). The same design can be observed on the bronze mirrors from the Siba cemetery of Tianshanbeilu and early sites of the Kayue culture, and in both cases is the result of interactions between northwestern China and the Steppe. A similar mirror is in the Cotsen collection (mirror O-0427; see v. 1: PL. 3). The three other bronze mirrors from this tomb feature similar patterns: all are decorated with quadrants filled with parallel lines and with concentric bands of dots or short lines (FIGS. 5–7).⁶⁷ Their similarity in design and decoration to the specimen from Tomb 1005 has removed any doubt that the latter is indeed a mirror.

Another mirror was found in Tomb 25 at Dasikongcun 大司空村. This tomb is smaller than Tomb 5 and has fewer funerary goods. But the six bronze *ge* dagger-axes, several bronze wine vessels, and several jade objects found within nonetheless indicate it is an elite tomb. The bronze mirror from this tomb has three concentric circles on the back with a loop (FIG. 8).⁶⁸

All six mirrors were from tombs dating to the second phase of Yinxu (from about the second half of the thirteenth century BCE to about the first half of twelfth century BCE).⁶⁹ The great similarity in their design and style is notable. Their geometric decoration, composed of circles, quadrants of lines, and dots, is quite different from the animal motifs typical of the bronzes locally made at Anyang but similar to the decorated mirrors in the northwest. Furthermore, their manufacture is cruder than that of Yinxu bronzes. One scholar has concluded that they were cast using

FIGURE 3:
Mirror from Tomb 1005,
Houjiazhuang cemetery (Yinxu)
殷墟侯家莊 (CA. 1250–1150 BCE).
Diameter 6.7 cm. After Chen
Mengjia 1954: 25; Kong Xiangxing
and Liu Yiman 1992: 4.

FIGURE 4:
Mirror from Tomb 5, Yinxu 殷墟
(CA. 1250–1150 BCE). Diameter
11.8 cm. After Zhongguo
Shehuikexueyuan Kaogu
Yanjiusuo 1980: 103; Zhongguo
Qingtongqi Quanj
Bianjiweiyuanhui 1998: fig. 4.



FIGURE 5



FIGURE 6

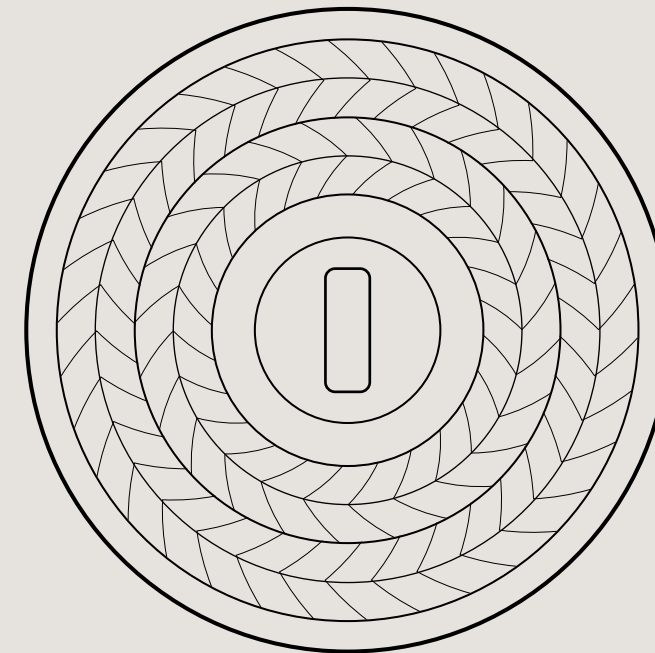


FIGURE 7

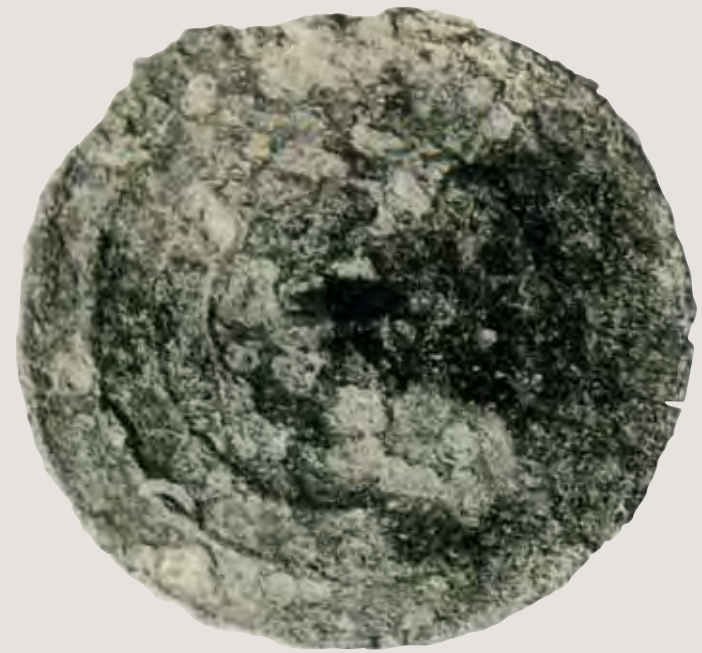


FIGURE 8

FIGURE 5:
Mirror from Tomb 5, Yinxu 殷墟
(CA. 1250–1150 BCE). Diameter
12.5 cm. After Zhongguo
Shehuikexueyuan Kaogu
Yanjiusuo 1980: 103; Zhongguo
Qingtongqi Quanj
Bianjiweiyuanhui 1998: fig. 3.

FIGURE 6:
Mirror from Tomb 5, Yinxu 殷墟
(CA. 1250–1150 BCE). Diameter
11.7 cm. After Zhongguo
Shehuikexueyuan Kaogu
Yanjiusuo 1980: 103.

FIGURE 7:
Mirror from Tomb 5, Yinxu 殷墟
(CA. 1250–1150 BCE). Diameter
7.1 cm. After Zhongguo
Shehuikexueyuan Kaogu
Yanjiusuo 1980: 103.

FIGURE 8:
Mirror from Tomb 25,
Dasikongcun (Yinxu) 殷墟大司空
村 (CA. 1250–1150 BCE). Diameter
7.5 cm. After Zhongguo
Shehuikexueyuan Kaogu
Yanjiusuo Anyang Gongzuodui
1989: 593, fig. 10:5.

stone molds, rather than the ceramic molds typical of bronze casting in Yinxu.⁷⁰ These characteristics show that the mirrors were imported from the outside and reflect the distinctive technology and ideas of their makers who, like the craftsmen who made the mirrors from the northwest, initially resided in Central Asia.

How did they reach the Central Plains? They could not have been introduced to Yinxu through the northwest, since at that time the incidence of bronze objects in the northwest had decreased sharply and in fact no mirrors have been found there dating to the second half of the twelfth century BCE. Besides, with the spread of local cultures and the concomitant shrinking of Shang territory in Shaanxi 陝西 province in the Late Shang period, direct contacts between Yinxu and the northwest had become impossible.⁷¹ In particular, the contemporaneous proto-Zhou culture, which was located in Shaanxi, between the northwest and Yinxu, had little interaction with the cultures in the northwest in the second phase of Yinxu.⁷² Thus, connections between Yinxu and the northwest through the territory of the proto-Zhou culture would have been unlikely. This conclusion is buttressed by recent evidence that the alleged Khotan provenience of some jade items from Fu Hao's tomb—which had been adduced as proof of a connection between Yinxu and Xinjiang—is questionable.⁷³ However, around this time a new corridor from the Steppe was opened, and it was via this route that mirrors were transported into the heart of Late Shang civilization.

That corridor was the Northern Zone. The concept of a Northern Zone as a broad geographical and cultural area was first proposed by Lin Yun.⁷⁴ However, the archaeological evidence shows that the Northern Zone was not as large as Lin believed, at least before the tenth century BCE. Based on current evidence, I would define it as the area comprising the Hetao Plain 河套平原 (also known as the Ordos region in south-central Inner Mongolia) and the northernmost parts of Shaanxi, Shanxi 山西, and Hebei 河北.⁷⁵ This area is adjacent to the Mongolian grassland which, of course, is part of the Eurasian Steppe. The northwest region, which former scholarship included in the Northern Zone, should be excluded, since metallurgy there arose at a different time, and its interactions with the Steppe were likely via a route that followed the Ejin River, as analyzed above, rather than the Mongolian Steppe. The northwest region and the Northern Zone were separated by the Helan Mountains 賀蘭山.

Connections between the Northern Zone and the Steppe started no later than the seventeenth century BCE, marked by the appearance of bronze earrings, chisels, and knives, as well as shells, all from the Steppe.⁷⁶ The number of those objects remained small until the Late Shang period, when various metallic artifacts in the Steppe style appeared in huge numbers in tombs in the Northern Zone.⁷⁷ Those objects include chisels, axes, socket-axes, arrowheads, loop-handle knives, spears, animal-handle knives, bow-shaped tools, daggers, and mirrors, all of bronze. The origins or prototypes of these objects can, in most cases, be traced to civilizations connected with the Steppe. Axes and socketed axes originated in the Iranian Plateau, which is adjacent to the BMAC, before the second millennium BCE.⁷⁸ Daggers originated in the Near East around the beginning of third millennium BCE⁷⁹ and were found in the BMAC together with mirrors.⁸⁰ Chisels, arrowheads, knives, and spears similar in style to those found in the Northern Zone were common in the Andronovo and Seima-Turbino cultures on the Steppe.⁸¹ Bow-shaped tools were created by the Karasuk culture (ca. 1300–600 BCE) in the Minusinsk Basin in southern Siberia,⁸² and images of them appear on the deer-stones on the Mongolian Steppe, which connected the Northern Zone with the Minusinsk Basin.⁸³ Shells were found in abundance in the Northern Zone, indicating a connection with the Indus Valley. The people of the Northern Zone also adopted from the Steppe the custom of wearing gold personal ornaments that touch the skin, a custom that was anathema to the inhabitants of the Shang and Zhou core area.⁸⁴ It appears that all these objects and customs were initially introduced to the Northern Zone through the Steppe. The discovery of shells and Chinese tripod pottery in stone-slab graves in Mongolia completes the chain of interaction from the Steppe to the Northern Zone.⁸⁵

It is in this context that bronze mirrors first appeared in the Northern Zone. So far, five mirrors have been found: three from the Hetao Plain,⁸⁶ one from Zhangbei 張北 (Hebei),⁸⁷ and one from Chunhua 淳化 (Shaanxi)⁸⁸—all of them are decorated with geometric patterns, like the mirrors found in Yinxu. The Chunhua mirror was from a tomb that has been dated by its pottery to be contemporary with the Late Shang period.⁸⁹ Mirrors contemporaneous with those in the Northern Zone were discovered in the Chust culture (ca. 1400–700 BCE) in the Fergana Valley, and in the Karasuk culture, which stretched as far west as the Aral Sea (or even, perhaps, the Volga River) and as far east



FIGURE 9

as the upper Yenisei River catchment.⁹⁰ Thus, it seems safe to conclude that mirrors and other bronze objects in the Northern Zone were brought in from the Steppe.

From the Late Shang period, the people of the Northern Zone also developed a local metallurgy for duplicating valued objects—and in the process introduced innovations, as attested by the ceramic-casting molds discovered in a bronze workshop at Xicha 西岔, on the Hetao Plain.⁹¹ That there were copper and tin mines nearby may explain why the workshop was located there. This is the first time that ceramic molds, rather than the stone molds used in the Steppe, were used systematically to cast Steppe-style bronze. This technology may have been acquired from Yinxu. Local casting also explains why objects such as bow-shaped tools found in the Northern Zone had their prototypes in the Steppe but in a slightly different form.⁹² The emergence of local bronze-casting may also explain why the number of bronze tools and weapons in the Northern Zone greatly increased beginning in the Late Shang period. As far as bronze mirrors go, however, due to their relatively small number we cannot be sure whether they, too, were cast locally in the Northern Zone.

Finally, the coexistence of Steppe-style objects with Yinxu bronze vessels in the Northern Zone and the great number of bronze weapons and tools of Steppe style found in Yinxu elite tombs indicate extensive interactions between the two regions. This is consistent with Oracle-Bone inscriptions, which speak of frequent wars between the Shang and kingdoms to the north.⁹³

FIGURE 9: Stone mirror-mold, Xiaodulingcun, Tonghua county (Jilin) 吉林通化縣小都嶺村 (ca. 500 BCE). Diameter 9.2 cm. After Zhang Ying 1990: fig. 3.

Perhaps, as a result of these wars, the Shang obtained bronze objects as tribute or booty.⁹⁴ In any case, the Northern Zone was a link in the chain of interaction that led to the introduction of bronze mirrors into Yinxu.

However, mirrors disappeared from the Central Plains after the second phase of Yinxu in the Late Shang period and did not reappear until around the beginning of the Springs and Autumns period. And when they reappeared, they were in a new and different style, a subject to which we will return. Although the craftsmen of Yinxu produced local copies of some exotic objects, such as animal-head knives from the Northern Zone,⁹⁵ this was not true of mirrors. Obviously, the idea of viewing one's reflection in bronze mirrors was not widely accepted at Yinxu. Thus, bronze mirrors here were a transient phenomenon. Geometric-pattern mirrors did not reappear in the Central Plains during the remainder of the Bronze Age.

Geometric-pattern mirrors, however, had a long afterlife in the area to the north of the Yanshan Mountains 燕山—in northern Hebei, eastern Inner Mongolia, and the Chinese Northeast, as well as in Korea. The first-millennium BCE mirrors and stone molds for casting them found in this wide area are decorated with geometric patterns (FIG. 9).⁹⁶ The patterns on some are quite similar to those on mirrors found in Gamatai and Linxia: triangles filled with lines.⁹⁷ The stone mirror-molds with triangular decorations date to the middle of the first millennium BCE.⁹⁸ The presence of the molds and the fact that the decorative design is somewhat different from that in the northwest—where mirrors have a pattern of line-filled triangles alternating with triangles with a plain surface, while all the triangles on the mirrors from the northeast are filled with lines—reveal that the northeast mirrors with a geometric pattern were cast locally. By virtue of its location near the eastern end of the Steppe, the northeast region developed a bronze-making technology that was heavily influenced by the metallurgy in the Minusinsk Basin. This is evident since the time of the Lower Xiajiadian 夏家店下層 culture (ca. 2000–1400 BCE).⁹⁹ Interactions between the northeast and the Steppe had become extensive from the late phase of the Upper Xiajiadian 夏家店上層 culture (ca. 900–700 BCE).¹⁰⁰ The manufacturers of mirrors with a pattern of triangles in this region may have seen mirrors from the Steppe, such as those from which the Gamatai and Linxia mirrors were derived, and copied them. This triangle-style became popular in northeast China and spread into Korea

in a much later time (see Horlyck, this volume, “Mirrors in Early Korea”). The mechanism behind these developments is a subject for future research.

From the contexts of mirrors in the capital of Late Shang, we may conclude that at Yinxu, bronze mirrors were status symbols, inasmuch as they were found only in tombs of the elite, apparently quite different from the situation in the Qijia culture. This difference may be a reflection of two different value systems.

THE BRONZE MIRRORS OF THE ZHOU PEOPLE AND THEIR NEIGHBORS: ADOPTION, LOCALIZATION, AND THE DAWN OF A CHINESE TRADITION OF MIRROR MANUFACTURE

THE ZHOU PEOPLE are significant in the history of Chinese bronze mirrors, for it was they who paved the way for the adoption of such mirrors as part of Chinese culture. During the final period of Late Shang, the proto-Zhou culture in Shaanxi (thought to be the archaeological remains of the Zhou people before their conquest of Shang) prospered, and it was there that the distribution and production of bronze mirrors were revived.

So far, three bronze mirrors have been found in late proto-Zhou (about the first half of the eleventh century BCE),¹⁰¹ and twenty-one in Western Zhou-period (CA. 1046?–771 BCE) archaeological contexts.¹⁰² Almost all have a plain, undecorated back. These mirrors were found in the Zhouyuan region 周原 (south of Qishan 岐山, north of the Wei River 渭河, east of Baoji 寶雞), the political and cultural center of the Zhou from the Late Shang (“proto-Zhou”) period through the end of Western Zhou, and in the eastern part of Gansu, adjacent with Shaanxi province and also part of the Zhou cultural sphere. Their contexts are diverse: they were from tombs ranging from those that contained only a few grave goods¹⁰³ to those that contained abundant luxuries;¹⁰⁴ their occupants included Zhou people,¹⁰⁵ as well as “leftover elites” from the defunct Shang dynasty.¹⁰⁶ This may imply a receptivity to extrinsic cultures, which could be related to the location of the Zhou, surrounded as they were by alien populations.

The rise of bronze mirrors in the late proto-Zhou period in the Zhouyuan region was accompanied by an upsurge in the occurrence of cowrie shells.¹⁰⁷ This indicates a connection with the west, where the large-scale casting of bronze mirrors continued in the Karasuk culture;¹⁰⁸ here could be the origin of the



FIGURE 10

first mirrors in Zhouyuan. While no mirrors have been found in contemporary sites in the Northern Zone, the discovery of a bronze mirror and cowrie shells at the Panjialiang cemetery in Huangzhong (Qinghai) 青海湟中潘家梁, dating to the second phase of the Kayue culture (CA. 1300–1000 BCE),¹⁰⁹ suggests a possible route from the northwest region connecting the Zhou people with the Steppe. Furthermore, at the Zhangjiapo necropolis in Chang’an (Shaanxi) 陝西長安張家坡, adjacent to the twin capitals of the Western Zhou, nearly 6 percent of the tombs are of the catacomb type, which was common in the Neolithic and Bronze Age cultures of the northwest.¹¹⁰ This hints at a connection between the Zhou and the northwest. In any event, archaeological discoveries have confirmed that interactions between the Zhou people and the Kayue culture became visible from the late proto-Zhou period.¹¹¹

Slightly later than the mirrors at Zhouyuan are thirty-four bronze mirrors found at the Dahuazhongzhuang cemetery in Huangyuan (Qinghai) 青海湟源大華中莊, dating to the third phase of the Kayue culture (CA. 1000–700 BCE).¹¹² This site has yielded the largest number of bronze mirrors seen anywhere in China during the Bronze Age. Since no evidence of local production has been found, these mirrors might also have been brought in from the Steppe. All the mirrors in Dahuazhongzhuang have a plain back surface, the same as those found in Zhouyuan, eastern Gansu (FIG. 10), and elsewhere in the Kayue culture.¹¹³ Dahuazhongzhuang is significant not only for its mirrors, but also for the presence of a considerable number of shells and, especially,

FIGURE 10: Mirror from Tomb 38, Yujiawan cemetery, Chongxin (Gansu) 甘肅崇信子家灣 (CA. 1046–977 BCE). Diameter 8.5 cm. After Gansu Sheng wenwu kaogu yanjiusuo 2009: 92, fig. 8.1.

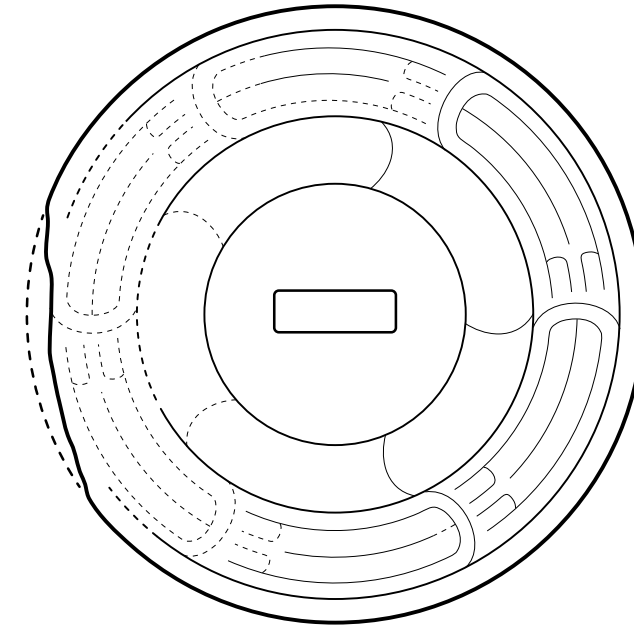


FIGURE 11

horse bones, all of which indicate interactions with the Steppe. This further supports the supposition that interactions between Zhouyuan and the Steppe were via the northwest. Further work in the northwest may provide more evidence of interactions reflected by mirrors in earlier periods. The explosion in the number of bronze mirrors from the late proto-Zhou period, evidently brought into the Zhouyuan region from far away, may be the result of the blossoming of Zhou as a new political center.

From the latter half of the Western Zhou period onward, bronze artisans at the Zhou cultural centers began to make some initial attempts at technological advancement and assimilating bronze mirrors into the mainstream artistic repertoire of the Shang-Zhou tradition. As they did so, the mirrors they manufactured began to diverge from the Karasuk prototypes. In the proto-Zhou and Early Western Zhou periods, bronze mirrors were flat or only slightly concave, a feature shared with mirrors on the Steppe. But from the latter half of the Western Zhou, they became more concave. This has led some scholars to claim that they are solar igniters (*yangsui* 陽燧).¹¹⁴ However, these mirrors are too small to ignite a fire. The most likely reason for casting them in a concave shape was in order to enlarge the reflected image. This development may indicate the local production of mirrors. The evidence of local production is particularly strong in the case of a concave bronze mirror found in Shaanxi which features characteristically Zhou decoration on its non-reflecting side. The mirror was found in a pit at Zhuangbai Liujiashiuku, Fufeng (Shaanxi) 陝西扶風縣莊白劉家水庫, together with bronze bells and chariot

FIGURE 11: Mirror from a pit at Zhuangbai Liujiashiuku, Fufeng (Shaanxi) 陝西扶風縣莊白劉家水庫 (CA. 976–878 BCE). Diameter 8.0 cm. After Luo Xizhang 1980: 16, fig. 11.

accessories;¹¹⁵ based on this association, it can be roughly dated to the middle of the Western Zhou period. It has a band of horizontal D-shaped elements surrounding the central loop (FIG. 11). This pattern is typical of Middle to Late Western Zhou bronze decoration. Although neglected in previous research, this mirror is, in fact, highly important: it is the earliest known mirror that we can be certain was made locally within the Chinese bronze-manufacturing tradition. Evidently, the Zhou artisans had begun to endow their mirrors with their own technological and aesthetic values.

From the time spanning the Late Western Zhou and the Early Springs and Autumns periods (CA. 850–679 BCE), mirrors have been excavated at the rulers’ cemetery of the Guo 虢 polity, part of the Zhou political system, at Shangcunling, Sanmenxia (Henan) 河南三門峽上村嶺, adjacent to Shaanxi. Two mirrors found within the coffin of Tomb 1650—a small tomb without any bronze vessels—continue the plain-back mirror tradition.¹¹⁶ Their appearance in this cemetery might be due to the fact that the Guo ruling lineage had relocated to Henan from its former home in the Baoji region—precisely the spot where the Western Zhou plain-back mirrors have been found. By the end of Springs and Autumns period, such plain-back mirrors had reached other regions of the Zhou system. Two have been reported so far, one from Langjiazhuang, Linzi (Shandong) 山東臨淄郎家莊,¹¹⁷ the other from a Chu 楚 cemetery at Changsha (Hunan) 湖南長沙.¹¹⁸ Around the same time, similar mirrors were also brought into the Ordos region in Inner Mongolia and the northeast, into such cultures as the Taohongbala 桃紅巴拉 and the Maoqinggou 毛慶溝. They were introduced there by nomadic people who were not part of the Zhou cultural sphere. The cultures of the Taohongbala and others in this area bear some similarities with the nomadic cultures to the west on the Steppe, including the Ulaangom culture in western Mongolia, the Pazyryk culture in the Altai Complex, and the Uyük culture in the Tuva region.¹¹⁹

In addition, Tomb 1612 at the Guo cemetery, which dates after 771 BCE based on the latest bronze vessel found within, yielded a mirror with a new motif—a raised-line pattern of various crudely drawn animals (FIG. 12).¹²⁰ This is the first time such a pattern appears in the Central Plains. Stylistically, this image differs from the decoration of “normal” bronzes of Zhou metallurgy of this time and has affinities with the bronze-manufacturing styles of the Steppe. In the Altai region, such images of animals drawn in simple lines appear frequently on bronze



FIGURE 12

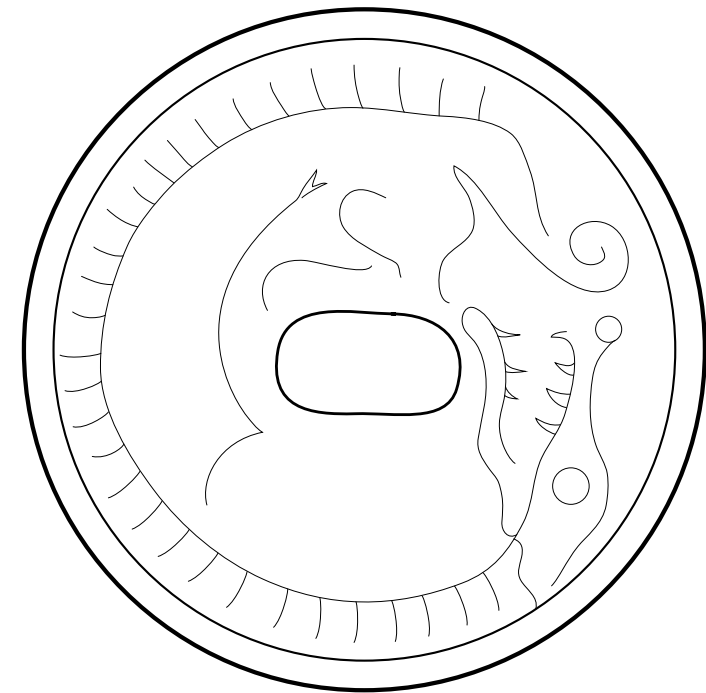


FIGURE 13

FIGURE 12:
Mirror from Tomb 1612,
Shangcunling cemetery,
Sanmenxia (Henan) 河南三門峽
上村嶺 (CA. 770–670 BCE).
Diameter 6.7 cm. After Zhongguo
Kexueyuan Kaogu Yanjiusuo
1959b: 27; Zhongguo Qingtongqi
Quanjì Bianjiweiyuanhui 1998:
fig. 4.

FIGURE 13:
Mirror from Tomb 164,
Chawuhugou cemetery, Hejing
county (Xinjiang) 新疆和靜縣察
吾乎溝 (CA. 800 BCE). Diameter
9.6 cm. After Xinjiang Wenwu
Kaogu Yanjiusuo et al. 1988: 26.

objects in the Maiemir culture (CA. 800–600 BCE), and mirrors bearing a pattern of several animals arranged in an array were also discovered in the Maiemir culture.¹²¹ In the Tuva region, such animal motifs can also be seen on deer-stones and bronzes of the Arzhan period (CA. 800–700 BCE).¹²² Animal motifs are also found on two bronze mirrors (FIG. 13) discovered at the Chawuhugou cemetery in Hejing county (Xinjiang) 新疆和靜縣察吾乎溝, close to the Altai region.¹²³ Both are decorated with the image of a coiled beast, a motif also seen on objects in the Altai Complex and the Tuva region. The tombs at the Chawuhugou cemetery range from the tenth to the sixth century BCE. Even though the chronological sequence here is still vague, the two tombs with mirrors may be roughly dated to around the eighth century BCE.¹²⁴ Because only two such mirrors were found at Chawuhugou, it is likely they too were derived from the Steppe. Since there is no evidence of any connection between the Central Plains and Chawuhugou, the crudely cast animal mirror from the Guo cemetery is likely to have been brought in from the Steppe as well. Actually, before mirror casting-molds appeared in Xinjiang after 500 BCE,¹²⁵ there is no evidence of local manufacture of bronze mirrors there. Only around twenty bronze mirrors dating down to the fifth century BCE have been discovered in Xinjiang.¹²⁶ This is not a significant number considering the size of Xinjiang and its location adjacent to both the Eurasian Steppe and the northwest. Mirrors with crudely cast animal motifs were found nowhere else in China. Thus, to trace the route of the mirror found in Tomb 1612 from the Steppe to Shangcunling, we need to consider other, more commonly occurring objects with exotic connotations that have been found in this cemetery—namely, iron and glass frit. Based on recent discoveries in Xinjiang, it seems the technology for smelting and casting iron reached China from central Eurasia.¹²⁷ Iron objects found in Springs and Autumns-period sites in the Qin-polity sites in Gansu and in central Shaanxi imply that the route of the technological transfer from the northwest was by way of the Wei River and then along the Yellow River to Sanmenxia.¹²⁸ Beads made of glass frit, another substance likely of westerly derivation,¹²⁹ have been discovered along this route from the Western Zhou period.¹³⁰ It was also perhaps by this same route that the animal-motif mirror appearing at the Shangcunling cemetery was carried from the Steppe to the Guo polity.

Another exciting mirror at the Guo cemetery is from Tomb 1052.¹³¹ The report describes it as a convex disk, similar to the



FIGURE 14



FIGURE 15

FIGURE 14:
Mirror from Tomb 1052,
Shangcunling cemetery,
Sanmenxia (Henan) 河南三門峽
上村嶺 (CA. 850–679 BCE).
Diameter 7.5 cm. After Zhongguo
Kexueyuan Kaogu Yanjiusuo
1959b: 28–31.

FIGURE 15:
Ceramic mirror mold, from Pit 85,
Houma foundry (Shanxi) 山西侯
馬鑄銅作坊 (CA. 500 BCE).
Diameter 10.2 cm. After Shanxi
Sheng Kaogu Yanjiusuo 1993: 174.

decorated mirror from Fufeng noted above. This mirror bears an elegant tiger pattern in the Zhou style (FIG. 14) and thus represents a continuation of the bronze mirrors cast in the Chinese tradition, first exemplified by the Fufeng specimen.

The first systematic casting of mirrors in Shang-Zhou metallurgy was launched at the foundries of the state of Jin 晉, in present-day Shanxi, toward the end of the Springs and Autumns period. During that period, Chinese traditional bronze mirrors were still scarce in other regions, while in Jin one encounters them in abundance for the first time. Local production is attested by the ceramic molds from the large, industrial-style foundry at Houma (Shanxi) 山西侯馬. So far, four ceramic molds for bronze mirrors, dated to around 500 BCE, have been discovered (FIG. 15). Mirrors cast in these molds would have been concave, like the Fufeng mirror and the Guo cemetery mirror, both of which were also products of Zhou metallurgy. The Houma mirror molds were cast with the *panchi* motif 蟠螭紋 on the non-reflective side.¹³² This motif—often depicting a group of dragon-shaped animals twisting around one another—was common on bronze vessels cast in the Zhou metallurgical tradition during the Springs and Autumns period. Its appearance on the Houma mirrors is thus an instance of the adaptation of traditional decorations of the Central Plains. Mirrors of this type continued to be cast and were found in an ever-larger region in the Warring States period, when a fully Sinicized tradition of mirror production reached its first full florescence (see Mackenzie, this volume).

FIGURE 15

Read Only/No Download

NOTES

1 Li Hengqiu 1984; O’Donoghue 1990; Gao Xisheng 2001.

2 Scholars have ascribed the origin of bronze mirrors in China to a wide variety of areas and cultures. For an argument that they originated in the Scythian culture, see Umehara 1936; in the Central Plains, see Gao Quxun 1958; possibly in southern Siberia, see Juliano 1985; outside or on the periphery of China, see Rubinson 1985; in the “Northern Zone,” see Lin Yun 1998b; in the Gansu Corridor, see Song Xinchao 1997: 162; in Xinjiang, see Liu Xuetaang 1999; in southern China, see Gao Xisheng 2001: 35; in Bactria, see Fitzgerald-Huber 1995: 40; and finally, possibly in Central Asia, see Kuz’mina 2007: 410.

3 According to the latest AMS dating of Erlitou, its first phase dates no earlier than 1750 BCE. See Zhang Xuelian et al. 2007.

4 Li Shuicheng 2005: 240.

5 Wenwu Bianjiweiyuanhui 1979: 148; Yan Wenming 1984: 39.

6 Wenwu Bianjiweiyuanhui 1979: 162; An Zhimin 1993: 1113. No formal report on this tomb has been published either.

7 Most publications that discuss this mirror describe the pattern as a seven-pointed star. Actually, if we look at the image carefully, it is apparent that the so-called star is merely the surface that is not covered by the seven line-filled triangles. An Zhimin (1993: 1113), who saw the mirror in person, is therefore more accurate in describing the pattern as one of seven triangles.

8 Zhang Zhongpei 1987: 174; Wang Zhen 2006: 14–16. The absolute dates of the Qijia culture are still unclear. It is usually believed to have ended somewhere between 1900 and 1600 BCE, but very recent finds suggest that it may have persisted for several centuries longer in southeastern Gansu (Wang Jianxin, personal communication, 2010).

Aside from these latest finds, the scholarly consensus is that the late phase of the Qijia culture is contemporaneous with the early Erlitou culture (see n. 3).

9 Song Xinchao 1997: 161–163.

10 Sun Shuyun and Han Rubin 1997. The Gamatai mirror contains up to 10 percent tin (Wenwu Bianjiweiyuanhui 1979: 148); for further discussion, see Scott, this volume.

11 Wang Zhijun 1996.

12 Fitzgerald-Huber (1995) is of the same opinion.

13 Fitzgerald-Huber 2003; Anthony 2007: 412–459.

14 Li Shuicheng 2005; Mei Jianjun 2003a, 2003b.

15 Fitzgerald-Huber 1995: 40–65; Li Shuicheng 2005: 267–272; Mei Jianjun 2003a, 2003b; Anthony 2007: 456–457.

16 Kuz’mina 2007: 408.

17 Kuz’mina 2007: 240.

18 Anthony 2007: 448.

19 Kuz’mina 2008: 103.

20 Anthony 2007: 448.

21 Anthony 2007: 428.

22 Kuz’mina 2007: 234, 286–289.

23 See Chernykh and Kuz’minkyh 1989: 112, fig. 64; 127, fig. 70.

24 See Chernykh and Kuz’minkyh 1989: 112, fig. 64.

25 Anthony 2007: 425.

26 Falkenhausen 2010: 54.

27 For this observation, I thank Min Li (personal communication, 2010).

28 Mei Jianjun 2003b: 41.

29 Anthony 2007: 425.

30 Li Shuicheng 2005: 271.

31 Gansu Sheng Wenwu Gongzuodui et al. 1984: 124.

32 Gansu Sheng Wenwu Gongzuodui et al. 1984.

33 Peng Ke and Zhu Yanshi 1999.

34 Li Shuicheng and Mo Duowen 2004; Li Shuicheng 2005: 272; Jin Guiyun 2007.

35 Flad et al. 2009: 83.

36 For example, hundreds of shells were found at the Gamatai cemetery alone. See Li Kai 2010: 148.

37 Li Shuicheng 2005: 266.

38 Fitzgerald-Huber 1995: 51.

39 The route outlined here became one of the Silk Routes during the Western Han dynasty. Still later, a portion of the Great Wall was built near the city of Zhangye, close to the source of the Ejina River. Clearly, this area was very well situated for communication with the Steppe. However, in searching for avenues of communication between China and the Steppe in the first and second millennia BCE, scholars have tended to be preoccupied by the routes through Xinjiang and have paid insufficient attention to the route via Lake Juyan.

40 For example, in the vast area of northern Xinjiang, only three sites are presently known that possibly date to the early second millennium (Shao Huiqiu 2007: 21–31).

41 Anthony 2007: 456.

42 Li Shuicheng and Shui Tao 2000: 38; a drawing of a plain-back mirror, which is ascribed to Tomb 79 at the Ganguya cemetery in Jiuguang (Gansu) 甘肃酒泉幹骨崖, has been published in Qian Wei 2006: 90.

43 Li Shuicheng 2005: 249

44 Qian Wei 2006: 41; Lü Enguo et al. 2001.

45 One local scholar has claimed that there are more than a hundred disks (Liu Xuetaang 1999: 116).

46 Lü Enguo et al. 2001: 181, 182.

47 Li Shuicheng 2005: 244.

48 Li Hancan 1992.

49 Gao Ashen 1991: 96.

50 Li Shuicheng 2005: 244.

51 Mei Jianjun 2003a: 16

52 Li Shuicheng 1993: 105; Mei Jianjun 2003a: 13.

53 Bunker 1998: 609, 610.

54 Li Shuicheng and Shui Tao 2000: 40–42; Mei Jianjun 2003a: 14, 15; Li Shuicheng 2005: 271.

55 Anthony 2007: 241.

56 Anthony 2009.

57 According to news reports, Zhang Liangren 張良仁 has found in Zhangye stone molds, presumably for copper or bronze objects, and copper residue dating to around 2000 BCE (Xinhua news release, November 13, 2010).

58 Qian Wei 2006: 88–92.

59 Lin Meicun (2003) has argued that various objects from the Tianshanbeilu cemetery can be traced to the Okunevo culture and the Sintashta culture. If this is true, this would corroborate interactions with the Steppe.

60 Arguments that grave objects in the Tianshanbeilu cemetery are proof of an ancient communication route from the Altai region across Xinjiang cannot be verified, since no contemporaneous sites have been discovered in the vast area between the two regions, despite the great progress in archaeological work there (Li Shuicheng 2005: 265; Mei Jianjun 2003a: 21).

61 Shui Tao 2001: 179.

62 Fitzgerald-Huber 1995; Li Shuicheng 2005: 265, 266; Lin Yun 2009; Mei Jianjun 2003a.

63 Peng Ke and Zhu Yanshi 1999: 124.

64 Li Xiaoding 1965: 2715–2717; O’Donoghue 1990: 16.

65 Chen Mengjia 1954: 25; Gao Quxun 1958.

66 Gao Quxun 1958: 710–719.

67 Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 1980: 103.

68 Zhongguo Shehuikexueyuan Kaogu Yanjiusuo Anyang Gongzuodui 1989: 593.

69 Han Jinqiu 2009: 253–273.

70 Bai Yunxiang 2010: 72.

71 Zhang Tian’en 2004: 164–179.

72 Zhang Tian’en 2004: 249–276.

73 Jing Zhichun et al. 2007: 376–378.

74 Lin Yun 2003.

75 The Northern Zone can be divided into subregions based on their different affinities with Yinxu and the proto-Zhou culture. But from the perspective of its interchanges with the Steppe, the Northern Zone can be considered one discrete region.

76 Lin Yun 2009.

77 For the summary of the discoveries, see Jiang Gang 2006: 59–62, 166–120.

78 Chlenova 1967; cited from Lu Liancheng 1996: 719, and Lin Meicun 1998: 46. Wu’enyuesitu 2008: 81–82.

79 Lin Meicun 1998: 47.

80 Hiebert and Killick 1993.

81 Chernykh 1992: 240–271.

82 Cited from Lin Yun 1998a: 255.

83 Cited From Lin Yun 1998a: 252, 253.

84 Bunker 1993.

85 Okladnikov 1955: 261.

86 Tian Guangjin and Guo Suxin 1986: 143.

87 Andersson 1933.

88 Yao Shengmin 1986.

89 Zhang Changshou and Liang Xingpeng 1989: 4–6.

90 Kuz’mina 2007: 408, 409.

91 Jiang Gang 2006: 111, 112.

92 Lin Yun 1998a: 251.

93 Liu Yiman 1993; Chen Fangmei 1995; Lin Yun 1998b; Yang Jianhua 2002; Han Jinqiu 2009: 74–166.

94 Liu Yiman 1993: 159.

95 Du Zhengsheng 1993: 244, 245.

96 Zhu Gui 1960; Shenyang Gugong Bowuyuan et al. 1975; Man Chengzhi 1987; Tang Hongyuan 1992: 55; Zhang Ying 1990: figs. 2–3.

97 Man Chengzhi 1987; Tang Hongyuan 1992: 55; Zhang Ying 1990: figs. 2–3.

98 See Bai Yunxiang 2010: 67.

99 Chlenova 1972: 6; Lin Yun 2009: 8–11.

100 Liaoning Sheng Zhaodaodameng Wenwu Gongzuozhan et al. 1973: 35, 36; Neimenggu Zizhiqu Wenwu Kaogu Yanjiusuo et al. 2009: 434, 435.

101 Han Wei and Wu Zhenfeng 1982; Luo Xizhang 1995:95.

102 Gao Xisheng 2001: 31; Zhouyuan Bowuguan 2005: 15; Xianyang Shi Wenwu Kaogu Yanjiusuo and Xunyi Xian Bowuguan 2006: 32. In the excavations of the Kongtougou cemetery at Zhougongmiao in Qishan (Shaanxi) 陕西岐山周公廟孔頭溝, six mirrors have been discovered.

103 Luo Xizhang 1995: 95.

104 Cao Fazhan and Jing Fan 1984.

105 Han Wei and Wu Zhenfeng 1982.

106 Xianyang Shi Wenwu Kaogu Yanjiusuo and Xunyi Xian Bowuguan 2006.

107 Peng Ke and Zhu Yanshi 1999: 124, 125.

108 Loubo-Lesnitchenko 1973: 27.

109 Miyake Toshihiko 2005: 74, 75.

110 Falkenhausen 2006: 210.

111 Zhang Tian’en 2004: 265.

112 Miyake Toshihiko 2005: 74, 75.

113 Qinghai Sheng Huangyuan Xian Bowuguan et al. 1985.

114 Yang Junchang and Duan Yanli 2000.

115 Luo Xizhang 1980.

116 Zhongguo Kexueyuan Kaogu Yanjiusuo 1959b: 27.

117 Shandong Sheng Bowuguan 1977: 100.

118 Hunan Sheng Bowuguan 1959: 50.

119 Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 2004: 530–540.

120 Zhongguo Kexueyuan Kaogu Yanjiusuo 1959b: 27.

121 Cited from Shao Huiqiu 2007: 226.

122 Cited from Shao Huiqiu 2007: 218

123 Xinjiang Wenwu Kaogu Yanjiusuo et al. 1988: 26.

124 Shao Huiqiu 2007: 111.

125 Liu Xuetaang and Li Suyuan 2008: 51, 56.

126 Liu Xuetaang 1999: 114, 115.

127 Tang Jigen 1993; Chen Ge 2001; Falkenhausen 2006: 227.

128 Falkenhausen 2006: 227.

129 Falkenhausen 2006: 227.

130 Yang Boda 1980.

131 Zhongguo Kexueyuan Kaogu Yanjiusuo 1959b: 28–31.

132 Shanxi Sheng Kaogu Yanjiusuo 1993: 174, 444.

Colin Mackenzie

THE NELSON-ATKINS MUSEUM OF ART

Mirrors of the Warring States Period (450–221 BCE)

The Perfect Man uses his mind like a mirror

ZHUANGZI, CA. fourth century BCE¹

THE WARRING STATES period was the first great age of Chinese bronze mirrors.² By the end of the era, the popularity of mirrors was such that they were frequently placed even in small tombs that contained few or no ritual vessels. Moreover, many mirrors were lavishly decorated in a variety of novel styles that frequently owed little to traditional bronze decoration. In some cases, their decoration was inspired by other media, particularly lacquer and textiles, but designs arose that were particular to mirrors. Indeed, the designs used to decorate mirrors rank among the most inventive and successful of the Warring States ornamental repertoire.

The rise of mirrors during the Warring States period was part of a far-reaching shift in the type of objects placed in tombs. As the prestige of ritual bronzes gradually declined, luxury objects in a wider range of materials, often combined together to form a single object, became more prominent. Belt hooks, for instance, became important articles during this period, exceeding even mirrors in the inventiveness of their designs. Lacquer and textiles also begin to appear more frequently in the archaeological record and show pronounced changes in style over the period. Although some of these perceived advances may partly reflect improved tomb construction, which allowed the preservation of materials that had previously not survived, it is clear that the changes in tomb assemblages represent a fundamental shift in the material culture of the elite.³

The new interest in mirrors may have stemmed partly from the magical properties attributed to them. Although the notion of

a mirror as both an auspicious and apotropaic object occurs explicitly in mirror inscriptions only in the Han period, it is likely that it was prevalent much earlier, since similar beliefs were widely attached to mirrors in the ancient world.⁴ However, it is clear from the not infrequent references to mirrors in the pre-Han philosophical and historical texts that their primary function was for grooming.⁵ For instance, the text associated with the Legalist master Han Feizi 韓非子 (280–233 BCE) states: “The Ancient Men, since their eyes were insufficient when they wanted to look at themselves, therefore by the aid of a mirror they looked at their faces; since their wisdom was insufficient when they wanted to govern themselves, therefore by the aid of the right principles they corrected themselves” 古之人目短於自見,故以鏡觀面;智短於自知,故以道正己。⁶ A passage in the *Zhanguo ce* (Intrigues of the Warring States) includes a story about a minister of Qi 齊 who, “in the morning dressed in robes and cap, looked at himself in a mirror” 朝服衣冠窺鏡, and asked in turn his wife and a concubine whether he or a certain Mr. Xu 徐公 was the more beautiful.⁷

Such stories speak to a growing self-awareness of one’s appearance, which would naturally have fuelled a need for mirrors. Conversely, increasing use of mirrors would have promoted visual self-consciousness. Indeed, it is in the context of personal attire and grooming, rather than religious ritual, that mirrors would have most regularly functioned, and the archaeological contexts of mirrors confirm the close link between mirrors and other items of grooming. Mirrors are frequently found in tombs

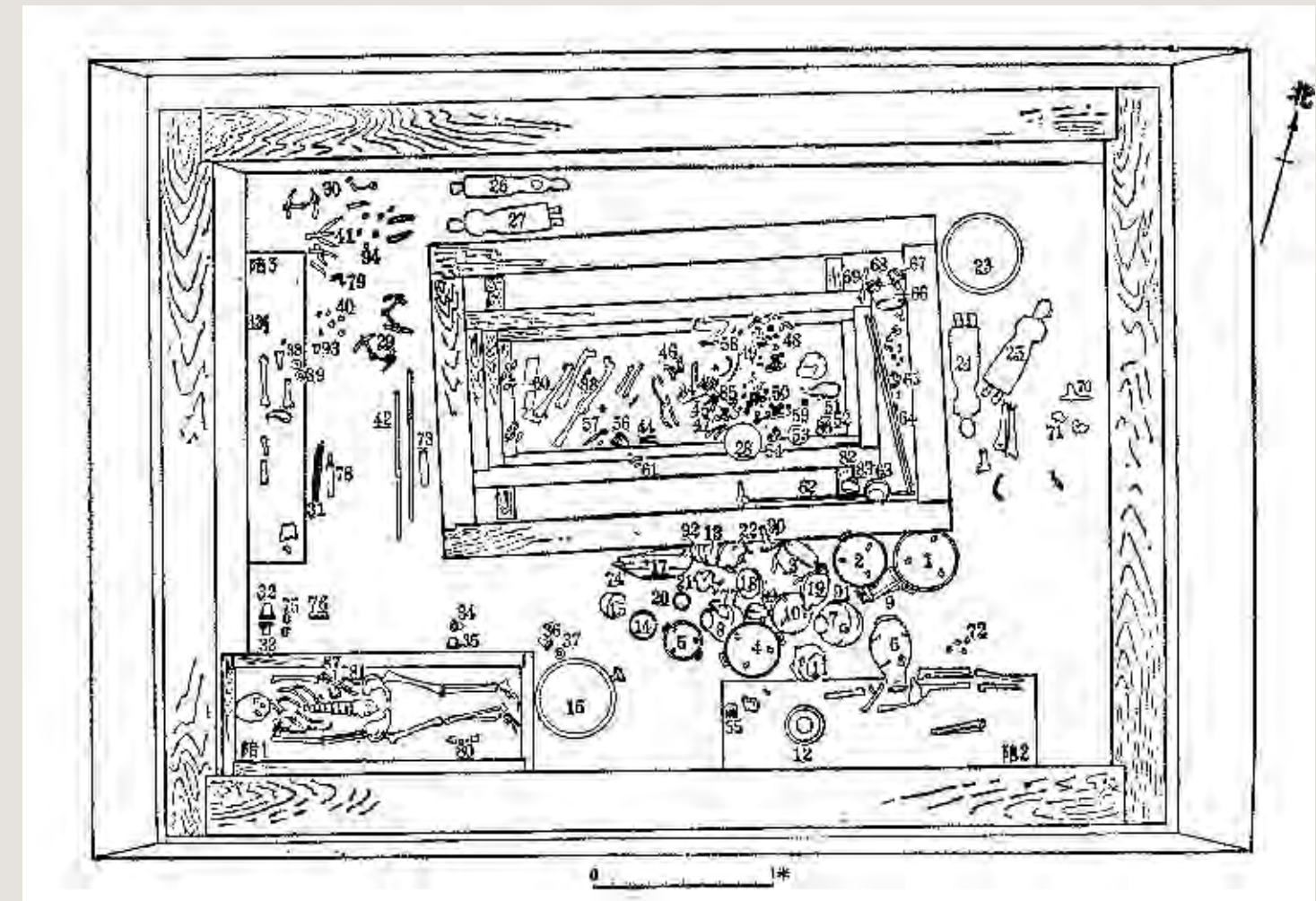


FIGURE 1

FIGURE 1:
Plan of Tomb 7 at Changzi
(Shanxi) showing mirror (53) and
adjacent items: a ring-handled
knife (59), a wooden comb (54),
a lacquer box (28), beads (51),
and the remains of hair (52).
Early fifth century BCE.
Drawing from Shanxi Sheng
Kaogu Yanjiusuo 1984: 504, fig. 2.



FIGURE 2

near the skeleton of the occupant and adjacent to combs and other grooming items (FIG. 1). In a richly furnished late Warring States tomb of a woman at Luoyang (Henan) 河南洛陽, two mirrors inlaid with glass and gold-wrapped beads were found next to a ball of cosmetic talc containing the oxides of mercury, iron, and silica, together with smaller amounts of silver, tin, alumina, lead, magnesium, copper, gold, calcium, and potassium.⁸

Although it is tempting to assume that such grooming tools would have been most commonly used by women, there is plentiful evidence that mirrors were used by men just as frequently. A late fourth- or early third-century BCE tomb of a Chu 楚 noble at Jiuliandun, Zaoyang (Hubei) 湖北棗陽九連墩 yielded a complete cosmetics case containing, in addition to the mirror, a comb and a knife (FIG. 2). And Zhao Tuo 昭佗, the male occupant of Tomb 2 at Baoshan, Jingmen (Hubei) 湖北荊門包山, who died in 316 BCE, was buried with two mirrors wrapped in silk and placed inside an elaborately painted lacquer box together with a makeup applicator, two bone hairpins, two wooden ornaments, and a shell.⁹

The fact that the Zhao Tuo mirrors were furnished with such a costly box shows that they were not mere tools but valued possessions. Even when mirrors did not have a box, they were frequently wrapped in silk covers, the impressions of which are often preserved in the corrosion products of mirrors. In the Cotsen Collection, mirrors O-0800 (see v. 1: PL. 6), O-0778 (v. 1: PLS. 25–26), and O-0407 (v. 1: PLS. 36–37) preserve the vestiges

of textiles in their corrosion products. A mirror from the late fourth or early third century BCE Tomb 1 at Mashan, Jiangling (Hubei) 湖北江陵馬山, which was wrapped in a well-preserved embroidered silk mirror cover (FIG. 3A–B), confirms the assumption that these textile ghosts represent the remains of wrappings. Such wrappings were probably also used for polishing the mirror in order to maintain a good reflective surface. As we all see below, this intimate association between textiles and mirrors was significantly to affect the evolution of mirror ornament.

We know little about how mirrors were actually used and held. A passage in the *Zuo zhuan* 左傳 for the twenty-first year of Duke Zhuang 莊公 (672 BCE) records a gift by the Zhou king of a “belt mirror” (*panjian* 鞶鑑) to the ruler of Zheng 鄭.¹⁰ Although the interpretation of the character *pan* 鞶 as “belt” is disputed,¹¹ finds of mirrors near the waist of tomb occupants indicate that the mirrors were suspended from belts at the waist. The practice of suspending mirrors from belts would explain why they were provided with a perforated knob rather than a handle, although as mirrors became larger, carrying them on the body would have become impractical. A number of mirrors have been found with the remains of a silk ribbon still tied through the knob, and Eastern Han reliefs show women holding mirrors by this means.¹² Large and heavy mirrors, such as mirror O-0407 (see v. 1: PLS. 36–37), however, would have been tiresome to hold in the hand and may have been furnished with low stands such as were later provided for mirrors. The cosmetic case from Jiuliandun (FIG. 2) includes

FIGURE 2: Lacquered wood cosmetics case from Tomb 1 at Jiuliandun, Wudian, Zaoyang (Hubei). Length 35.0 cm. Late fourth or early third century BCE. Photograph from Hubei Sheng Bowuguan 2007: 85.



FIGURE 3A



FIGURE 3B

FIGURE 3: (A) Bronze mirror from Tomb 1 at Mashan, Jiangling (Hubei). Diameter 9.0 cm. Second half of the fourth century BCE. Photograph from Hubei Sheng Jingzhou Diqu Bowuguan 1985: pl. 34 (B) Silk mirror cover from Tomb 1 at Mashan, Jiangling (Hubei). Diameter 17 cm. Second half of the fourth century BCE. Photograph from Hubei Sheng Bowuguan 2006: 212.

a movable strut within the case that could be raised to support the mirror, which was apparently slotted into a groove in the top surface. Although stands from the Warring States period are rare, a growing number of stands from the Han period, including the example in the Cotsen Collection (no. O-0399a–b; see v. 1: PLS. 64–65), are documented, and representations of mirrors on stands are known from later periods.¹³ Occasionally mirrors are found with rings attached to the knob (FIG. 12C), which were perhaps used to hang them from a stand.

THE RISE OF MIRROR PRODUCTION IN THE NORTH DURING THE LATE SIXTH AND FIFTH CENTURIES BCE

THERE IS LITTLE EVIDENCE for the existence of significant mirror production in the Zhou sphere before the late sixth century BCE. Although mirrors are occasionally found in tombs of the Shang, Western Zhou, and Springs and Autumns periods (see Li Jaang, this volume), they appear almost without exception anomalous in character when their decoration is compared with that on ritual vessels and weapons.¹⁴ The majority of these mirrors were probably acquired by trade or pillage from peoples of the northern and northwestern periphery, where mirrors seem to have long been important. As a number of scholars have pointed out, it was probably interaction with these peripheral peoples that eventually sparked Chinese interest in mirrors.¹⁵

Jin 晉 may have been among the first Chinese states to cast mirrors in significant quantities. Molds and pattern blocks for reflectors have been identified among the casting debris at a foundry at the site of its capital at Houma (Shanxi) 山西侯馬. The molds show that two types of reflectors were cast: conventional flat-faced mirrors, and another, smaller type with a concave reflector termed *yangsui* 陽燧, which may have been used for igniting fire rather than viewing reflections (FIG. 4A–D). The decorative style of these mirror molds does not depart significantly from the styles seen on other Houma molds, though many elements of the Houma style—the interest in naturalistic motifs and variegated textures—were indebted to external influence.¹⁶ One of the molds (FIG. 4A) is decorated with discrete images of animals and birds in naturalistic and active poses similar to those seen on two mirrors found in an early Warring States tomb

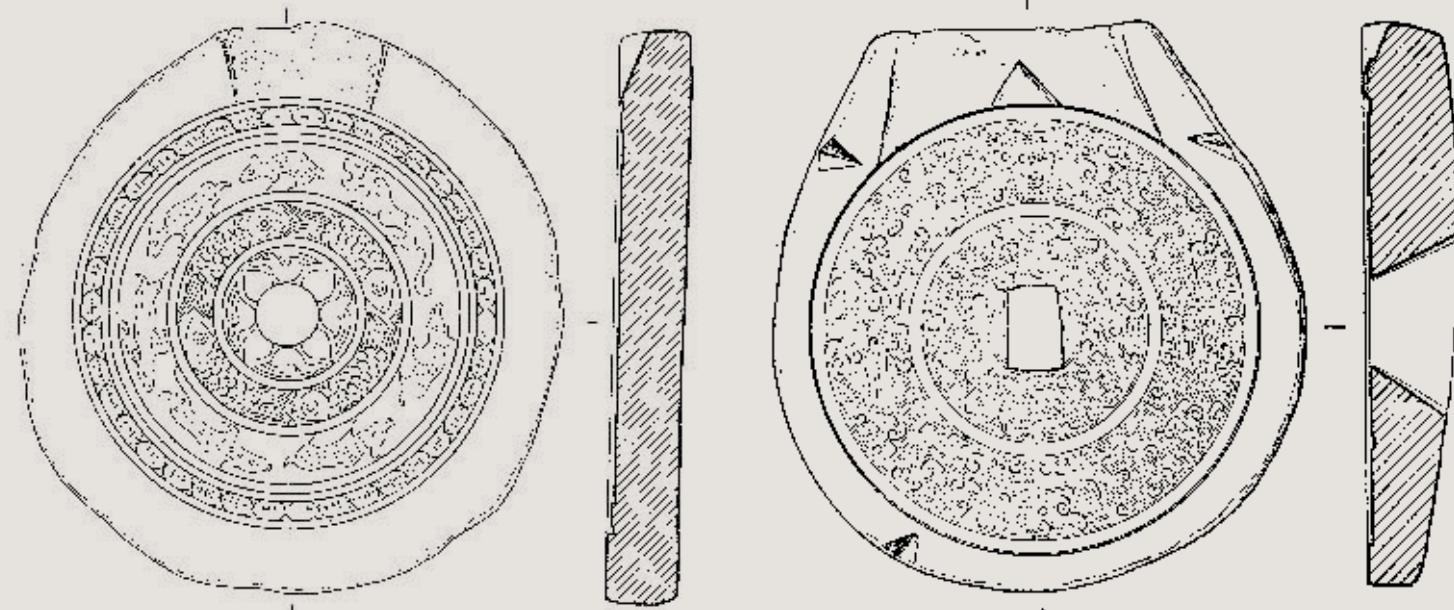


FIGURE 4A

FIGURE 4B

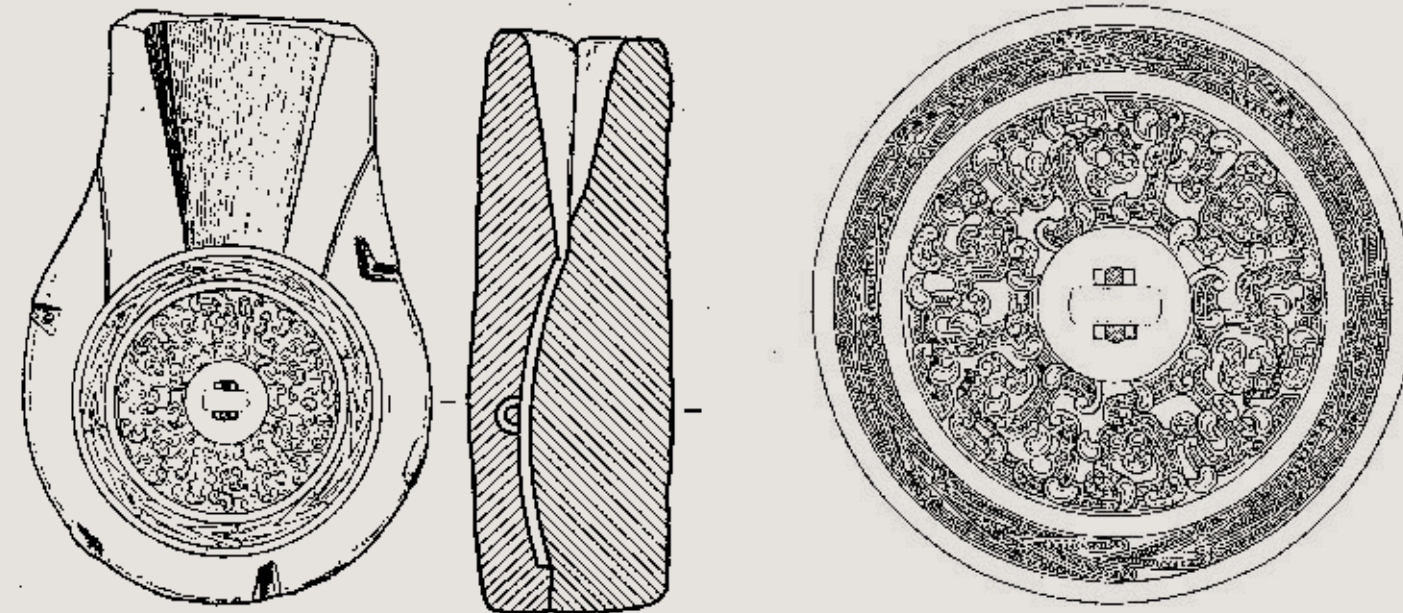


FIGURE 4C

FIGURE 4D

FIGURE 4: Clay molds for reflectors from Houma (Shanxi). Fifth century BCE. (A) Mold for a mirror decorated with bands of fishes and animals within a cowrie border. Drawing from Shanxi Sheng Kaogu Yanjiusuo 1993, v. 1: 175, fig. 89:2. (B) Mold for a mirror decorated with dissolved dragon heads on a granulated ground. Drawing from Shanxi Sheng Kaogu Yanjiusuo 1993, v. 1: 175, fig. 89:1. (C) Top and bottom molds for a yangsui reflector. Drawing from Shanxi Sheng Kaogu Yanjiusuo 1993, v. 1: 177, fig. 90:1. (D) Mold for a yangsui reflector decorated with dragon interlacy. Drawing from Shanxi Sheng Kaogu Yanjiusuo 1993, v. 1: 177, fig. 90:2.



FIGURE 5A

FIGURE 5B

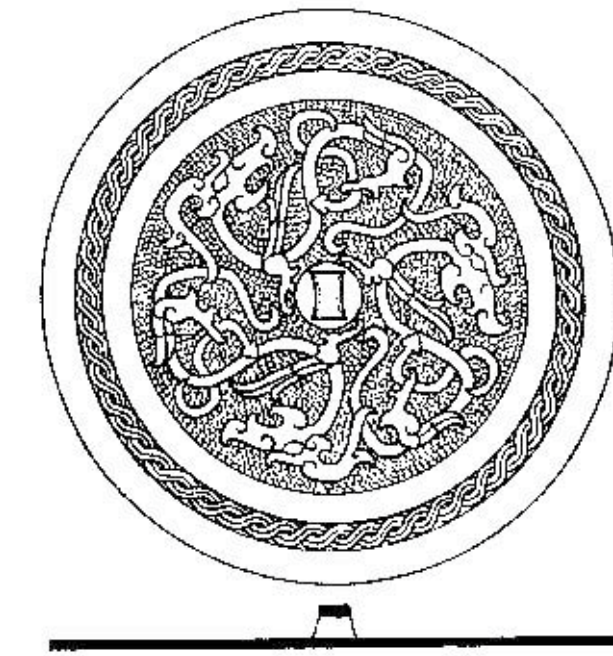


FIGURE 5C

FIGURE 5: (A) Bronze mirror from Tomb 2 at Guandixiang, Zhongning (Ningxia). Diameter 7.4 cm. Sixth to fifth century BCE. Drawing from Ningxia Huizu Zizhiqu Bowuguan Kaogudui 1987: 775, fig. 4:9. (B) Bronze mirror from Tomb 251 at Jinshengcun, Taiyuan (Shanxi). Diameter 9.0 cm. Drawing from Li Xiating and Li Shaoxuan 2009: 125, fig. 124. (C) Bronze mirror from Tomb 7 at Changzi (Shanxi). Diameter 10.2 cm. Drawing from Li Xiating and Li Shaoxuan 2009: 125, fig. 123.

at Guandixiang, near Zhongning in central Ningxia 宁夏中宁关帝乡, the occupant of which was probably a member of one of the nomadic tribes inhabiting the periphery (FIG. 5A),¹⁷ but it is clear that the Houma production of mirrors was not merely for export to the border tribes. A mirror from the tomb of a minister from the Zhao 赵 lineage at Jinshengcun, Taiyuan (Shanxi) 山西太原金胜村 (FIG. 5B) and another from Tomb 7 at Changzi (Shanxi) 山西长子 (FIG. 5C) fall within the range of decorative schemes found on many Houma molds and may well be Houma castings. The mirrors are simple disks lacking the raised rim of later Warring States mirrors and decorated with winged dragons reserved against a granulated ground surrounded by rope-twist and cowrie borders.

Three mirrors in the Cotsen Collection all share the flat rim of the Taiyuan and Changzi mirrors and relate broadly to Houma styles. Of these, mirror O-0304 (see v. 1: PL. 39) is decorated with interlaced dragons on a granulated ground and lacks an outer border, an absence that perhaps indicates a primitive stage and a date as early as the sixth century BCE. Mirror O-0750 (see v. 1: PL. 40), decorated with dragon heads reserved against a granulated ground, is similar to the design on one of the Houma molds (FIG. 4B); and mirror O-0293 (see v. 1: PL. 41) bears abstracted monster masks that represent archaic revivals of the Shang *taotie* 饕餮, a frequent motif on vessel and bell molds at Houma.¹⁸

In contrast to the flat surface and intaglio decoration on the mirrors discussed above, the small mirror O-0800 (see v. 1: PL. 6) is an early example of an important group of mirrors formed of two separately cast layers—a flat undecorated plate, one side



FIGURE 6A

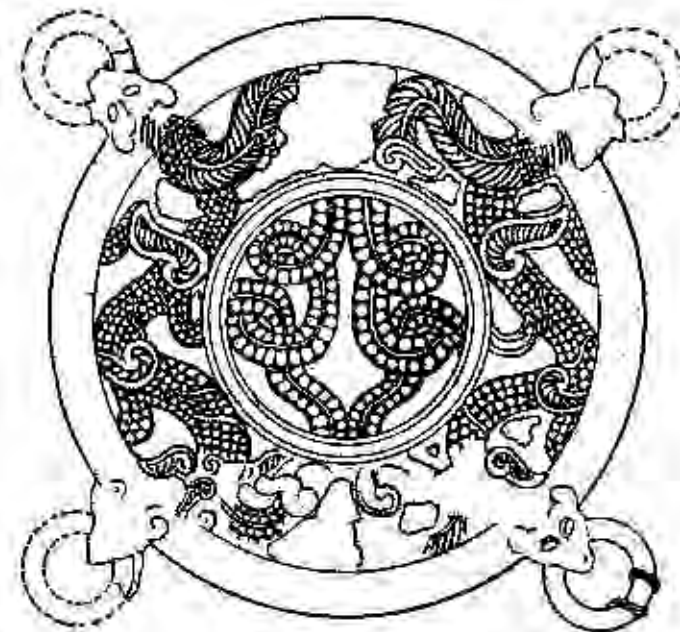


FIGURE 6B

of which formed the reflective surface, and an openwork ornamental layer—that were fitted together after casting.¹⁹ The origin of these double-tier mirrors is something of an enigma, since Chinese bronze casters were perfectly capable of casting high-relief decoration as a single unit. It has been suggested that this two-tier method was adopted so that different alloys could be used, one for the decorative grille on the back and another for the reflective plate itself—a high tin alloy for the front and a high copper alloy for the grille. Such a combination would not only have been stronger than a single alloy, but would also have resulted in a bichromatic effect, the high copper grille contrasting with the more silvery reflector. Although a number of double-tier mirrors with differential alloys from the fourth century BCE are known,²⁰ creating a color contrast between the reflective plate and the openwork grille may not have been the original reason for creating double-layer mirrors. Instead, as O'Donoghue has argued, the fashion for multilayered mirrors may have been indirectly inspired by circular openwork plaques known as *danglu* 當盧 which formed an element of horse trap-pings (FIG. 6).²¹ Although unrelated in function to mirrors, they, like mirrors, originated among the northern tribes, and perhaps in response to this market, their design seems to have been adapted to form the decorative backings for mirrors, at which point the loops originally protruding from their edges were replaced by serpent heads, as on mirror O-0800. O'Donoghue's argument is supported by the similarity between the design of the openwork on mirror O-0800 and a *danglu* from Tomb 7 at Changzi (FIG. 6A). On both of these, the design is composed of a pair of dragon-like winged beasts attacking serpents. Although on the Changzi example, the serpents are confined within the outer ring, a *danglu* from a tomb at Zhongzhou in Luoyang 洛陽中州路 (FIG. 6B) provides a precedent for the arrangement on mirror O-0800.

The slightly larger mirror O-0648 (see v. 1: PLS. 9–10) exemplifies an unusual variant of the two-tier style. Whereas on the smaller mirror the openwork decoration and the knob are cast as a single plate, on this mirror the two concentric bands of dragon interlace are cast separately. Each profile dragon head has a round eye, a curled snout, and a lower jaw that extends into a tongue-like element. The casting of the knob as a three-dimensional dragon is an unusual feature, perhaps inspired by the small bear-like creatures that sometimes form the knobs of mirrors intended for the northern market.²² The use of fine granulation, striations, and curling accents is typical of Houma decorative styles and can

FIGURE 6:
(A) Bronze *danglu* horse trapping from Tomb 7 at Changzi (Shanxi). Diameter 9.0 cm. Drawing from Li Xiating and Li Shaoxuan 2009: 118, fig. 106. (B) Bronze *danglu* horse trapping from Tomb 2717 at Zhongzhou, Luoyang (Henan). Diameter 7.5 cm. Drawing from Zhongguo Kexueyuan Kaogu Yanjiusuo 1959: 105, fig. 73:1.

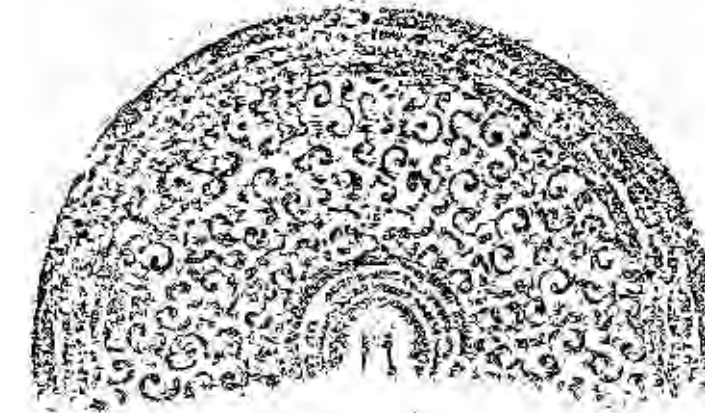


FIGURE 7A

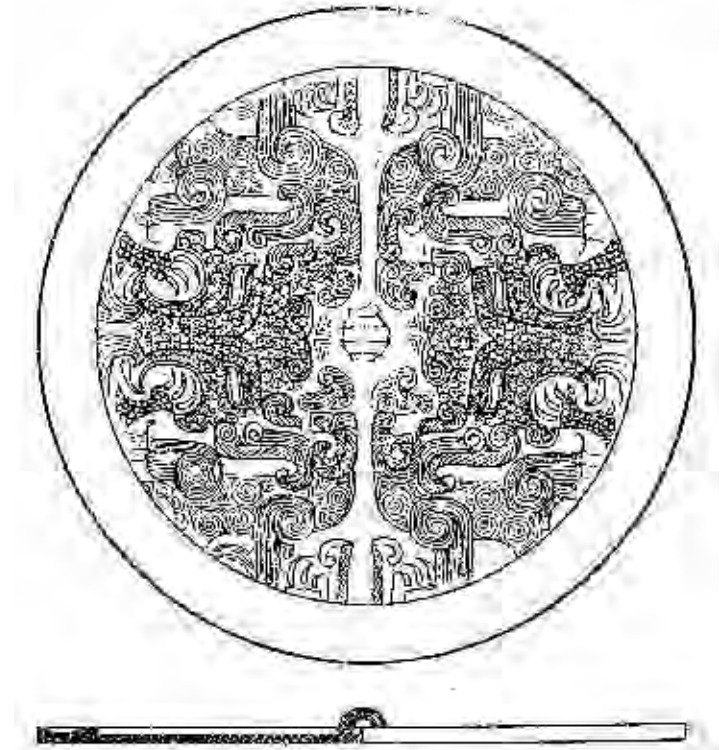


FIGURE 7B

be compared with the decoration on the *yangsui* mirror mold from Houma (FIG. 4D). During the course of the fifth century, dragon interlace gradually became submerged by the curling and feather-like elements, resulting in a uniform patterned ground. This evolution was, of course, not limited to mirrors—it was part of a widespread shift in the ornament of bronzes that also transformed the decoration on vessels and bells. A mirror from Tomb 2719 at Zhongzhou in Luoyang,²³ dated by its excavators to the early Warring States period (FIG. 7A), indicates that this style had been adopted by mirror designers by the end of the fifth century BCE. These fields of curls were to become a stock background for a new class of motifs on mirrors of the fourth and third centuries BCE (discussed below).

NEW DEVELOPMENTS IN HUBEI DURING THE FOURTH CENTURY BCE

AFTER THE ABANDONMENT OF HOUMA at the end of the fifth century BCE, evidence for mirror production in the north becomes fragmentary. Mirrors seem still to have been relatively rare in the north, and although high-quality double-tier mirrors were reported to have been found among the contents of royal Zhou tombs unearthed at Jincun near Luoyang 洛陽金村 between 1929 and 1931, tombs subsequently excavated at Luoyang have not yielded large numbers of mirrors.²⁴ It is in the territory of the southern kingdom of Chu that mirrors are most common and many of the most innovative designs occurred.

Chu further developed the double-tier mirror, probably invented lacquered and textile-covered mirrors, and was the originator of a number of decorative schemes that gradually gained wide popularity. Chu mirror production is, however, still not

FIGURE 7:
(A) Fragment of a bronze mirror from Tomb 2719 at Zhongzhou, Luoyang (Henan). Fifth century BCE. Rubbing from Zhongguo Kexueyuan Kaogu Yanjiusuo 1959a: 91, fig. 60:12. (B) Bronze mirror decorated with *taotie* mask from Tomb 13 at Jiudian, Jiangling (Hubei). Diameter 12.2 cm. Second half of the fourth century BCE. Drawing from Hubei Sheng Wenwu Kaogu Yanjiusuo 1995: 248, fig. 161:4.

fully understood. A large number of mirrors were discovered in the 1920s and 1930s in the Huai 淮 River valley, a region that lay within Chu territory during most of the Warring States period, but subsequent excavations have yielded relatively few mirrors in this region.²⁵ Instead, excavations since the 1950s revealed two other centers of mirror production coexisting in Chu. One of these was associated with its territory to the north of the Yangzi River and was centered on the Chu capital Ying 郢, the site of which is identified with Jinan Cheng in Jiangling (Hubei) 湖北江陵紀南城, and the other, possibly earlier, flourished in the region of Yiyang 益陽 and Changsha 長沙 in northern Hunan.

Mirror production at the Chu capital seems to have specialized in double-tier mirrors, mirrors with textile appliqué, and lacquered and painted mirrors. The workshops apparently started operating relatively late. Even in the first half of the fourth century, mirrors are rare, and it is only from around 350 BCE that they begin to appear regularly in Chu tombs.²⁶ Some designs were not exclusive to Chu and probably enjoyed wide currency in both the north and south. For instance, the aforementioned mirror from Tomb 1 at Mashan (FIG. 3A) is decorated with fields of curls similar to those on the mirror from Zhongzhou in (FIG. 7A). Mirror O-0200, decorated with a *taotie* mask (see v. 1: PLS. 13–14), also exemplifies the difficulty of defining regional styles. On it, the



FIGURE 7C

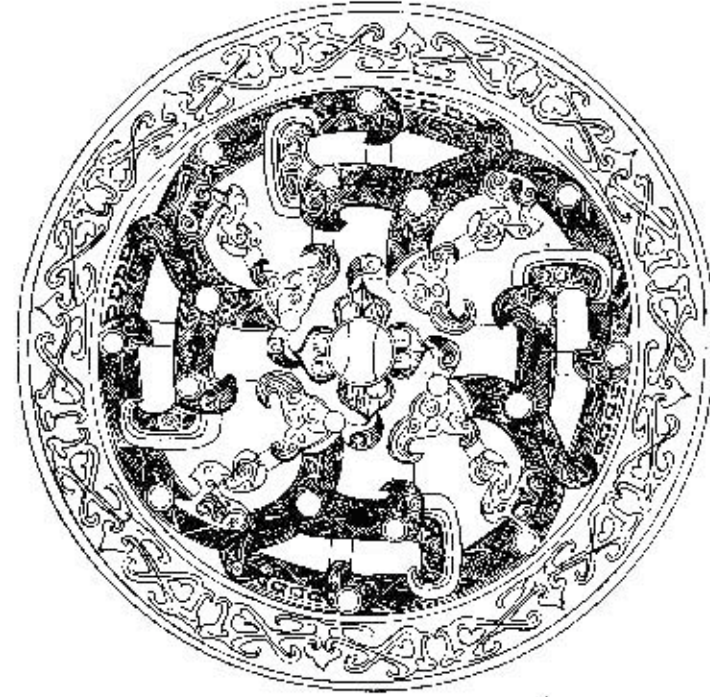


FIGURE 8A

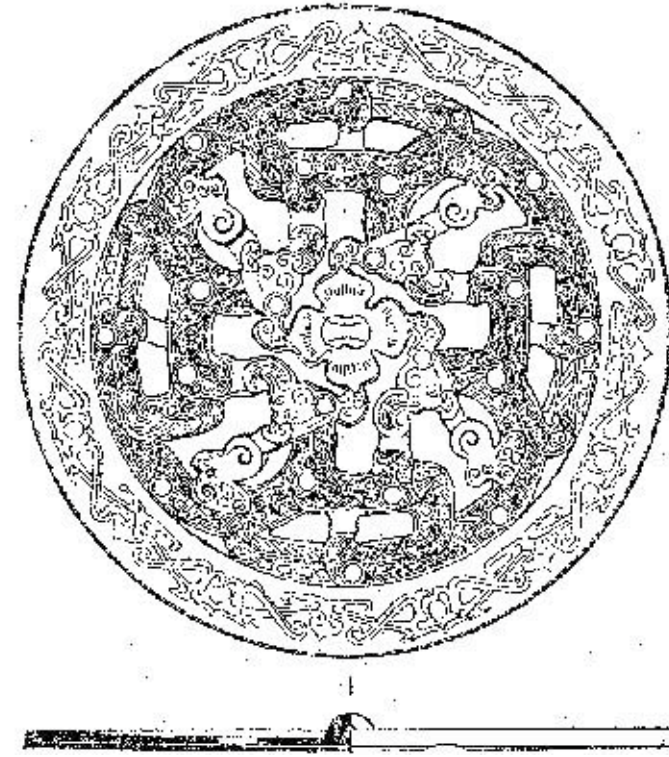


FIGURE 8B

FIGURE 7:
(c) Decoration on a bronze *nao* bell from Tomb 2 at Baoshan, Jingmen (Hubei). Second half of the fourth century BCE. Drawing from Hubei Sheng Jing Sha Tielu Kaogudui 1991: 114, fig. 70 (D): 2.

FIGURE 8:
(A) Mirror from Tomb HM293 at Daobei, Luoyang (Henan). Diameter 14.8 cm. Fourth century BCE. Drawing from Luoyang Shi Di'er Wenwu Gongzuodui 1996: 40, fig. 5. (B) Mirror from Tomb 2 at Baoshan, Jingmen (Hubei). Diameter 14.9 cm. Second half of the fourth century BCE. Drawing from Hubei Sheng Jing Sha Tielu Kaogudui 1991: 195, fig. 125:2.

mask is identifiable only by the horizontal S-shaped eyes on either side of a scaly nose and above a pair of three-taloned claws, its other features having become virtually indistinguishable. Interest here has shifted away from individual motif to pattern, texture, and linear rhythm. Although a similar mirror is illustrated by Umehara Sueji as having come from Jincun,²⁷ and another was excavated from a tomb at Luoyang,²⁸ an almost identical example was also found in a late fourth-century Chu tomb at Jiudian 九店 in Jiangling (FIG. 7B). While it is possible that the Jiudian mirror may have been an import from the north, it is more likely that it was cast in Chu, since a similar mask also occurs on a type of bronze bell known as a *nao* 铙 or *zheng* 钲 from Tomb 2 at Baoshan, a type of bell common in Chu tombs (FIG. 7C).²⁹

Double-tier mirrors were also shared between Luoyang and Chu. The contents of an unrobbed fourth-century BCE tomb at Daobei 道北 in Luoyang (FIG. 8A) reflect very clearly the shift in importance from ritual bronzes to personal items. Apart from two pottery jars, an insignificant *ling* 铃 bell, and a bronze copy of a jade ornament, its only other contents were a magnificent gilt bronze belt hook with jade inlay and a double-tier mirror.³⁰ This mirror is almost identical in design and dimensions to one of the two mirrors from Tomb 2 at Baoshan (FIG. 8B), differing only in that the Luoyang example was embellished with gold and silver foil, whereas the Baoshan mirror is inlaid with turquoise



FIGURE 9A

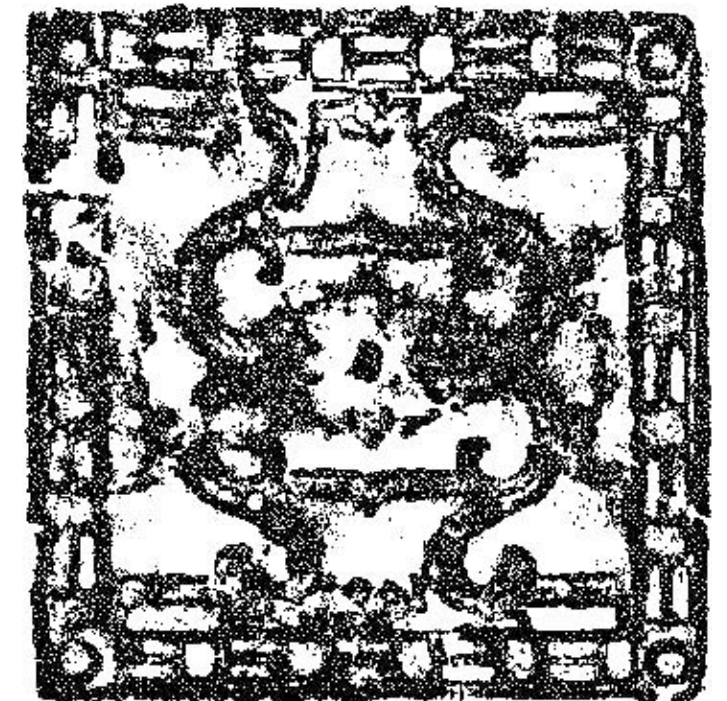


FIGURE 9B

FIGURE 9:
(A) Double-tier mirror from Xigongqu, Luoyang (Henan). Width 11.0 cm. Fourth century BCE. Photograph from Zhongguo Qingtongqi Quanjì Bianjiweiyuanhui 1998: pl. 18. (B) Double-tier mirror from Tomb 13 at Caipo, Xiangfan (Hubei). Width 11.0 cm. Fourth century BCE. Photograph from Xiangfan Shi Kaogudui 2005: 38, fig. 11.

cabochons and coated in lacquer. Given the current state of research, it is difficult to be certain whether the Daobei mirror was an import from Chu or the Baoshan mirror from the north, or whether both regions shared this design. Two double-tier square mirrors in the Cotsen Collection pose equally difficult problems in terms of their origin. Mirror O-0424 (see v. 1: PLS. 4–5), decorated with two pairs of confronted birds grasping serpents (?), is a type that occasionally in the past has been considered to date as early as the sixth century BCE, but the similarity of the X-motifs with spiraled ends in the borders to fourth-century lacquer decoration suggests a later date. Although no similar mirror has been found in a Chu tomb, the manner in which the bird is rendered, with swept back wings and outstretched claws, occurs in Chu lacquer and bronze.³¹ Another double-tier square mirror decorated with four S-serpents separated by ogival petal motifs, mirror O-0295 (see v. 1: PL. 7), also relates both to Chu and northern examples. Although serpents are common in Chu art, they are also found in Jin bronze decoration. Moreover, the ogival form of the petal motifs echoes those on a mirror said to have come from Jincun,³² while the alternating double- and single-scale borders occur on a mirror from Luoyang (FIG. 9A) and another from a Chu tomb at Xiangfan 襄樊 in northern Hubei (FIG. 9B). It seems likely, therefore, that this mirror is a northern rather than a Chu product.

Mirror O-0360 (see v. 1: PL. 8), on the other hand, is decorated with a complex design of writhing dragons that is more typical of Chu approaches to decoration, with its emphasis on sinuous movement. A mirror excavated from Tomb 3 at Zuozhong, to the south of Jingmen (Hubei) 湖北荆門左冢 (FIG. 10A) is decorated with a similar design of dragons. It was originally inlaid with eighteen jade cabochons (the concentric circles on mirror O-0360 may originally also have held inlays), and was further ornamented with black and brown lacquer and painted designs on the rim.

Mirror O-0360 is remarkable for another feature found on mirrors from Chu: the use of textiles as decorative elements. The underside of the grille on this mirror (FIG. 10B) bears the remains of textiles in its corrosion products, but unlike the other ghosts of textiles found on the other Cotsen mirrors, these cannot be the vestiges of a wrapping, since they are sandwiched between the rear of the reflector plate and the decorative grille. As David Scott has argued (this volume), it is therefore likely that the silk fabric was deliberately inserted between the two bronze layers



FIGURE 10A



FIGURE 10B

FIGURE 10:
(A) Double-tier mirror from Tomb 3 at Zuozhong, Jingmen (Hubei). Diameter 22.4 cm. Second half of fourth century BCE. Drawing from *Jingmen Shi Bowuguan and Xiang Jing Gaosu Gonglu Kaogudui* 2006: 178, fig. 125. (B) Rear of grille on Cotsen mirror O-0360 (see v. 1: PL. 8).



FIGURE 11A



FIGURE 11B

FIGURE 11:
(A) Bronze mirror decorated with an embroidered silk textile. Dimensions unknown. Photograph from *Chung* 2005: 22, fig. 1-6. (B) Embroidered textile from Tomb 1 at Mashan, Jiangling (Hubei). Second half of fourth century BCE. Drawing from *Hubei Sheng Jingzhou Diqu Bowuguan* 1985: 60, fig. 2.

during manufacture and would have been partly visible through the openwork grille.

This same feature has been reported on the two mirrors from Tomb 2 at Baoshan, though in both of them the remains of silk textiles survived on the rear of the reflector, rather than on the grille.³³ A number of single-tier mirrors from Chu tombs in the Jingzhou 荆州 region have also been reported as preserving the remains of textiles adhering to their rear surfaces.³⁴ It may be that these textiles represent the vestiges of mirror covers in which they were wrapped, but it is also possible that they are decorative appliques in the manner of the double-tier examples discussed above. These examples suggest that mirror O-0186 (see v. 1: PLS. 51–54) may also possibly be of Chu manufacture. The rear surface of the mirror is covered with a rather coarsely embroidered silk textile bordered with a separate plain textile matching the circumference of the mirror. Although the lacquer parallel adduced by Hanmo Zhang (this volume) implies that this mirror—if genuine—is of Han date,³⁵ an unprovenanced mirror decorated in a similar technique with a design of interlaced serpents (FIG. 11A) matches closely a silk textile from Tomb 1 at Mashan (FIG. 11B). Although a number of questions regarding these two mirrors remain to be resolved, it seems possible that, like the double-tier mirror, they exemplify a little-known Chu tradition of decorating mirrors with textiles.

Two lacquered mirrors in the Cotsen Collection must certainly be Chu products, not only because the vast majority of lacquered objects that have survived come from Chu tombs, but also because their style can be matched to excavated Chu lacquer. The first, mirror O-0185 (see v. 1: PLS. 44–45), is a double-tier mirror decorated with two pairs of addorsed dragons whose exaggerated S-shapes are typical of Chu woodcarving, as exemplified by a screen from Tomb 1 at Tianxingguan, Jiangling (Hubei) 湖北江陵天星观 (FIG. 12A). The small lacquered mirror O-0422 (see v. 1: PL. 50), painted with a pair of birds, can be compared with similar examples from Baoshan Tomb 1 (FIG. 12B) and Tianxingguan Tomb 2 (FIG. 12C). Although the fluid outlines of the birds and scrolling flourishes are typical of lacquer painting, the manner in which the feathers are crosshatched is probably derived from embroidered silk designs such as those found in Tomb 1 at Mashan (FIG. 12D). The fashion for painting mirror backs was to survive into the Han period: mirror O-0278 (see v. 1: PLS. 46–49), ascribed to the Warring States or Western Han period in the catalogue, is more likely to date from the latter, both on the basis of excavated parallels and on the presence of the “flying gallop” and “Parthian shot” poses present in the outer band.³⁶

Mirror O-0423, inlaid with jade and turquoise (see v. 1: PL. 11), on the other hand, is possibly a northern product. Although a few mirrors with inlays of jade cabochons are known from the Jiangling region, such as the mirror from Tomb 3 at Zuozhong,



FIGURE 12A



FIGURE 12B



FIGURE 12C

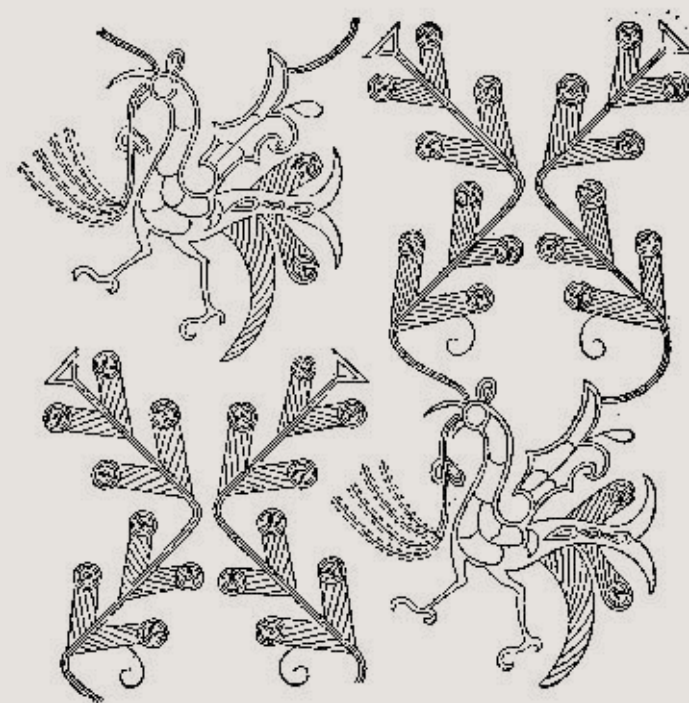


FIGURE 12D

FIGURE 12: (A) Lacquer screen from Tomb 1 at Tianxingguan, Jiangling (Hubei). Length 48.8 cm. Middle or second half of the fourth century BCE. Drawing from Hubei Sheng Jingzhou Diqu Bowuguan 1982: 101, fig. 24.2. (B) Painted bronze mirror from Tomb 1 at Baoshan, Jingmen (Hubei). Diameter 19.7 cm. Second half of the fourth century BCE. Drawing from Hubei Sheng Jing Sha Tielu Kaogudui 1991, v. 1: 36, fig. 22. (C) Painted mirror from Tomb 2 at Tianxingguan, Jiangling (Hubei). Middle or second half of the fourth century BCE. Drawing from Hubei Sheng Jingzhou Bowuguan 2003: 105, fig. 88. (D) Embroidered design on a textile from Tomb 1 at Mashan, Jiangling (Hubei). Second half of the fourth century BCE. Drawing from Hubei Sheng Jingzhou Diqu Bowuguan 1985: 65, fig. 53.

the use of jade to form the complete upper tier is unknown at Jiangling. The closest parallel to mirror O-0423 is a famous mirror with jade and glass inlay reputed to be from Jincun and now in the Harvard University Museums (ex Winthrop collection; see Falkenhausen, this volume, FIG. 3).³⁷ Although the abstracted mask that forms the jade inlay on mirror O-0423 is quite different from the barley-twist jade ring of the Winthrop mirror, they share the unusual feature of a knob fashioned of non-bronze materials, glass in the case of the Winthrop piece and turquoise on mirror O-0423. Moreover, the undulating surface and fine striations on the jade inlay on mirror O-0423 parallel jades known from Jincun and suggest a date no earlier than the third century BCE.

It is likely that a number of other regions also produced double-tier mirrors. Whether this is true of the southwest is uncertain; a double-tier mirror decorated with dragons from a tomb at Xiaotianxi, Fuling (Chongqing) 重慶涪陵小田溪, may be an import from Chu.³⁸ But other specimens display styles that link them with Shandong in the east. The discovery of Han-period mirror molds within the site of the Qi capital at Linzi 臨淄 is evidence that Shandong was a center of mirror production during the Han, and isolated finds of mirrors from Warring States-period tombs hint that it may already have been a significant producer of mirrors earlier.³⁹ A large inlaid fourth- or third-century BCE mirror found in a tomb at Shangwangeun 商王村 near Linzi (Shandong) 山東臨淄 differs enough from inlaid mirrors found elsewhere to suggest the existence of a distinctive Qi style.⁴⁰ At least three double-tier mirrors have been published from Linzi, including two almost identical with a mirror from Jiangling in Hubei;⁴¹ but two single-tier mirrors discovered in other middle- to late Warring States-period tombs at the site are as yet unparalleled elsewhere. One of these is decorated with a pattern described as “brocade” and the other with S-shaped dragons on a granulated ground.⁴² An exceptionally large mirror inlaid with gold thread, turquoise, and with silver bosses, excavated from the site of the capital of Qi at Linzi,⁴³ is furnished with three rings on the circumference in place of the usual central knob. This tri-ring arrangement was probably invented as more manageable way of holding heavy mirrors. This feature is paralleled on two other impressive Warring States-period mirrors, probably both products of Qi foundries, which were buried in Han period tombs: a mirror from Sanlidun, Lianshui (Jiangsu) 江蘇漣水三里墩, and one from the tomb of King Zhao Mo 趙昧 of Nanyue 南越 (d. 122 BCE) at Xianggangshan, Guangzhou

(Guangdong) 廣東廣州象岡山, on which the cords linking the rings still survive.⁴⁴ Future discoveries in Shandong and elsewhere are likely to expand our knowledge of Qi mirror production.

HUNAN MIRROR PRODUCTION AND THE INFLUENCE OF TEXTILE AND LACQUER DESIGNS

NOTWITHSTANDING THE FINE TWO-TIER and lacquered mirrors produced in the Jiangling region during the fourth century BCE, it was in the southern regions of Chu territory in the vicinity of modern Yiyang and Changsha, that Chu mirror production seems to have reached its zenith. Whereas fewer than fifty mirrors have been found in the more than a thousand tombs excavated in the Chu cemeteries at Yutaishan 雨臺山 and Jiudian near the Chu capital, well over five hundred mirrors have been excavated from tombs in Hunan attributed by Chinese archaeologists to Chu, and about 25 percent of these contained mirrors.⁴⁵ Unfortunately, the chronology of Chu tombs in Hunan, and particularly of those in Changsha, is a matter of debate, and it is likely that the dates ascribed to some tombs by Chinese archaeologists may be too early.⁴⁶

If one were to accept the Chinese dating, one would conclude that mirror production in Hunan began earlier than in the Jiangling region and that it was remarkably innovative for an outlying region.⁴⁷ Alternatively, it is possible that the majority of Hunan mirrors fall into the late fourth and third centuries and therefore largely postdate the abandonment of the Chu capital at Jiangling in 278 BCE. While two-tier mirrors and mirrors with painted or lacquer designs common in the Jiangling region occur rarely in Hunan,⁴⁸ the great majority of Hunan mirrors fall into two broad decorative categories: (1) those decorated with fields of feathers and curls (represented by mirrors O-0420, NO-1504, O-0646, NO-1506, and no. O-0398; see v. 1: PLS. 17–21, 33–34); and (2) those with triangles and spirals (O-0279, O-0833, O-0778, and O-0180; see v. 1: PLS. 23–27). In both cases, the decorated surface forms a ground that is overlaid with a new range of motifs in relief. Unlike the double-tier mirrors, motif and ground were cast as a single unit; in a broad sense, however, these styles could also be said to be two-tier, inasmuch as the main motifs overlaid or float above the base ground. Such two-tier decoration has no precedent in ritual bronzes, and it is possible that it was devised as a cheaper alternative to the double-tier mirrors.

The “Feather-and-Curl” Ground Mirrors

The feather-and-curl ground on Hunan mirrors probably derived from the feather-and-curl grounds that gradually displaced interlacery on bronze vessels during the sixth and fifth centuries. This process began in Chu, and it is likely that the appearance of the feather and curl on mirrors represents a borrowing from vessel decoration. At Jiangling, this ground pattern is surprisingly unusual—a rare instance appears on the mirror from Tomb 1 at Mashan (FIG. 13A)—but it became the stock-in-trade of the Hunan bronze casters. It became the staging ground for a new range of motifs, such as the so-called hooked-T or *shan*-motif, petals, and other relief elements, which transformed these monotonous patterns into much more appealing designs.

A key aspect of these designs is that, unlike the northern fifth-century BCE single-layer mirrors (such as mirrors O-0304, O-0750, and O-0293 [see v. 1: PLS. 39–41]), on which the motif and background were carved on a single pattern model, on these mirrors the ground and motif were impressed using separate models or stamps. Low ridges forming a faint grid visible in the feather-and-curl ground imply that the pattern was built up by repeatedly impressing a small stamp into the mold, and the imperfect registration between each unit resulted in a narrow seam. These seams are visible in a number of mirrors in the Cotsen Collection, such as mirrors O-0420, NO-1504, and O-0646 (see v. 1: PLS. 17–19, 21), but it is noticeable that they do not continue onto the motifs. This discrepancy implies that the background was first impressed with the feather-and-curl design and that a separate pattern block for the motifs was somehow overlaid or inlaid into this surface. Whatever the exact method used, the textural contrast between the smooth and often slightly concave surfaces of the motifs and their finely textured background is one of the most pleasing aspects of Warring States mirror design.

The most common subcategory of the feather-and-curl ground is defined by large hooked-T motifs, characteristically arranged in a radial arrangement with the longer, central stem extending almost to the outer border. (FIG. 13A) The hooked-T mirrors were the most common of all Warring States mirrors, and their production was not limited to Chu—molds for T-motif mirrors have been found as far north as Yi Xian (Hebei) 河北易縣—but their overwhelming frequency in Hunan suggests that they may have been invented in the south.⁴⁹ Even on the earliest examples, the motifs are already full-fledged independent units,

and their resemblance to the modern form of the character *shan* 山 (mountain) has prompted some Chinese scholars to suggest that the motif embodied a belief in the sacred role of mountains.⁵⁰ Although it is possible that this unusual motif did acquire a symbolic meaning, perhaps even one connected with the notion of a magical mountain, it should be noted that its hooked, sharply angular slanting form is conspicuously different from graphs of the *shan* character in use during the Warring States period (FIG. 13B). Instead, the form echoes the units of decoration used to compose networks of interlocking-T figures that occasionally occur in the decoration of bronze vessels from the Shang period onward. Although this similarity has been recognized by a number of scholars, the origin of this pattern in textile design has been less widely recognized. Such slanted patterns are found in Warring States-period woven silk fabrics (FIG. 13C) and are even more common in basketry (FIG. 13D). Indeed, the interlocking-T design is a pattern that is fundamental to many textile traditions worldwide, virtually always oriented along diagonal axes.⁵¹ The theory that the T-motif was an adaptation of a textile pattern is supported by another variant of the feather-and-curl mirrors. On these, the feather-and-curl ground is overlaid with an angular zigzag pattern (FIG. 14A) enclosing four-petal rosettes. Whereas the rosettes were a ubiquitous motif in various media by the fourth century, the only possible source of the zigzag can be rhomboid designs that frequently occur on Warring States textiles (FIG. 14B).

Other motifs—heart-shaped petals and a loop-like figure sometimes described as a flail—occurring on the feather-and-curl ground, either by themselves, as on mirror NO-1506 (see v. 1: PL. 20), or as subsidiary motifs interspersed between the hooked Ts, as on mirrors O-0420 and NO-1504 (v. 1: PLS. 17–19), may also have originated as fragments of designs invented in other artistic media. Dohrenwend has suggested that both of these motifs may have been adapted from the wings of peacock-like birds that appear on the top of a late Warring States-period lacquer box of probable Chu origin (FIG. 15).⁵² While the lacquer parallel she adduces is striking, the filament-like thinness of the outlines and the dotting embellishment of this design are unlike the broader strokes common in most lacquer painting and instead seem to evoke the fine outlines and stitching of the embroidered textiles from Tomb 1 at Mashan (FIG. 12D). The Mashan designs, which frequently include rosette and bird motifs, are characterized by similar fine outlines, slanting striations, and also the fine granular

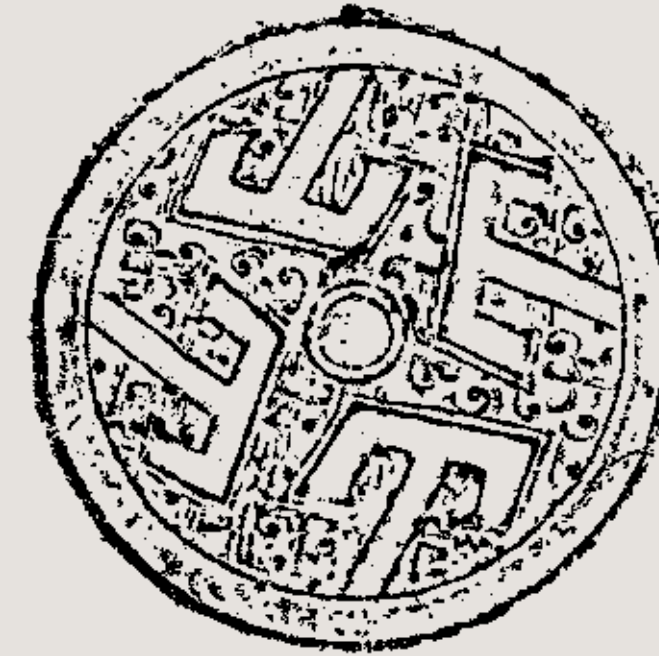


FIGURE 13A



FIGURE 13B

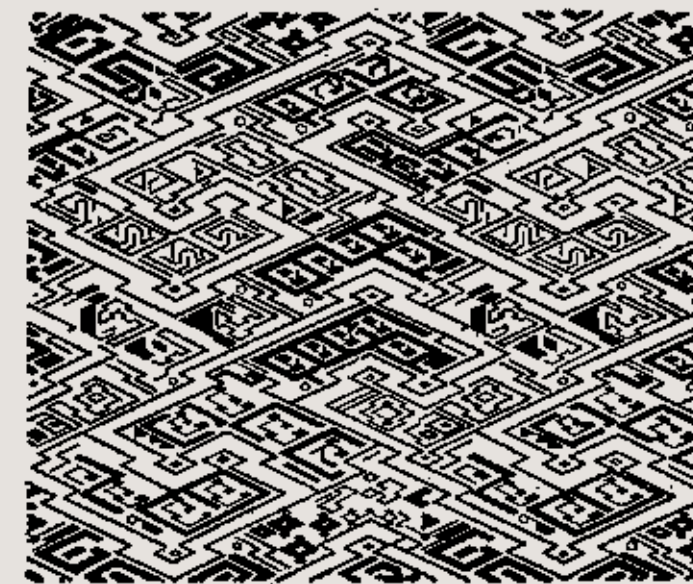


FIGURE 13C

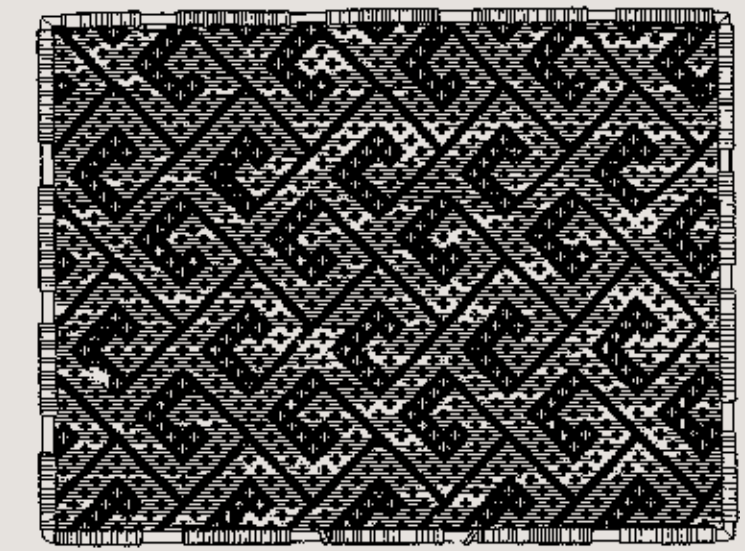


FIGURE 13D

FIGURE 13: (A) Bronze mirror from Dongtang, Changsha (Hunan). Fourth century BCE. Diameter 11.9 cm. Rubbing from Gao Zhixi 1991: 44, fig. 8 (B) Examples of Chu graphs of the *shan* character from a Chu silk manuscript and Chu bamboo slip. From Hong Juntao and Liu Chengyu 1998 (*shang*): 543. (C) Silk damask from Tomb 1 at Mashan, Jiangling (Hubei). Second half of the fourth century BCE. Drawing from Hubei Sheng Jingzhou Diqu Bowuguan 1985: 44, fig. 36. (D) Woven bamboo box from Tomb 410 at Jiudian, Jiangling (Hubei). Fourth century BCE. Drawing from Hubei Sheng Wenwu Kaogu Yanjiusuo 1995: 320, fig. 215.

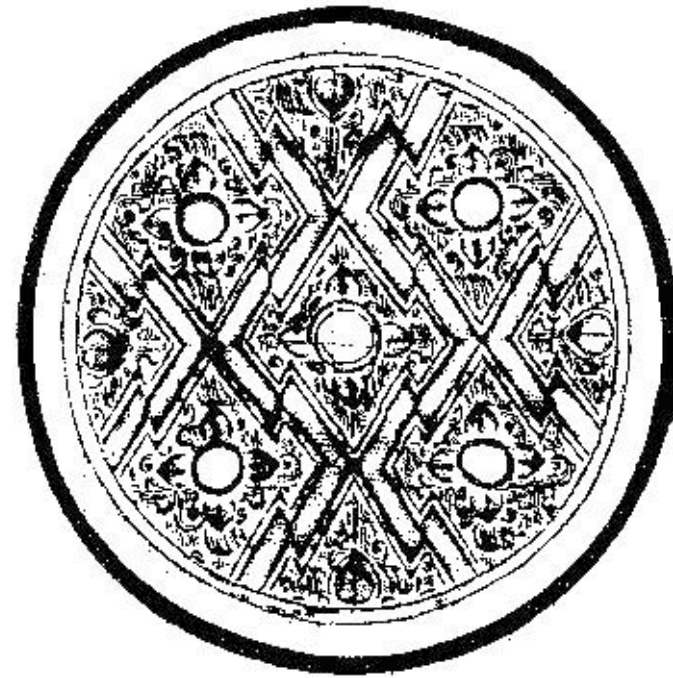


FIGURE 14A



FIGURE 15

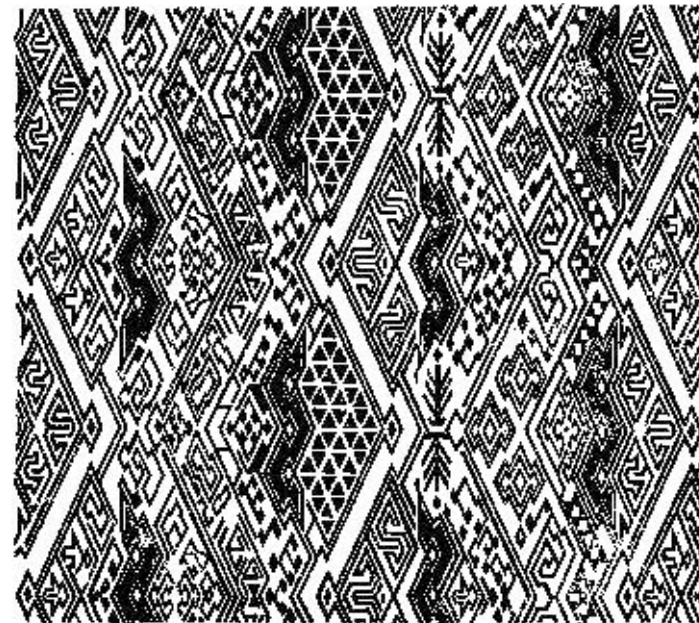


FIGURE 14B

texture produced by the use of chain stitch. It is possible that some of these technical devices were imitated in lacquer and perhaps, at second remove, by the mirror designers.

Another group of feather-and-curl mirrors associated with Hunan and represented by mirror O-0398 (see v. 1: PLS. 33–34) also exhibits independence from traditional bronze design. This group, which flourished no earlier than the late Warring States period, is decorated with strange beasts with bulbous bodies and bear- or rat-like features outlined in thread relief.⁵³ Unlike the hooked-T schemes, which are essentially static designs, these motifs are imbued with a sense of sweeping movement reminiscent of lacquer painting and interact with one another and with the borders in a psychologically convincing and sophisticated manner. One foot of the beasts on mirror O-0398 perches on the inner border, while the other steps on a cloud scroll; the beast's left arm reaches toward the outer border, while his right grasps another cloud; his long tail is in turn grasped in the open jaws of a smaller rodent creature perched on a cloud. As in the previous group, there is a striking contrast between the smooth, undecorated surface of the motifs and the furry ground, as though the motifs were created using separate patterns that were somehow overlaid onto the background in the mold.

FIGURE 14:
(A) Bronze mirror from Tomb 1491 at Changsha (Hunan). Diameter 11.8 cm. Fourth to third century BCE. Rubbing from Hunan Sheng Bowuguan et al. 2000, v. 1: 243, fig. 186. (B) Textile design from Tomb 2 at Baoshan, Jingmen (Hubei). Second half of the fourth century BCE. Drawing from Hubei Sheng Jing Sha Tielu Kaogudui 1991: 174, fig. 108.

FIGURE 15:
Lacquered box and cover formerly in the John Hadley Cox Collection. Diameter approximately 20 cm. Third to second century BCE. Photograph from Sickman and Soper 1960: pl. 12a.

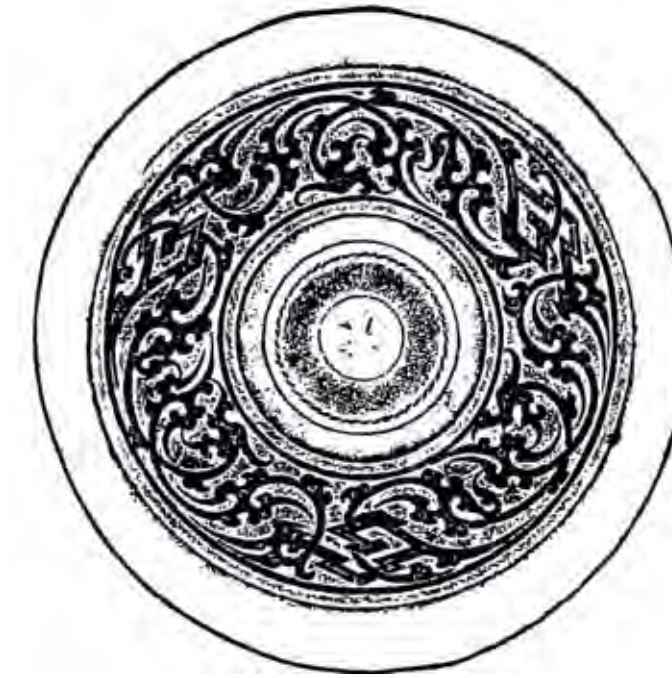


FIGURE 16A



FIGURE 16B

FIGURE 16:
(A) Mirror from the tomb of Liu Wuzhi at Yangzhou (Jiangsu). Diameter 18.4 cm. Early Han period, second century BCE. Rubbing from Yangzhou Shi Wenwu Kaogu Yanjiusuo 2010: 32, fig. 34, and 34, fig. 42:2. (B) Drawing of the decoration on Cotsen mirror O-0833 (see v. 1: PL. 24).

Spiral And Triangle Ground Mirrors

SECOND IN POPULARITY among Hunan mirrors only to the feather-and-curl group were mirrors decorated with a ground of spirals and triangles. Like the former, this scheme was ultimately derived from traditional bronze decor. And as in the case of the feather-and-curl group, spiral-and-triangle mirrors depended for their appeal not so much on the ground itself as on the motifs that were developed to overlie it. For some reason, none of the motifs associated with the feather-and-curl ground were considered appropriate to combine with this ground. Instead, spiral-and-triangle-ground mirrors are typically decorated with elegant scrolling dragon and bird motifs well exemplified by mirrors O-0279, O-0833, O-0778, and O-0180 (see v. 1: PLS. 23–27). It is possible that this dichotomy reflects the relative dates of the two groups, since the spiral-and-triangle ground appeared later than the feather-and-curl.⁵⁴ Indeed, some of the mirrors in this category may have been cast in the Qin or early Western Han period.⁵⁵ Mirror O-0833 (see v. 1: PL. 24), for example, may date from the early Han period on the basis of its similarity to a mirror from the early Han-period tomb of Liu Wuzhi 劉毋智 at Yangzhou (Jiangsu) 江蘇揚州 (FIG. 16A).⁵⁶ The design consists of three ribbon-like dragons with gaping mouths and twin horns that gracefully interlace with cloud scrolls and the rhomboids (FIG. 16B). This combination of sweeping curvilinear rhythms and sharply angular forms was one of the striking decorative innovations of the late Warring States period and was to exert a profound influence on Western Han ornament.

In a variant of the spiral-and-triangle group, the scroll was replaced by four separate dragons, ogival petal forms were sometimes added to the inner ring, and a lobed border was placed at the outer edge (FIG. 17A, B). The exceptionally fine mirror O-0720 (see v. 1: PL. 38) belongs to this group; its beautifully patterned ground utilizes the familiar spirals and triangles but adds dotting and rhomboid outlines, over which are laid four dragons with twisted bodies, reverted heads, and bared fangs, interspersed with small birds perched on the four central petals.

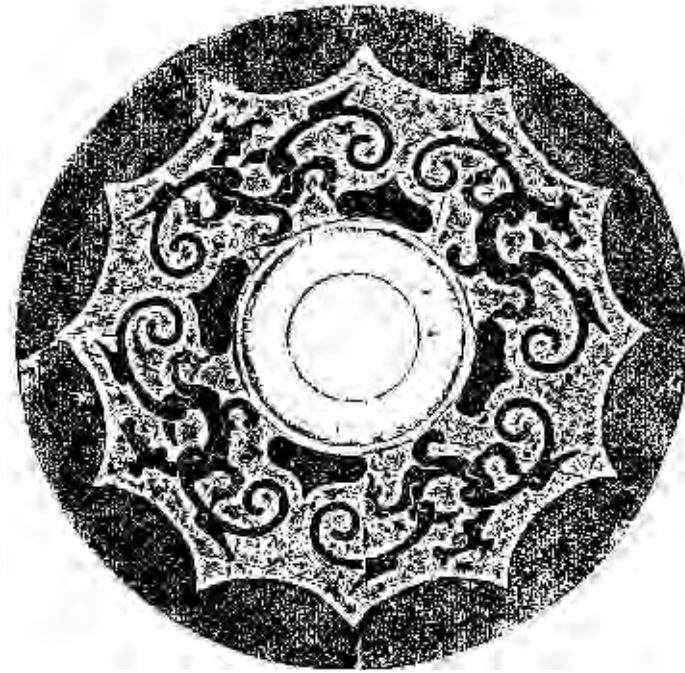


FIGURE 17A

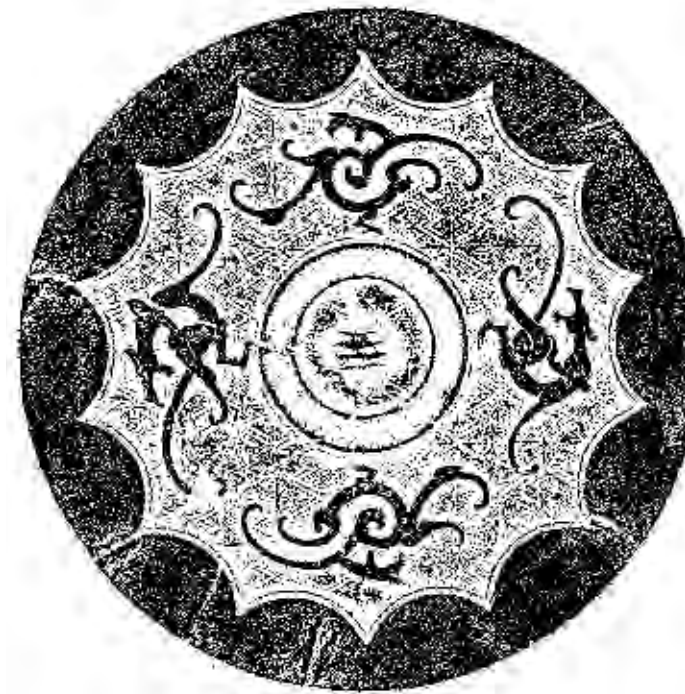


FIGURE 17B

FIGURE 17:
(A) Mirror from Tomb 1074 at Changsha (Hunan). Diameter 14.0 cm. Third century BCE. Rubbing from Hunan Sheng Bowuguan et al. 2000: 259, fig. 235. (B) Mirror from Tomb 78 at Wangpo, Xiangyang (Hubei). Diameter 14.5 cm. Third to second century BCE. Rubbing from Hubei Sheng Wenwu Kaogu Yanjiusuo et al. 2005: 294, fig. 220:1.

THE RISE OF THE TEXTILE PATTERN GROUND
AND THE PROBLEM OF NORTHERN STYLES
IN THE THIRD CENTURY BCE

IN CONTRAST TO THE PRECEDING GROUPS, all closely linked with Chu, at some point in the third century, probably in the second half, a new style of mirror emerged that is more closely associated with the rising power of Qin 秦 and other northern centers. This style is also defined by geometric grounds, some still close to the spiral-and-triangle group, but others directly imitating the interlocking-T pattern of textile inspiration. The similarity of this ground to the interlocking-T patterns found on textiles has suggested to some scholars that actual woven fabrics impregnated with wax were used to impress the mirror mold.⁵⁷ Close inspection of the mirror designs, however, suggests that they are free adaptations rather than exact replicas of textile patterns—the granulation occurring on the bronze versions, for instance, is not found in such textile designs and would be impossible to produce there.

The motifs overlaid on this ground are equally novel. Unlike the dragon-scroll mirrors in which the scrolls are linked into a continuous lace-like network that largely obscures the background, in this group the motifs are characteristically discrete units, and their sparse distribution allows the background surface to play a more important role in the overall design. A T-pattern mirror from a Qin tomb at Gaotai in Jingzhou (Hubei) 湖北荆州高台 (FIG. 18A) exemplifies a well-known type overlaid with three or four abstracted dragons, their bodies convoluted into rhomboid forms. Although a single example is reported from Changsha,⁵⁸ the majority of this type are associated with regions north of the Yangzi, with at least two said to have come from Luoyang.⁵⁹

Much rarer is a mirror in the Cotsen Collection decorated with a remarkably realistic rendering of two warriors confronting tigers: mirror O-0460 (see v. 1: PLS. 55–56). Devoid of the stylization characteristic of previous mirror decor, the half-crouching warriors wield shields and long swords, their bulging eyes focused on their adversaries. Mirror O-0460 can be confidently identified as a Qin product on the basis of its similarity to an almost identical mirror discovered in a Qin-period tomb at Shuihudi, Yunmeng, in northern Hubei 湖北雲夢睡虎地 (FIG. 18B). This region had formerly been part of Chu territory, but the lacquer, bronze, and ceramic assemblages from the Shuihudi tombs are so overwhelmingly distinct from those of late Chu tombs that there



FIGURE 18A



FIGURE 18B

FIGURE 18:
(A) Bronze mirror from Tomb 1 at Gaotai, Jingzhou (Hubei). Diameter 13.5 cm. Third century BCE. Drawing from Hubei Sheng Jingzhou Bowuguan 2000: 102, fig. 84:2. (B) Mirror from Tomb 9 at Shuihudi, Yunmeng (Hubei). Diameter 10.4 cm. Third century BCE. Rubbing from Yunmeng Shuihudi Qinmu Bianxiezu 1981: 46, fig. 62.

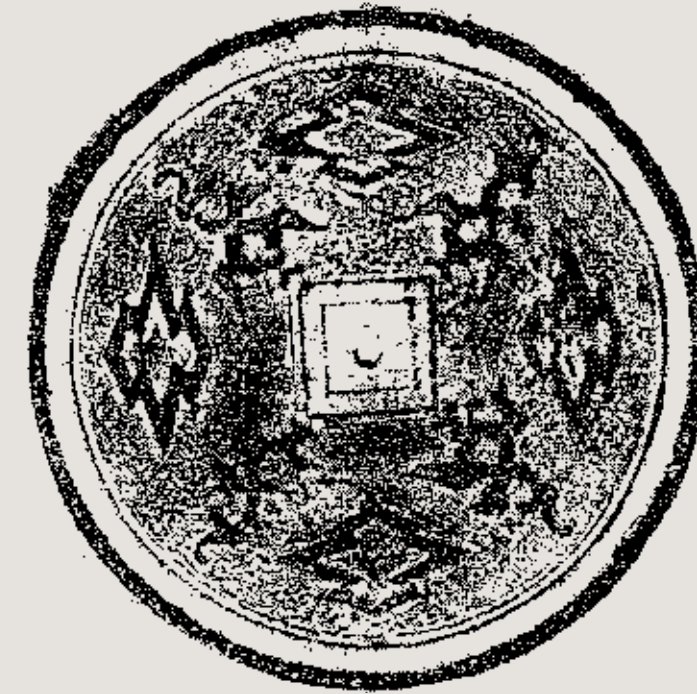


FIGURE 19A



FIGURE 19B

FIGURE 19:
(A) Bronze mirror from Tomb 26 at Laodaojing cemetery, Xinxiang (Henan). Diameter 10.0 cm. Third century BCE. Drawing from Zhengzhou Daxue Lishi Xueyuan Kaoguxi and Henan Sheng Wenwu Guanliju Nanshui Beidiao Wenwu Baohu Bangongshi 2008: 28, fig. 12:1. (B) Mirror from Tomb 1202 at Mangshan, Luoyang (Henan). Diameter 12.0 cm. Third century BCE. Rubbing from Luoyang Shi Di'er Wenwu Gongzuodui: 1999: 24, fig. 12.

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can be no doubt their contents are Qin rather than Chu products. Precedents for the man–animal combat theme can be found in the so-called pictorial vessels of the late Spring and Autumn and early Warring States periods, but the figures on the mirrors show a much more advanced command of the three-quarter viewpoint. The only other instance of a man–animal combat theme is the famous mirror in the Hosokawa 細川 Collection inlaid in gold with a sword-wielding horseman confronting a tiger, said to have come from the royal Zhou tombs at Jincun.⁶⁰

Mirror O-0458 (see v. 1: PL. 22) is a T-ground mirror decorated with zigzag rhomboids alternating with phoenix-like birds. An almost identical example has been found in a late Warring States tomb at the Laodaojing cemetery in Xinxiang city, north of Zhengzhou (Henan) 河南新鄉老道井 (FIG. 19A), a region that was originally part of the territory of Wei 魏 but which by this period may already have been absorbed by Qin. The ground of mirror O-0457 (see v. 1: PLS. 29–30), although less clearly of textile inspiration, is decorated with motifs that link it to this group. Although its starburst center is familiar on Hunan mirrors,⁶¹ the motif of small bird figures perched on a rhomboid is most frequently found in Qin-period tombs in Hubei and farther north, as exemplified by a mirror from Luoyang (FIG. 19B).⁶²

On mirror O-0131 (see v. 1: PL. 35), an ogival frame divides the field into inner and outer zones, among which small figures of birds and dragons are interspersed over the lozenge ground. The monumental mirror O-0407 (see v. 1: PLS. 36–37) possesses a similar arrangement but with the textile ground replaced with spirals (curiously reminiscent of the grounds of curls that were common on jade *bi* 璧 disks of this period) and the bird motifs almost totally abstracted into scrolls. It is likely that these two mirrors date from no earlier than the very end of the Warring States period, if not later, since their only parallels come from Qin and Western Han archaeological contexts.⁶³

The archaeological distribution of the textile-ground mirrors discussed above lends support to the theory of a northern mirror style traditionally associated with Luoyang.⁶⁴ Certainly, the combat scene on the Shuihudi mirror and on mirror O-0460 (see v. 1: PLS. 55–56) derives from a realistic tradition associated more with the north than with the south. Unfortunately, our evidence for mirror production in the north during the fourth and third centuries BCE is fragmentary, and the numbers of excavated examples count in the hundreds rather than thousands. It is clear that mirrors were intermittently used in Qin since at least as early as the

early Warring States period, but there is little evidence for a distinctive style.⁶⁵ A similarly conspicuous paucity of mirrors has been noted among the hundreds of tombs unearthed in the vicinity of Luoyang.⁶⁶ Mirror production in the north was, however, not without significance. Mirror O-0884 (see v. 1: PL. 12) represents a late stage in the degeneration of the feather-and-curl ground in which the “feathers” have become stereotyped into a lifeless grid. This mirror would be of little consequence were it not for the fact that a similar mirror found in a Warring States tomb at Luoyang is inscribed on its inner ring with the characters *qian jin* 千金 (“thousand metals”), a phrase that seems to refer both to the value of the mirror and, by extension, to a wish for wealth for the owner.⁶⁷ Since no inscribed mirrors have been found in Chu territory, it seems that these two mirrors represent the birth of the practice of inscribing mirrors with auspicious phrases that was to become widespread during the Han period (see Brashier, this volume).

FIG. 19. A. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE. B. Mirror O-0458, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

THE LEGACY OF WARRING STATES MIRRORS

FIG. 20. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

THE INFLUENCE OF WARRING STATES MIRRORS ON later mirror traditions was seminal. It was during this period that mirror design achieved independence from the decor of ritual bronzes and developed truly novel styles: double-tier mirrors, lacquered mirrors, and inlaid mirrors all enjoyed their floruit during the Warring States period. Perhaps the most outstanding achievement of the Warring States mirror designers was their skillful manipulation of contrasting textures and of seemingly incompatible forms—the straight line and the curve. Although the mirror patterns invented in the Warring States period were eventually replaced by different styles during the course of Western Han, the legacy of the Warring States mirror went beyond mere design. The very fact that by the end of this era even small tombs regularly yielded mirrors is an indication of the degree to which the individual was now self-consciously absorbed by his or her appearance. It is perhaps no coincidence that the mirror rose to popularity during the time in Chinese history when the concept of the individual first came to the fore. The popularity of the mirror was not simply a by-product of this new consciousness, but may well have been a factor in its emergence. After all, how could the “Perfect Man” have used his mind as a mirror if mirrors had not been available to him?

ACKNOWLEDGMENTS

I would like to thank Lihui Xiong for her assistance with the translation of passages from the classical texts and for compiling the bibliography. I am also truly grateful to the anonymous peer reviewer, whose meticulous scrutiny of the text and notes has saved me many embarrassing errors. The date 450 BCE is adopted in this volume as marking the beginning of the Warring States period, and this paper assumes the early Warring States period corresponds approximately to 450–375 BCE, the middle Warring States period to ca. 375–300, and the late Warring States period to ca. 300–221.

FIG. 21. Mirror O-0884, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 22. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 23. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 24. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 25. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 26. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 27. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 28. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 29. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 30. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 31. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 32. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 33. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 34. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 35. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 36. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 37. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 38. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 39. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 40. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 41. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 42. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 43. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 44. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 45. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 46. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 66. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 67. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 68. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 69. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 70. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 71. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 72. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

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FIG. 82. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 83. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 85. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 86. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 91. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 108. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 109. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 110. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 111. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 112. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 113. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 115. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 118. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 119. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 120. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

sphere are a mirror from a late Western Zhou tomb at Liujiacun, Fufeng (Shaanxi) 陝西扶風劉家村 (Song Xinchao 1997: 152, fig. 3, right; Li Jaang, this volume, FIG. 13), and a convex disk-shaped object from Tomb M1052 at Shangeunling, Sanmenxia (Henan) 河南三門峽上村嶺 that has sometimes been identified as a mirror (Zhongguo Kexueyuan Kaogu Yanjiusuo 1959b: 14, fig. 8:1; Li Jaang, this volume, FIG. 15). To these two mirrors may be added a mirror discovered in 1973 at Liujiacun, Fufeng (Luo Xizhang 1980: 16, fig. 11, pl. 3:2.).

FIG. 13. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 14. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 16. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 17. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 18. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 19. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 21. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 22. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 23. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 24. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 25. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 26. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 28. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 33. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 34. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 38. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 39. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 40. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 41. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 42. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 43. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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FIG. 54. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 55. Mirror O-0458, Henan, Luoyang, late Warring States period, 4th century BCE.

FIG. 56. Mirror O-0407, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 57. Mirror O-0460, Henan, Shuihudi, late Warring States period, 4th century BCE.

FIG. 58. Mirror O-0131, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

FIG. 59. Mirror O-0457, Henan, Xinxiang, Laodaojing cemetery, late Warring States period, 4th century BCE.

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A Performance Design on a Chinese Bronze Mirror in the Cotsen Collection

THE COTSEN COLLECTION contains a unique bronze mirror with an embroidered and painted silk textile adhering to its non-reflecting side. This mirror, number O-0186 (see v. 1: PLS. 51–54), is one of only two known mirrors with completely preserved silk backings. The only other specimen was sold by the London dealer Eskenazi some years ago (see Mackenzie, this volume, FIG. 11A); it is now in the Young Yang Chung Collection.¹ Unfortunately, the provenience of both mirrors is unknown. Their silk backings, embroidered in chain-stitch, are attached by means of lacquer, as Colin Mackenzie and Shelagh Vainker have shown.² That silk backings were once a somewhat common phenomenon is attested not only by the textile-derived patterning seen on many Warring States–period mirrors, but, even more conclusively, by textile remnants discovered in certain protected places between the two plates of two-plate mirrors, including several specimens in the Cotsen Collection (see Scott, this volume, and Mackenzie, this volume).

In contrast to the ornamental design of interlaced serpents gracing the Young Yang Chung piece, the design seen on mirror O-0186 is narrative. It features compositions of human and animal figures that are separated from each other by trees, forming three scenes that seem to represent episodes in a story. Each scene includes two or three human figures depicted realistically; in addition, one of the scenes has in it a mysterious squatting figure. As pointed out by Mackenzie, this squatting figure, gesturing as if it were holding a bow or a staff, resembles a witch-like figure depicted in lacquer on a *se* zither excavated from the Warring States–period Chu Tomb 1 at Changtaiguan, Xinyang (Henan) 河南信陽長台關 (FIG. 1).³ But whom does this figure represent?



FIGURE 1

FIGURE 1:
Human and animal figures on part of a *se* zither unearthed from a Chu tomb at Xinyang, Henan province. Early Warring States period (475–221 BCE). After Henan Sheng Wenhuaaju Wenwu Gongzuodu 1964: color pl. II.2.

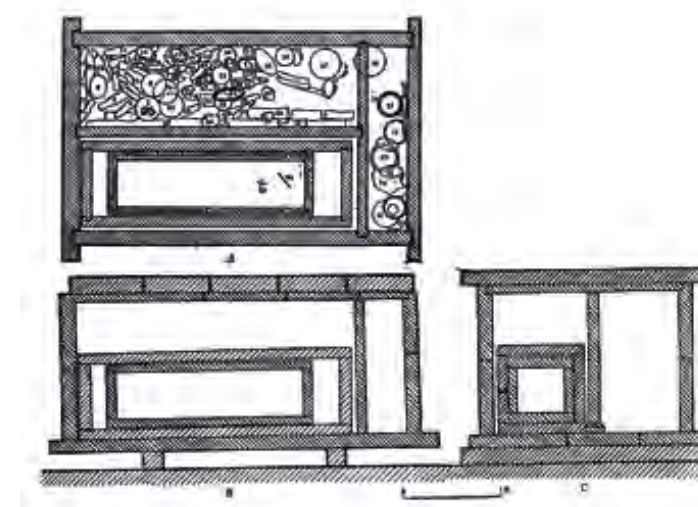


FIGURE 2

Can the story depicted on mirror O-0186 be identified in any surviving texts? How and why was it turned into a pictorial design? What message did it convey to its viewers? Such are the questions this study attempts to answer.

THE DESIGNS ON THE LACQUERED COSMETIC BOX FROM LEIGUTAI

ALTHOUGH THE ARCHAEOLOGICAL CONTEXT OF mirror O-0186 remains a mystery, finds from excavations during recent decades can provide clues for understanding its peculiar design. In particular, I have found that the painted decoration of a lacquered cosmetic box excavated from Tomb 1 at Leigutai, Xiangyang (Hubei) 湖北襄陽擂鼓台 strikingly resembles what we see on the Cotsen mirror. Discovered in 1978, this tomb is located to the south of present-day Xiangyang, in Xiangfan 襄樊 municipality. It comprises an outer coffin and two nested inner coffins (FIG. 2). No explicit evidence, such as coins, manuscripts, or dated objects, is available to date it, but based on the composition and style of its contents, it can be confidently dated to the early part of the Western Han (202 BCE–8 CE) period.⁴ According to the excavation report, it is no later than the thirteenth year of Emperor Wen of the Han 漢文帝 (167 BCE).⁵

The lacquered cosmetic box under discussion is one of three found within the outer coffin. It is cylindrical in shape. The

FIGURE 2:
Plan view of the coffin found in Leigutai Tomb No. 1. Early Western Han dynasty (206 BCE–8 CE). After Xiangyang Diqu Bowuguan 1982: 148. Nos. 1, 2, and 62 are places where the cosmetic boxes are found.

FIGURE 3:
Design on the inner side of the lid of the cosmetic box excavated from Leigutai Tomb 1 at Xiangyang. Early Western Han dynasty (206 BCE–220 CE). After Li Zhengguang, *Handai qiqi tu'an ji*, color pl. 20.

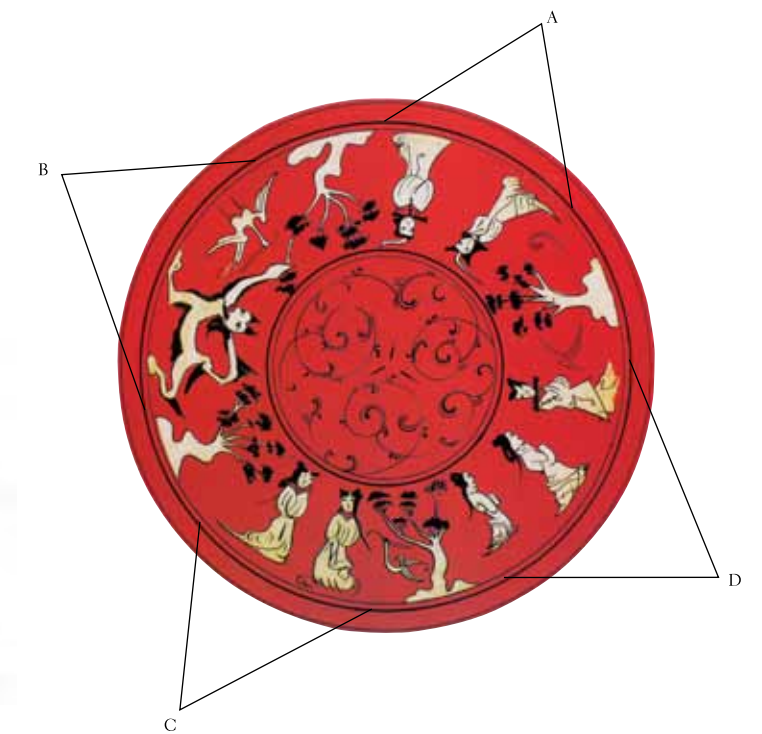


FIGURE 3

diameter of the lid measures 23.8 cm, and the whole box is 9.7 cm high. It contains a bronze mirror adorned with the common Western Han mirror design of connected arcs (also seen, for example, in mirror O-0313 in the Cotsen Collection; see v. 1: PL. 58) and two wooden combs, one more fine-toothed than the other. The outer surfaces of both the lid and the main body of this box are coated with black lacquer, on which a geometric pattern of clouds or birds symbolizing the all-pervading cosmic *qi* 氣 is painted in red. The pictorial scenes resembling the decor of mirror O-0186 occur on the inside; they are deployed in two ring-shaped bands on the flat circular surfaces provided by the ceiling of the lid and the bottom of the body, in each case surrounding a concentric version of the *qi* design seen on the outside (FIGS. 3, 4). Contrasting with the black outer surfaces, the insides of the vessel and its cover are coated with red lacquer; the trees, animals, birds, and human figures are depicted in black and white colors.

The pictorial design on the lid (FIG. 3) consists of four scenes separated from another by trees. Let us look at them in a counter-clockwise sequence. The scene I believe to be the first (labeled A in FIG. 3) includes two male figures wearing hats with high-protruding mortarboards; one of them has a prominent horizontal hat-fastener near the collar and a long sword hanging from his belt. The two figures seem to be making eye contact, suggesting that a conversation is going on. The next scene (B) contained a standing bird with outstretched wings and a running quadruped with a human face. In the third scene (C), two female figures are



FIGURE 4

seen, with a flying bird in profile on the right. This part is similar to one of the scenes on the silk backing of mirror O-0186 (compare v. 1: PL. 52, upper left third). The last scene (D) can also be identified as the double of another scene depicted on the mirror (compare v. 1: PL. 54): two female figures, shown in profile, turn toward a male shown full-face and holding a sword in his arms.

The design on the vessel body (FIG. 4) includes three scenes, arranged in a clockwise order. In two of them, a three-figure group appears: two walking female figures portrayed in profile with a male figure walking between them (E and G). In scene E, we see, in addition, a squatting figure with non-human facial features and upward-pointed ears protruding from its forehead. The animal's right hand is placed on its buttocks, and the left is holding what turns out to be not a bow or staff, but its long tail. This figure has an exact equivalent on mirror O-0186, which shows it with only two of the three figures that accompany it in scene E, a male and a female (see v. 1: PL. 53). The same figure is also seen in scene G on the bottom of the lacquered box, again accompanied by the above-mentioned three-figure group; here it is shown in a different posture, dramatically dashing leftward. The scene in between (F) includes four human figures: three males and a female. The three males all seem to be staring at the female; one of them is grabbing or pointing at her with his right arm.

In spite of the difference in media, the close similarity between the design stitched on the silk backing of mirror O-0186 and that painted on the lacquered cosmetic box from Leigutai is

obvious. In composition and style, the three scenes on the mirror correspond exactly to scenes C, D, and E on the lacquered box, down to details of the trees used to separate the scenes. The only difference is the absence from the mirror, in the scene corresponding to scene E on the box, of one of the three figures; lack of space is undoubtedly the reason for its omission.

Given that the decoration of the lacquered box is more comprehensive and contextualizes the three scenes seen on the mirror with four additional scenes, it seems more likely that the design on the box served as the blueprint for the mirror's silk backing than the other way around. This notion is also supported by the differences in the arrangement of the pictorial scenes on the two objects. From the body language of the human figures depicted, such as their walking gestures as indicated by their garment folds, the viewer can infer that the scenes on the lid are arranged counterclockwise, while those on the vessel body are clockwise. The designer of the silk backing, however, pieced together one scene from the vessel bottom with two scenes from the lid without regard to the opposite flow of their compositions, and without considering the overall order of the pictorial elements on the cosmetic box.

If this is correct, we may draw the following two conclusions: (1) the designer of the silk backing of mirror O-0186 must have known either the lacquered box from Leigutai or a closely similar painted object; and (2) regardless of the date of the bronze mirror, which David Scott (this volume) confidently assigns to the Warring States period based on metallurgical analysis, the silk

backing cannot be earlier than Western Han in date. Even though these two conclusions warrant some skepticism with regard to the mirror backing's authenticity (and the puzzlingly early radiocarbon date of 3497 ± 20 B.P. [calibrated age 1883–1754 BC] obtained from the silk backing would confirm such skepticism),⁶ they do not prove that it is definitely a forgery made after the 1978 discovery of Tomb 1 at Leigutai. Recent research on Han-period workshop processes,⁷ and on the nature of traditional Chinese artistic practices in general,⁸ has emphasized the modular nature of artistic production, making it appear quite possible, even likely, that identical designs might have been used repeatedly and in different media during a given period. It is, moreover, certainly plausible that an undecorated Warring States-period mirror could have been adorned with a new backing during Western Han times, though, at least so far, the evidence available seems to suggest that silk backings on mirrors were mainly a Warring States-period phenomenon.

In any case, issues of authenticity are not the focus of this paper; neither is a style-based narrative of pictorial depictions in Warring States and Han art.⁹ Instead, I wish to concentrate on the content of what is shown. Even if future research shows the silk backing of mirror O-0186 to be problematic, the following analysis will remain valid for the lacquer box from Leigutai, the archaeological provenience of which is without doubt.

THE WU ZIXU STORY IN LITERARY SOURCES

TO DETECT THE NARRATIVE SCHEME, we must first identify who and what those human and non-human figures are. Here it happens that a crucial piece of evidence is provided by mirrors—not Western Han mirrors, but a handful of inscribed mirrors from the Eastern Han period (25–220 CE) with decoration representing the “Romance of the Wu 吳 and Yue 越 Kingdoms,” a narrative that has survived in a number of literary sources. Reading the texts and images in conjunction allows us to identify the scenes on the lacquered box from Leigutai as a rendering of the Wu Zixu 伍子胥 legend from the “Romance of Wu and Yue.”

The earliest references to the Wu Zixu story are found in the *Zuo Tradition* (*Zuozhuan* 左傳) and the *Narratives of the Politities* (*Guoyu* 國語), both compiled in the fourth century BCE; the *Springs and Autumns of Mr. Lü* (*Lüshi chunqiu* 呂氏春秋), 249 BCE; Sima Qian's 司馬遷 (145–90 BCE) *Records of the*

Historian (*Shiji* 史記); as well as the *Garden of Sayings* (*Shuoyuan* 說苑), CA. first century BCE.¹⁰ Here follows a summary of the story as given by these texts.

Wu Zixu was one of the two sons of Wu She 伍奢, who served King Ping of Chu 楚平王 (r. 528–516 BCE). Later, Wu She was ensnared by his political enemies and was sentenced to death. To prevent his sons from taking revenge, the king of Chu summoned them to the capital along with Wu She. The elder son, Wu Shang 伍尚, chose to obey and to die with his father, even though he had seen through this scheme. Wu Zixu, however, fled to Chu's neighboring state, Wu. He helped Gongzi Guang 公子光, who later became King Helü of Wu 吳王闔閭, ascend the throne and served as his minister. Eventually, Wu Zixu led the Wu armies in a victorious war against Chu, occupied the Chu capital, and whipped the corpse of King Ping, who had died in the interim, to take revenge for his father's and brother's deaths. Helü died of a battle wound in 496 BCE. His successor, King Fuchai 夫差, did not heed Wu Zixu's advice when Wu Zixu warned him of the danger coming from Wu's neighbor, the kingdom of Yue. Instead, Fuchai killed Wuzi Xu for alleged disloyalty in 484 BCE.

All texts agree on this basic story. But at some point, the account was further embellished. We see the results of this in the two earliest surviving collections of anecdotes concerned specifically with the southeastern coastal region of China, where Wu and Yue were located: the *Lost Writings of Yue* (*Yue jueshu* 越絕書) and the *Springs and Autumns of Wu and Yue* (*Wu Yue chunqiu* 吳越春秋), attributed, respectively, to Yuan Kang 袁康 and Zhao Ye 趙擘, two late Eastern Han writers.¹¹ These two texts add a narrative involving two beautiful women from Yue, Xi Shi 西施 and Zheng Dan 鄭旦—a narrative that became extremely popular and is widely repeated in later texts.¹² Briefly stated, it recounts that Xi Shi and Zheng Dan were sent to King Fuchai of Wu as gifts by King Goujian of Yue 越王勾踐. Wu Zixu advised Fuchai against accepting them, but Fuchai, who was smitten by their beauty, had Wu Zixu killed as a punishment for such advice. Admitted into the inner circle of the Wu ruler, the two women proceeded to corrupt his fighting spirit so thoroughly that Yue, when it invaded Wu in 473 BCE, scored an easy victory; Fuchai ended up committing suicide.

Although both texts include the story of Yue's strategies for attacking Wu, the details are not completely the same. The *Yue jueshu* narrative is relatively sketchy when dealing with the two beautiful women, dwelling instead on Wu Zixu's tragedy. The

Wu Yue chungiu version, by contrast, contains more details concerning Xi Shi and Zheng Dan, but it does not account for the death of Wu Zixu as an immediate consequence of his admonition, as is done in the *Yue juechu*. Let us compare the two texts at some closer detail, attaching numbers to each episode.

The *Yue juechu* starts with (A1) the king of Yue consulting his high official Zhong 種 about strategies for attacking Wu. Zhong, in response, offers his “nine strategies,” one of which is to use seductive women to corrupt the king of Wu. Next, (A2) “The king of Yue then dressed up two beautiful women, Xi Shi and Zheng Dan, and had his high official Zhong present them to the king of Wu.”¹³ Against this, (A3) Wu Zixu offers a well-organized remonstrance, warning that this is an evil strategy on Yue’s part, aiming to bring down the Wu kingdom. But (A4) the king of Wu refuses Wu Zixu’s advice: he accepts the two women and kills his loyal minister.¹⁴

The *Wu Yue chungiu* also starts with (B1) the conversation between the king of Yue and Zhong about how to conquer Wu, but in contrast to the *Yue juechu*, the *Wu Yue chungiu* emphasizes the king of Wu’s tendency to indulge in sexual pleasure, which sets up the basis for the strategy of “corrupting by beauty.” (B2) The king of Yue then “selected two beauties to present to the Prince of Wu”;¹⁵ here, in comparison with the *Yue juechu* version, the *Wu Yue chungiu* provides more details, as follows:

*Then the king of Yue sent scouts to seek out beautiful women throughout his state. They found at Mt. Zhuluo 苧羅 two girls named Xi Shi and Zheng Dan, who were making a living by selling firewood. They dressed them up in fine clothes, taught them how to walk with graceful manners, trained them at a place called Tucheng 土城, and allowed them to have exposure to the lanes of the capital city. Three years later, the training was completed and the two girls were presented to Wu.*¹⁶

This passage not only provides the information on where the two women came from, how they were found, and what their social status was, but also describes the process of training they received for the purpose of winning the king of Wu’s favor. Also in the *Wu Yue chungiu*, unlike in the *Yue juechu* account, it is Fan Li instead of Zhong who is sent to Wu as the envoy presenting the two beauties. Some extant modern folklore versions of the story allege

a romantic relationship between Xi Shi and Fan Li,¹⁷ and similar stories might have been in circulation before the completion of the *Wu Yue chungiu*. It must be mentioned here that throughout historical times, Wu Zixu has been venerated as a local deity in the southeastern coastal regions of China. As David Johnson has forcefully argued, this religious cult of Wu Zixu was the vehicle through which the lore of Wu Zixu was transmitted from one generation to another without major change.¹⁸ Some of the elements we see in much later eras may be the surviving parts of the very early version of the Wu Zixu folk legend, and this would be especially likely if these elements are connected with the Wu Zixu cult. (B3) As in the *Yue juechu*, Wu Zixu remonstrates with the king of Wu as the latter is about to accept the two beauties. Wu Zixu’s speech is identical in both texts, irrespective of the change of envoy. In the end, (B4), as in the *Yue juechu*, the king of Wu turns down Wu Zixu’s proposal, but unlike in the *Yue juechu*, the *Wu Yue chungiu* episode does not refer immediately afterward to Wu Zixu’s death.¹⁹

Attesting to the popularity of this morality tale of how erotic beauty corrupts when unchecked by moral rectitude, these embellishments to the basic Wu Zixu story are depicted in a dramatic way on the backs of some extant Eastern Han-period bronze mirrors. Eugene Wang lists five mirrors with this iconography: two in the Shanghai Museum 上海博物館, one in the Nanjing Museum 南京博物院, one in the British Museum, and one in the Yamaguchi 山口 Collection in Japan.²⁰ To these, one may add a newly published mirror of the same type in the Qianjingtang 千鏡堂 Collection at the Danyang Museum 丹陽博物館.²¹ The surface of each mirror is divided into four quadrants, separated by groups of bosses (FIG. 5). Each quadrant represents a part of the “Romance of Wu and Yue:” (c1) two males identified by the inscriptions as the “King of Yue” (Yue wang 越王) and his minister Fan Li 范蠡; (c2) two females, the “two girls of the king” (“Wang zhi er nü” 王之二女 or “Wang nü er ren” 王女二人); (c3) a dramatically depicted figure, “the loyal minister Wu Zixu” (“Zhongchen Wu Zixu” 忠臣伍子胥 or simply “Wu Zixu”); and (c4) a male sitting on a mat enclosed by a screen, the “King of Wu” (Wu wang 吳王).²² The pictorial composition is so consistent that, even when all the figures depicted on a given mirror are not identified by inscriptions (as on the one in the Danyang Museum), viewers can still recognize them immediately. Only the mirror in the Yamaguchi Collection differs from the others by replacing the



FIGURE 5A



FIGURE 5B

images of the two Yue males (c1) and the two Yue females (c2) with two scenes of horse-drawn carriages, but the images of Wu Zixu (c3) and the king of Wu (c4) remain in the other two quadrants.²³

One difference between the visual narrative on the Wu Zixu mirrors and those in the *Yue juechu* and the *Wu Yue chungiu* is that the minister conversing with the king of Yue in scene (c1) is identified as Fan Li, whereas the figure should be identified as Zhong according to the two texts. This may not be accidental, but, like the *Wu Yue chungiu*’s substitution of Zhong by Fan Li as the envoy presenting the two women to the Wu court, may reflect the particular focus in one telling of the story. The narrative of the Wu Zixu mirrors may be slightly closer to the *Wu Yue chungiu* version than to the *Yue juechu* version, although all three are quite close to one another.

THE DESIGN ON THE LACQUER BOX FROM LEIGUTAI

THE DEPICTION OF THE WU ZIXU STORY on the mirrors just mentioned provides the key for understanding the painted scenes on the lacquered cosmetic box from Leigutai described above. As discussed, I assume that the four scenes arranged counterclockwise on the lid and the three arranged clockwise on the bottom of the box together constitute a coherent narrative. I have determined that they, too, represent a version of the Wu Zixu story, according

FIGURE 5A: Design of the Wu Zixu motif on the back of the bronze mirror in the Shanghai bowuguan collection. B: rubbing of A. Han dynasty (206 BCE–220 CE). From Shanghai Bowuguan, Lianxing shenye yingzhi lianggong: Shanghai Bowuguan cang tongjing jingpin, 51.

closely with the story told in the *Wu Yue chungiu*. Let us review them one by one, starting with the lid (FIG. 3). I would propose to identify the two male figures in scene A as the king of Yue and one of his two ministers, either Fan Li (in accordance with the Wu Zixu mirror) or Zhong (following the literary accounts), presumably engaged in plotting the strategy of “corrupting by beauty.” The next two scenes, B and C, show the two beauties Xi Shi and Zheng Dan. The setting, with a running animal, birds, as well as the trees framing them, may evoke the two women’s home at Mount Zhuluo, mentioned in the *Wu Yue chungiu*.²⁴ Such a setting would be compatible with the two girls’ original occupation of selling firewood. Scene D, showing two females following a male figure, probably depicts how the two beauties were found by an officially sent beauty-scout, as described in the *Wu Yue chungiu*.

Moving to the scenes depicted on the vessel body (FIG. 4), the two female figures with the squatting animal figure in scene E are dressed more gracefully than those in the previous scene on the lid (D); these figures should likewise be Xi Shi and Zheng Dan, here shown at the end of their three-year training program mentioned in the *Wu Yue chungiu* passage. The male between the two females may be Fan Li, the Counselor-in-Chief of Yue, who, according to the *Wu Yue chungiu*, was sent to Wu as the envoy escorting the two beauties. The squatting long-tailed figure in this scene may also help identify the male figure as Fan Li. Another anecdote in the *Wu Yue chungiu* tells how Fan Li

recommended to the king of Yue a certain Yue maiden trained in martial arts as the right person to train the Yue army for its upcoming fight against Wu. The king thereupon summoned her to the capital. The following is what happened on her journey:

The maiden was heading north to see the king of Yue. On her way, she met an elder calling himself Elder Yuan 袁. He asked the maiden, “I have heard that you are good at sword-fighting and I would like to see your skills?” The maiden said, “I dare not hide what I know, you sir please test me.” Hearing this, Elder Yuan then struck a Junyu 箬竹 bamboo with a stick. One of the bamboo branches was broken and fell on the windlass over a well. Before it fell on the ground, the maiden quickly caught its end. Elder Yuan then flew into the tree and turned himself into a white monkey.²⁵

This anecdote again reveals how the “Romance of the Wu and Yue Kingdoms” enriched the original sober historical account of the 478 BCE conquest of Wu by Yue with all sorts of magical and legendary elements. Such elements could be combined and recombined to create different stories; the *Yue jueshu* and the *Wu Yue chunqiu* each represent but one of these many possible narratives. In an analogous process, these elements could be inserted as modules into the visual depictions as well. As a case in point, I would propose that the quadruped depicted in scene E of the lacquered box is none other than the white monkey mentioned in the *Wu Yue chunqiu* as associated with another Yue strategy for causing the downfall of Wu; the monkey, reserved by the *Wu Yue chunqiu* authors for a different anecdote, has here been integrated into the story of the two women of the “corrupting by beauty” strategy. Perhaps, in this context, it serves an alter ego of Fan Li, whom these semi-legendary elaborations transformed from a mere minister and diplomat into a magician-like figure.

The next scene, F, shows the dramatic moment when Wu Zixu admonishes the king of Wu. Two of the three male figures should be the king of Wu and Wu Zixu; the third could either be Fan Li or Wu Zixu’s political enemy, Pi 髡, the Great Steward of Wu.²⁶ The female figure in this scene is either Xi Shi or Zheng Dan. Based on the plot of the story, we may identify the male figure standing next to and gesturing toward the female figure as Wu Zixu in the act of delivering his admonition.

The final scene, G, resembles scene E in its pictorial composition, except for the position of the non-human figure, which is placed in front of the human figures rather than behind. I read this scene as representing the king of Wu taking the two women from Yue in defiance of his minister’s advice. Once again, it is hard to fit the non-human figure in this interpretation, but the similarities in its facial features to that of its pendant in the adjacent scene E, from which it is separated merely by a tree, suggest that it is the same animal and should be interpreted in the same vein, as a visual reminder of Fan Li’s lingering presence at the Wu court now intruded by his Yue spies. The tree functions simultaneously as a dividing element and as a symbolic reminder of the *Wu Yue chunqiu* account that “Elder Yuan then flew into the tree and turned himself into a white monkey.”²⁷

The above reading of the design on the lacquered box is based on the transmitted texts, mainly the *Yue jueshu* and *Wu Yue chunqiu*. It is important to note, however, that these two texts were not yet in existence when the Leigutai box was made. Even though it is possible that some components of the two texts might have circulated in written form during that earlier period, current evidence warns us against overestimating textual influence; what we see in the *Yue jueshu* and the *Wu Yue chunqiu* is, in all likelihood, stories that were transmitted orally over a very long time after the historical events they elaborate upon. It is possible, in addition, that visual art forms, such as the lacquered box design under discussion as well as the later bronze-mirror designs, played a role in shaping and reshaping the “Romance of the Wu and Yue Kingdoms” as it developed. Their relationship is mutual rather than unilateral.

There might have been still other factors participating in the development of the saga, either in its written or pictorial form. Just as the painted decoration on the lacquered box may conceivably have influenced the embroidery on the silk backing on mirror O-0186, these decorative art forms may also have shared similar motifs or stories with the performing arts. In the following, I attempt to demonstrate the connections between early Chinese performances of historical or semi-historical stories with visual depictions on bronze mirrors, lacquered boxes, and the walls of burial chambers.



FIGURE 6



FIGURE 7

EARLY CHINESE THEATRICAL PERFORMANCE AND VISUAL ART DESIGN

VIEWERS SEEK MEANING IN ART, and they are frustrated when such meanings are difficult to figure out. Counteracting such frustration, Eugene Wang has proposed an elegant reading of the Wu Zixu mirrors against the political-historical background of the Late Eastern Han period.²⁸ He derives his proposed meanings by taking different themes in texts from the period and deliberately arranging them in such a way as to find hermeneutic information upon which to reconstruct a “circumstantial context” for the mirrors. Given that the “circumstantial context” is mostly lost, Wang contends that we must try to enter the mental state of viewers of the time under discussion, so as to quarry that “mental context”—that is, whatever we can now know about Eastern Han sociopolitical and historical conditions—for possible meanings to attach to the artwork under consideration.²⁹ The problem with such an approach is its uncertainty: can we know that such a circumstantial meaning does indeed inhere in the object in question? In the

FIGURE 6:
Part of the depiction of the “With two peaches killing three knights” story on one of the walls of Shaogou Tomb No. 61 at Luoyang, Henan province. Late Western Han dynasty (206 BCE–220 CE). After Luoyangshi Di’er Wenwu Gongzuodui et al. 1996: 99.

FIGURE 7:
The Hongmen banquet, depicted on one of the walls of Shaogou Tomb No. 61 at Luoyang, Henan province. Late Western Han dynasty (206 BCE–220 CE). After Luoyangshi Di’er Wenwu Gongzuodui et al. 1996: 91.

case of the Wu Zixu mirrors, the extent to which their iconography could be related to the political struggles at the imperial court at the end of the Eastern Han is hard to gauge, and it seems something of a stretch to claim, as Wang does, that “the image of Wu Zixu amounts to a psychological self-portrait for the Later Han gentleman of culture.”³⁰ Wang’s approach is commendable as a middle way between a unilinear narrative and a deconstructionist reading,³¹ but it should not stand in the way of plumbing the artworks for more specific meanings wherever this is possible.

Rather than dwelling on political circumstances, therefore, I would like to highlight the performance aspect of the representation of historical or semi-historical stories in Han decorative art. As Anneliese Bulling showed long ago, during the Han period, and indeed before, scenes like those depicted—for example, in the Wu Zixu mirrors—were actually performed on stage, either in public or in the courtyard of an individual household.³² She observed that, rather than being illustrations of a book or an oral tale, the depictions of two stories, “Killing three knights with two peaches” (Ertao sha sanshi 二桃殺三士) (FIG. 6) and “Hongmen banquet”

(Hongmen yan 鴻門宴) (FIG. 7), on the partition and rear walls of a tomb chamber excavated at Shaogou, Luoyang (Henan) 河南洛陽燒溝 (late Western Han (206 BCE–8 CE), are performative in nature.³³ Similar scenes of performance—theatrical as well as musical and acrobatic—can be found engraved on the walls of the middle chamber of the Late Eastern Han tomb at Yinan (Shandong) 山東沂南, and elsewhere.³⁴ Records of actual performances are rare, and there are no scripts preserved, but the evidence is sufficient to prove that what we may call theatrical sketches or skits existed in China by the early Western Han period.³⁵ The decoration of the lacquered box from Leigutai, as well as the much later Wu Zixu mirrors, should be viewed in this context.

Entertainers and jesters are mentioned in court and other public settings as early as in the *Zuozhuan*,³⁶ and in several other Warring States, Qin, and Western Han texts. Particularly suggestive evocations of actors and actresses appear in the rhapsodies (*fu* 賦) by the Eastern Han writer Zhang Heng 張衡 (78–139 CE).³⁷ Although these are works of poetry and must be treated with caution as historical records, they do attest to the existence and availability of popular performances during that period. Zhang’s “Rhapsody of the Western Capital” (*Xijing fu* 西京賦) flamboyantly describes acrobatic shows, circus acts, music performances, dancing, singing, and skits. In Han times, such performances were referred to as the “hundred kinds of amusement” (*baixi* 百戲). The acrobatic performances described include wrestling (*jiaodi* 角抵), weight-lifting (*kangding* 扛鼎), pole-climbing (*xuntong* 尋橦), rope-dancing (*zousuo* 走索), and ball- or sword-throwing (*tiaowanjian* 跳丸劍), among others, ending with the breathtaking performance on the “circus carriage” (*xiche* 戲車), which is described as follows:

In a short while the play carriage was set up, on which a tall pole was erected. Flaunting his talents, a young acrobat climbed up and down freely on the poles. Suddenly he turned upside down, hung on the top of the pole by his heel; it seemed that he was going to fall dead on the ground; but it turned out that his body was again attached to the pole. Bridled together, the hundred horses galloped shoulder by shoulder. The skills displayed on the top of the pole could not be more perfected. With a bended bow, the youth shot at the Western Qiang 羌; then turning around, he aimed at the Serbis (Xianbei 鮮卑).³⁸

Allowing for some poetic license, such acrobatic acts undoubtedly existed during Han times. We can see them illustrated on the walls of the Yinan tomb chamber.³⁹ If we may believe the “Rhapsody of the Western Capital,” then performative sketches were embedded in the “peaceful entertainment” (*pingle* 平樂), and they were performed not only for the Han emperor, but also for people of other walks of life.⁴⁰ The text continues:

Nüying 女英 and Ehuang 娥皇, seated, were singing their lengthy verses; their singing sounded clear, smooth, and agreeable. Hong Ya 洪涯, standing, directed his show with his flags; he was dressed with hairs and feathers, fine and flamboyant. Before they finished the musical notes, clouds arose and snowflakes flew down, which at the beginning fell thin and slow, and became thicker and faster afterwards.⁴¹

Nüying and Ehuang were the mythical sage ruler Yao’s 堯 two daughters, who, according to legend, became the wives of the sage ruler Shun 舜; they are here represented on stage by singers. Hong Ya was allegedly the inventor of a magic show. Perhaps, the actor who acted in this role mimicked the ancient magician’s performance, while the two female singers were singing the stories about the sage rulers of the remote past.

Next, Zhang Heng describes a performance of the story of Elder Huang 黃, as follows:

Elder Huang of Donghai 東海 district, carrying his red bronze knife, cast spells like a Yue witch. He expected that this would help him subdue the white tiger, in the end, however, the spells were not able to save him from death. Those who carried evil and practiced enchantment could not sell their skills thereafter.⁴²

According to the *Xijing zaji* 西京雜記, a collection of Han *biji* 筆記 pieces allegedly compiled by Liu Xin 劉歆 (?–23 CE), this performance originates from a folktale about a tamer of dangerous animals in Donghai (Shandong), who, as a young man, was able to subdue serpents and tigers by his magical powers but lost that ability as he became older. Sometime in the late Qin period, a white tiger appeared in his hometown, and he attempted



FIGURE 8

FIGURE 8:
(Upper register): The story of the Jin lord Ling’s attempt to kill his minister Zhao Dun, depicted on one of the walls of the middle tomb chamber at Yi’an, Shandong province. Late Eastern Han dynasty (25–220 CE). After Zeng Zhaoyu et al. 1956: pl. 58.



FIGURE 9

FIGURE 9:
(Upper register): The story of Lin Xiangru’s diplomatic commission to the Qin, depicted on one of the walls of the middle tomb chamber at Yi’an, Shandong province. Late Eastern Han dynasty (25–220 CE). After Zeng Zhaoyu et al. 1956: pl. 55.



FIGURE 10

FIGURE 10:
(Lower register): The story of Jing Ke’s unsuccessful assassination of the Qin Prince, depicted on one of the walls of the middle tomb chamber at Yi’an, Shandong province. Late Eastern Han dynasty (25–220 CE). After Zeng Zhaoyu et al. 1956: pl. 60.



FIGURE 11

FIGURE 11:
(Both registers): The story of the Hongmen banquet, depicted on one of the walls of the middle tomb chamber at Yi’an, Shandong province. Late Eastern Han dynasty (25–220 CE). After Zeng Zhaoyu et al. 1956: pl. 55.

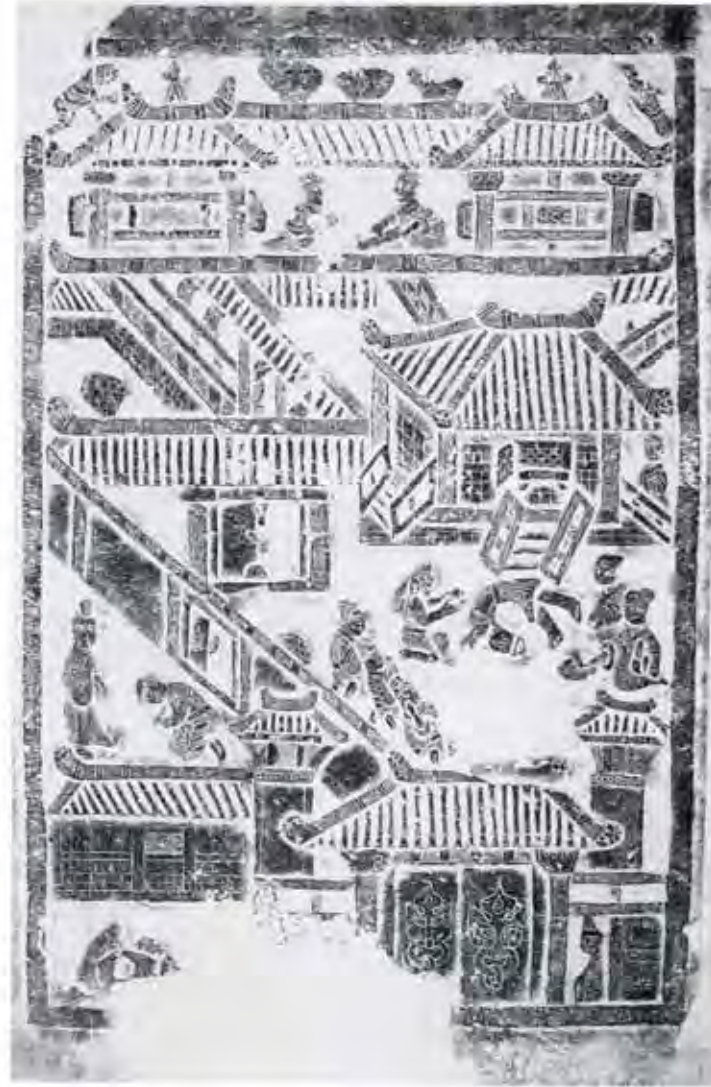


FIGURE 12

to subdue it. But by then he had become an alcoholic, and he failed and was killed by the tiger.⁴³ Conceivably, this story could be performed as a pantomime; or it could have been staged as a more complicated skit, in which Elder Huang and the tiger acted and danced, combining monologue, dialogue, and singing. In any case, the story of Elder Huang provided the basis for the plot of a theatrical performance.

The carved stone depictions of the Yinan tomb suggest that Elder Huang's story was by no means the only such story performed on stage during Han times. The pictures in the different areas of the tomb served different purposes. On the gate, there are fighting scenes and images of the primordial couple Fuxi 伏羲 and Nüwa 女媧 and of the Queen Mother of the West and the Royal Patriarch of the East, as well as winged immortals, showing

that the tomb was supernaturally protected and connected to the immortal world. The scenes on the walls of the front chamber are about offering and receiving sacrifice. The main theme of the middle chamber's depictions is the enjoyment of life, as shown through scenes of harvest, banquet, procession, and the performance of games and plays which are of interest to us here. Even the "circus carriage" mentioned by Zhang Heng appears in one of the carvings. The back chamber was the place for the coffin, the tomb occupants' bedchamber, appropriately adorned with images of male and female servants in attendance.⁴⁴

It is in the pictures of the middle chamber that we find illustrations of well-known historical and semi-historical stories. There are eighteen carved scenes, some of them labeled by inscription; but even most of those lacking an inscription are recognizable.

They represent a selection of dramatic events from the past, such as the attempt of Patriarch Ling of Jin 晉靈公 to murder his minister Zhao Dun 趙盾 (FIG. 8); the Zhao 趙 minister Lin Xiangru's 蔺相如 successful diplomatic mission to Qin (FIG. 9); Jing Ke's 荊軻 failed attempt to assassinate the king of Qin (FIG. 10); and the Hongmen banquet, of which the general Xiang Yu 項羽 and the founder of the Han dynasty were the principal participants (FIG. 11). Each scene is rendered vividly, with a sense of immediacy that suggests the events are being acted out in front of the viewers. Lively details, such as the glaring exaggeration of the human figures' facial expressions, gestures, and dress, led the excavators to suggest a connection with plays performed on stage.⁴⁵ To be sure, the format of full-fledged theatrical performances, as we see in the Song and Yuan dramas, had not developed in the Han. We may nevertheless confidently assert that some of the historical stories might have been acted out in the form of skits or storytelling during Han times.

The scenes of performance represented here have their significance in the context of the burial chamber. In the underlying religious belief system, the netherworld was viewed as the continuation of this mundane world. In such a view, abundant food, many servants, and everlasting entertainment by skilled performers, as depicted here, were considered most desirable.⁴⁶ Similar vivid acrobatic scenes occur frequently on Han carved stones and pictorial bricks (FIG. 12). This generic carnival theme is pervasive in Han and later tomb decoration, and it is, above all, religiously motivated. It is for this reason that I hesitate to impose a direct political-historical interpretation on the performance scenes seen in Han funerary art, or to interpret them as embodying a specific individual's intellectual taste, interest, or political expression.

In this light, we may reconsider the scenes painted on the lacquered cosmetic box from Leigutai and also seen on the silk backing of mirror O-0186. Possibly, these are scenes that were actually performed. Like the dramatic scenes depicted in the Yinan tomb, they may belong to the genre of performance sketches, rendering the visual impression of entertainments enjoyed by the patrons and reflecting their aesthetic taste in these matters. It is true that the "Romance of the Wu and Yue kingdoms" carried some fairly conventional didactic meaning, but that didactic meaning, rather than expressing the political views of specific individuals, was generically conveyed in the popular art forms—performative sketches, for instance—that were enjoyed by people from different walks of life. In accordance with the prevalent religious beliefs

of the time, shaped by the core values of avoiding misfortune and gaining personal welfare,⁴⁷ visual depictions of such performances were displayed not merely in the world of the living, but also in funerary contexts. The rendition of historical and semi-historical scenes in Han decorative art, as depictions of actual performances, participated in the symbolic evocation of an ideal, rich, and happy lifestyle, extending the visual pleasure experienced by the living to the netherworld. It was not the didactic content of the historical stories themselves, but their performance that mattered.

CONCLUDING REMARKS

EVEN THOUGH THE TEXTUAL AND VISUAL SOURCES pertaining to the staged performance of historical stories in early China flow much more amply during the later part of the Han period, it is my contention that such practices go back to Early Western Han and indeed even earlier times, and I view the depictions on the lacquered box from Leigutai as supporting evidence for this view. These early performance practices can help us understand the formation and transmission of early Chinese texts, which, I believe, quite possibly occurred in an ongoing feedback process with mainly oral and aural performance events. Conceivably, thus, the textual rendition of episodes from history was shaped or reshaped by these performances, accounting at least in part for the formation of the texts we have now. Let us take the *Shiji* and the *Zuozhuan* as examples. As we have seen, some stories recorded in the *Shiji*, such as Jing Ke's attempt to assassinate the king of Qin and the Hongmen banquet, are the same events depicted among the performance scenes in the Yinan tomb, showing that, at least by Eastern Han times, they could have appeared in performative arts. Did the entertainers of that time derive their plots from Sima Qian? Given the limited circulation of the *Shiji* and the eminently popular character of the performances in question, this does not seem likely. More probably, the stories had been transmitted orally over many generations, and Sima Qian, himself a participant in Han culture, was aware of them. Although they were surely not Sima Qian's only source, storytelling and skit performances that he may have attended—perhaps at the Han imperial court—may have had some impact on his rendering of the stories in question, explaining how he was able to provide so much detail in his dialogues among historical figures.

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Similar considerations may also be applied in the study of even earlier Chinese literature. As Burton Watson has observed, “it is the speech portions which carry the burden of the story.”⁴⁸ It is possible, for instance, that some of the speeches by eminent political figures recorded in the *Zuozhuan* were performed, and thus transmitted, by court jesters and actors even before they took on their written form. In a study of the story of Prince Dan of Yan 燕太子丹, Herbert Franke argues that the knowledge of the prince’s story was by no means limited to the educated social echelons who could read the *Shiji* and other sources, but was probably well known among the commoners as well.⁴⁹ Indeed, the heroic narratives in early Chinese texts, as Johnson argues, are deeply rooted in China’s folk tradition, which is, to use Johnson’s words, “the earliest and fullest expression of China’s secular mythology,” or “epic.”⁵⁰ In all probability, common people learned such historical stories through popular entertainments, such as storytelling and skits.⁵¹ This continued to be true during later periods of Chinese history. I do not wish to overstretch the similarity of these early dramatic performances to the Miscellaneous Plays (*zaju* 雜劇) of the Song and Yuan periods, but their social function and intellectual impact were comparable.⁵²

If the above analysis is correct, it reveals that the story of the Wu Zixu motif in its elaborate form, with the added narrative of “corruption by beauty,” was current at the beginning of the Western Han period, when it was depicted on the lacquered box from Leigutai (and on mirror O-0186, if genuine). This puts into question the earlier view that the creation of the Wu Zixu motif as seen on the Wu Zixu mirrors was an Eastern Han phenomenon, close in time to the compilation dates of the *Yue jueshu* and the *Wu Yue chunqiu* and linked to the political and intellectual concerns of that time. It now appears that this story was current a full three centuries before the earliest extant texts in which it is

mentioned. Indeed, it must have been known at the time when some of the texts that only mention the basic, skeletal version of the Wu Zixu legend—the version lacking the tale of the two beauties—were compiled. We can no longer know today whether Sima Qian, for instance, was aware of the story but rejected it, perhaps because he did not consider it historically reliable, or whether, perhaps because of its regional currency, the story was unknown at the capital, where Sima Qian was writing. Nor do we know whether, during Early Western Han times, this part of the story already circulated in written form or only as an oral tale that was picked up by the lacquer painters who created the Leigutai box. Regardless, this is a good example of how well-contextualized and exactly datable archaeological finds can potentially contribute to a more precise knowledge of the transmission of historical lore (textual and, perhaps, nontextual) in early China.

The above analysis also suggests that the Wu Zixu motif in its Late Eastern Han instantiations requires a new strategy of interpretation. Instead of exploring this issue in a political-historical framework, I have attempted an interpretation based on widely current customs in popular culture. Both textual and archaeological data sources suggest the existence of theatrical performance of historical stories in early China. The design on the cosmetic box from Leigutai, repeated on mirror O-0186, belongs to the genre of depictions of staged theatrical performances. When depicted in a funerary context, such scenes express the desire of an affluent, joyful lifestyle in the afterworld. This becomes clearer when the scenes of performance on the Wu Zixu mirrors and on the cosmetic box from Leigutai are viewed in conjunction with the design of acrobatic and dramatic scenes in the middle chamber of the Yinan tomb. Similarly motivated theatrical depictions, in tomb contexts and elsewhere, have continued to be a mainstay of Chinese visual culture until fairly recent times.

ACKNOWLEDGMENTS

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NOTES

1 Vainker 2004: 36, fig. 1; Chung 2005: 23; 22 fig. 1-6.

2 Vainker 2004: 36; Mackenzie 2001: 346.

3 Mackenzie 2001: 346; Henan Sheng Wenwu Yanjiusuo 1986: color pls. 2–3.

4 Xiangyang Diqū Bowuguan 1982.

5 Xiangyang Diqū Bowuguan 1982: 154.

6 Lyssa Stapleton, personal communication, 2011.

7 Barbieri-Low 2007.

8 Ledderose 2000.

9 Such a treatment would naturally have to link the depictions on mirror O-0186 to such precedents and parallels as the famous painted box (M2: 432) from Tomb 2 at Baoshan, Jingmen (Hubei), dated to the Late Warring States period (Hubei Sheng Jing Sha Tielu Kaogudui Baoshan Mudi Zhengli Xiaozu 1988: pl. 4), and the painted banner from the Early Western Han-period Tombs 1 and 3 at Mawangdui, Changsha (Hunan) (Hunan Sheng Bowuguan and Zhongguo Kexueyuan Kaogu Yanjiusuo 1973, v. 1: 39–45; v. 2: 49–61; Hunan Sheng Bowuguan and Hunan Sheng Wenwu Kaogu Yanjiusuo 2004: color pls. 20–22).

10 *Chunqiu Zuozhuan zhu*, “Zhao,” 19.2:1401; 20.2:1407–1409; 30.2–30.4:1507–1509; 31.4:1512; 32.2:1516; “Ding,” 4.3:1542–1548; 5.5–5.7:1551–1554; 6.4:1557–1558; “Ai,” 1.1–1.2:1604–1606; 1.4:1607–1608; 1.6:1608–1609; 11.3–11.4:1661–1665; 12.3–12.4:1671–1672; 13.3–13.5:1676–1679; 20.3:1716–1717. *Cuoyu jijie*, “Wuyu,” 19:536–566; “Yueyu shang,” 20:567–574; “Yueyu xia,” 21:575–588. *Lǎshi Chunqiu jiaoshi*, “Dangran,” 2:95; “Zunshi,” 5:204; “Yibao,” 10:551–552; “Shoushi,” 14:767–768; “Changgong,” 14:791; “Biji,” 14:828; “Liwei,” 17:1178; “Qiuren,” 22:1514; “Guizhi,” 23:1532; “Zhihua,” 23:1552–1553; “Bugou,” 24:1583. *Shiji*, “Wutaibo shijia,” 31:1460–1475; “Chu shijia,” 40:1712–1716; “Yuewang Goujian shijia,” 41:1739–1755; “Wu Zixu liezhuan,” 66:2171–2183; “Cike liezhuan,” 2516–2518. *Shuoyuan jiaozheng* “Zunxian,” 8:184–186; “Zhengjian,” 9:227–232; 237–238; “Fengshi,”

12:307–308; “Quanmou,” 13: 332–333; “Zhigong,” 14:352–354; 361–362; “Zhiwu,” 15:379; “Zayan,” 17:412; 422–424.

11 The authorship of neither text is very certain. For details, see Schuessler and Loewe 1993; Lagerwey 1993.

12 For the textual reconstruction of the Wu Zixu story, also consult Johnson 1980a, 1980b, and Cohen 2009.

13 Yuan Kang 1966: chap. 14: 1.

14 Yuan Kang 1966: chap. 14: 1–2.

15 Zhao Ye 1999: 143.

16 Zhao Ye 1999: 143.

17 Zhejiang Wenyi Chubanshe Bianjibu 1983.

18 Johnson 1980a, 1980b.

19 Zhao Ye 1999: 143–144. The death of Wu Zixu is told in another chapter; see Zhao Ye 1999: 74–78.

20 Wang 1994: 513.

21 Chen Fengjiu and Wang Quan 2007: 202.

22 See, for example, the ink rubbing of a mirror in the Shanghai Museum (Shanghai Bowuguan 2005: 51).

23 For the image of this mirror, see Wang 1994: 515, fig. 8.

24 According to the *Kuaiji zhi* 會稽志, *Yudi zhi* 輿地志, and *Shidao zhi* 十道志, Mount Zhuluo is located at Zhuji 諸暨 (Zhejiang) and has long been connected with the Xi Shi and Zheng Dan legend. For the details of this information, consult the Yuan dynasty commentator Xu Tianhu’s 徐天祐 notes; see Zhao Ye 1999: 143.

25 Zhao Ye 1999: 148. For a more detailed version of this passage, see *Yiwen leiju* 95: 1652. Weng Shixun (1991) compares different versions pertaining to this story in various texts. The pronunciation of Elder Yuan’s surname evidently speaks his true identity, a simian (猴) instead of a human being in this context. Meir Shahar (1992: 200–202) discusses

“yuan 猿” in an article on the origin of the Sun Wukong 孫悟空 character. According to datable literary resources, monkeys still lived in mountainous areas of present-day Zhejiang 浙江 province as late as the mid-eighteenth century, and they can still be found in parts of southern China even today. On monkey depictions in the Han, and possible Indian influences on this iconography, see Wu Hung 1987.

26 Zhao Ye 1999: 144–147.

27 Zhao Ye 1999: 148.

28 Wang 1994: 533.

29 Wang 1994: 533.

30 Wang 1994: 527.

31 Wang 1994: 533.

32 Bulling 1967–68.

33 Luoyangshi Di’er Wenwu Gongzuodui et al. 1996: 87–100; Henan Sheng Wenhujū Wenwu Gongzuodui 1964.2: 107–125, color pls. 1–2, pls. 1–8; Guo Moruo 1964.

34 Based on the images carved on stones and bricks found in Shandong, Henan, Shaanxi, Sichuan, and Jiangsu areas, Xiao Kangda presents various types of Han performance arts that are also more or less textually traceable in the *baixi* setting. Among those images the historical or semi-historical theme is certainly detectable. For details, see Xiao Kangda 2010: 153–190, 211–266; and passim. There is also abundant evidence of this kind in later epochs—for instance, the historic and semi-historic theme presented on the walls of the Eastern Han (25–220 CE) Wu Liang shrine and the carved images found in Mahao 麻浩 Tomb 1, Leshan 樂山, Sichuan 四川 (dated to the Three Kingdoms period [220–280 CE]); see Wu Hung 1989: 142–213; Leshanshi Wenhujū 1990. On the Yinan murals, see Zeng Zhaoyu et al. 1956.

35 Liao Ben and Liu Yanjun 2000: 42–72; Zeng Yongyi 2003.

36 In the twenty-eighth year of Patriarch Xiang of Lu 魯襄公 (545 BCE), the *Zuozhuan* mentions that Qīng Fēng’s 慶封 (?–538 BCE) soldiers watched the

performance by the entertainers (*Chunqiu Zuozhuan zhu*, “Xiang,” 28.9: 114§; some time earlier than the twenty-fifth year of Lord Ai of Lu (517 BCE), the court jester Jiao participated in the Wei court struggle (*Chunqiu Zuozhuan zhu*, “Ai,” 25.1:1725).

37 Zhang Heng 1993: 419–420.

38 Zhang Heng 1993: 419–420.

39 Zeng Zhaoyu et al. 1956: 34–39, 82–100.

40 Li You 1993; Huan Kuan 1992: 6.29:353–354, 7.37:437.

41 Zhang Heng 1993: 419.

42 Zhang Heng 1993: 419–420.

43 Liu Xin 1991: 115–117.

44 Zeng Zhaoyu et al. 1956: 30–31.

45 Zeng Zhaoyu et al. 1956: 42.

46 Cf. Poo Mu-Chou 1998; Loewe 1979, 1982, 2005.

47 Cf. Poo Mu-chou 1998.

48 Watson 1962: 23, 50.

49 Franke 1957: 454.

50 Johnson 1981: 268–269.

51 Bulling 1967–68: 33.

52 Many scholars, Zhou Yibai, for instance, hail the fact that stories, such as that about Elder Huang of Donghai district, were actually performed in a fairly sophisticated way in the Han or even before the Han, with which later performances and even dramas share much similarities. Even though the forms of later drama were tuned with very well designed literary formats, its popular origin and taste can be easily detected from those surviving scripts. In any case, the connection between early theatric performances represented by the Han “hundred plays” and the later Song and Yuan dramas cannot be simply dismissed. For more information, see Zhou Yibai 2007: 21–24; Tang Wenhao 1985; Wang Guowei 1984: 1–113; Liao Ben and Liu Yanjun 2000: 42–72; Zeng Yongyi 2003.

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Positioning the Heavenly Horses on Han Mirrors



FIGURE 1

THE DESIGN ON THE BACK OF MIRROR O-0226 in the Cotsen Collection (see v. 1: PL. 70) is decorated with the iconic representation of the Mother Queen of the West (Xiwangmu 西王母) and the Father King of the East (Dongwanggong 東王公), both identified by inscriptions.¹ This was a popular motif in the Eastern Han period (25–200 CE). The animals accompanying the two figures, however, are unusual: a winged tiger and a winged horse fill opposite quadrants of the mirror. Normally in Han art, a tiger is paired with a dragon, as seen on a Han mirror in the collection of the Shanghai Museum (FIG. 1).² Mirror O-0226 thus raises at least two questions: Why did the Han people usually pair a tiger with a dragon? And why did a horse come to replace the dragon on this one mirror?

CARDINAL EMBLEMS

THE INSCRIPTION ON THE SHANGHAI MIRROR tells us something about the normal tiger-dragon pairing. Placed along the rim, outside the main decorative zone, it reads: “Mr. Long 龍氏 has mastered his special way of casting mirrors. [There are] the Father King of the East and the Mother Queen of the West. The Blue Dragon is on the left; the White Tiger is on the right. All the carved animals are here. [May you] have great auspiciousness.”³ The inscription explains both the content and the purpose of the design. What is pertinent here are the spatial references, which allude to the well-known set of cardinal emblems. A complete description would read: “The Blue Dragon is on the left, the White tiger is on the

right, the Red Bird is in the front, and the Dark Warrior is at the back.”⁴ Dragon, tiger, bird, and dark warrior are emblems of the cardinal points: east, west, south, and north.

The association of these creatures with the four directions had an astronomical basis. The ancient Chinese divided the sky into twenty-eight segments and grouped the brighter stars within each segment. They called each group of stars a “lodge” (*xiu* 宿) because they saw that the moon moved cyclically from one to another.⁵ Sima Qian 司馬遷 (CA. 145–CA. 86 BCE) gave us a comprehensive description of how the Han people viewed the system of lunar lodges in the “Treatise of Celestial Offices” of his *Records of the Grand Historian*. The sky, he wrote, was like an array of bureaucratic offices, divided among five palaces: the North Star, like the emperor, anchored the Central Palace, and

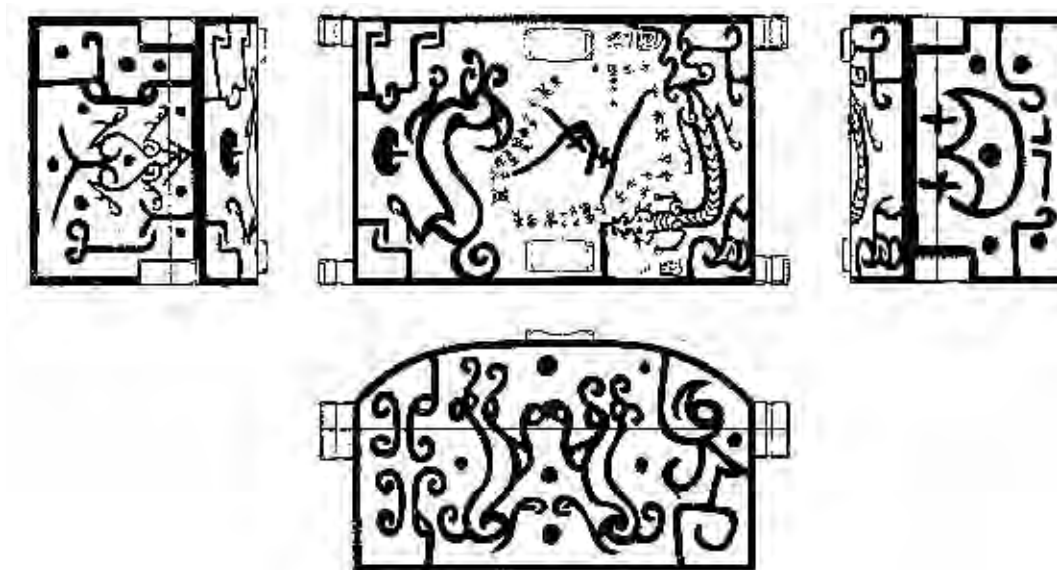


FIGURE 2

the twenty-eight lunar lodges, like imperial subjects, were allotted equally to the Eastern, Western, Southern, and Northern Palaces. Each palace had its governor—the Eastern Palace had the Blue Dragon, the Western Palace had the Harmonious Pond (*xianchi* 咸池) or the White Tiger, the Southern Palace had the Red Bird, and the Northern Palace had the Dark Warrior (*xuanwu* 玄武).⁶

Sima Qian’s description represented an astronomical approach to the cardinal emblems, but two other approaches besides his were current during the reign of Emperor Wu 漢武帝 (141–87 BCE). In the first place, Gongsun Hong 公孫弘, a senior scholar recruited to the court in 130 BCE, elaborated on four creatures in the context of omens. He told the emperor that when ancient sage kings ruled their people with benevolence, a unicorn, a phoenix, a turtle, and a dragon would appear. He did not connect them with the four directions.⁷ Second, sometime before 139 BCE, the authors of the *Book of the King of Huainan* presented four kinds of creatures in the context of monthly observances. They took this ritual system from Master Liu’s *Spring and Autumn Annals*, a book that had been compiled in the Qin state about 239 BCE.⁸ They recommended that the Son of Heaven—that is, the emperor—receive his subjects in the eastern chambers of the Bright Hall while riding in a dragon-patterned carriage, wearing a blue robe, and holding a blue banner. In the summer, the Son of Heaven should move to the southern chambers of

the Bright Hall, and carriage, robe, and banner should be red. When autumn came, he should move again, to the western chambers, this time with white as the prevailing color. In the winter, he should visit the northern chambers with every color black. In this idealized ritual system, the authors assigned four kinds of creatures to the four seasons and the four directions: creatures with scales to spring and the east, creatures with feathers to summer and the south, creatures with fur to autumn and the west, and creatures with shells to winter and the north. The four animals mentioned in the other two discourses match these characteristics: the dragon has scales, the phoenix/bird has feathers, and the turtle/Dark Warrior has a shell/armor; in astronomy, the creature with fur could be a tiger, while in the discourse of omens, it could be a unicorn.

Archaeological finds provide us with a picture unlike the descriptions in the received texts. The pairing of dragon and tiger appeared very early in the Yangshao 仰韶 culture (CA. 5000–CA. 2750 BCE). The most startling example comes from Tomb 45 at Xishuiipo in Puyang (Henan) 河南濮陽西水坡. One of the tomb occupants is accompanied by images of a dragon and a tiger, both formed by clamshells and as large as the corpse.⁹ Observing that the dragon is placed in the east and the tiger in the west, Feng Shi 馮時 was the first to argue that the images are representations of the eastern and western lunar lodges as articulated in later texts;

FIGURE 1: Bronze mirror in the Shanghai Museum. Diam. 21.2 cm. Late 2nd century to early 3rd century CE. Rubbing from Chen Peifen 1987: pl. 49.

FIGURE 2: Lacquer chest excavated in 1978 from the tomb of Marquis Yi of Zeng at Leigudun, Suizhou (Hubei). 71 x 47 x 40.5 cm. CA. 433 BCE. Drawing from Hubei Sheng Bowuguan 1989, I: 356.



FIGURE 3

K. C. Chang, on the other hand, believes that the images attest shamanistic practices.¹⁰ Another remarkable example is a bronze mirror from Tomb 1612 at Shangcunling in Sanmenxia (Henan) 河南三门峡上村岭, dated to the ninth–seventh centuries BCE (see Li Jaang, this volume, FIG. 12; q.v. for further discussion).¹¹ The mirror shows the images of a dragon, a tiger, a bird, and a deer-like animal. It is unclear, however, whether the mirror maker had any astronomical intentions. The design on a lacquered wooden clothes box in the tomb of Marquis Yi of Zeng, dated to the second half of the fifth century BCE, is less ambiguous in terms of its astronomical references (FIG. 2).¹² The inscriptions at the center of the lid are the names of the Northern Dipper and the twenty-eight lunar lodges. The back of the tiger is near the lodges in the west (Triad, Tuft), and the tail of the dragon winds along the lodges in the east (Tail, Heart, Belly, Chest). The images on the three sides of the box are less easy to identify. Feng Shi suggests that the creature on the side by the tiger is a bird and that the two animals on the side by the northern lunar lodges are deer.¹³ If so, the designs on Marquis Yi’s clothes box may, in turn, prove that the grouping of the four animals on the Sanmenxia mirror was not random. In these early archaeological examples, unlike in the received texts, the association of the tiger with the west is quite firm. These examples do indicate, however, that the creature that stands for the north could have been a deer-like animal, not a turtle, as stated in the received texts.

Visual examples before and during the reign of Emperor Wu confirm the inconsistencies in picturing the creature of the north. One of the painted coffins in Lady Dai’s 軟 tomb at Mawangdui, Changsha (Hunan) 湖南长沙马王堆, constructed several years after 168 BCE, shows two dragons flanking a mountain peak and accompanied by a phoenix, a tiger, and a deer. The combination of animals echoes the pre-Han examples. But the incense burner discovered in the tomb of Dou Wan 竇綰, the king of Zhongshan’s 中山 consort, buried sometime before 104 BCE at Mancheng (Hebei) 河北满城, tells a different story.¹⁴ The creatures on the exterior of the incense burner are a phoenix, a tiger, a camel, and a dragon (FIG. 3). The interchangeability of deer and camel suggests that their mutual attribute was more terrestrial than celestial. Chen Jiujin 陳久金 speculates that using deer to represent the north could have come from the reverence for deer among nomads living on the steppe that neighbors northern China.¹⁵ Likewise, camels were often seen in the Mongolian north. Yet the painted tomb at Shiyuan in Yongcheng (Henan) 河南永城柿园 delivers another surprise.¹⁶ The tomb, whose occupant was probably the king of Liang 梁, was built sometime before 118 BCE. The painting on the ceiling of the main chamber depicts a gigantic dragon, whose horn is held in a bird’s mouth and who seems to be devouring a fishlike creature; a tiger climbing a peak is rendered at the bottom. Though unidentifiable, the fishlike creature is at least aquatic, like a turtle.

FIGURE 3: Bronze incense burner. CA. 104 BCE. 32.3 cm. high. Excavated in 1968 from Tomb 2 at Mancheng (Hebei). Drawing from Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 1980, I: 256–57.

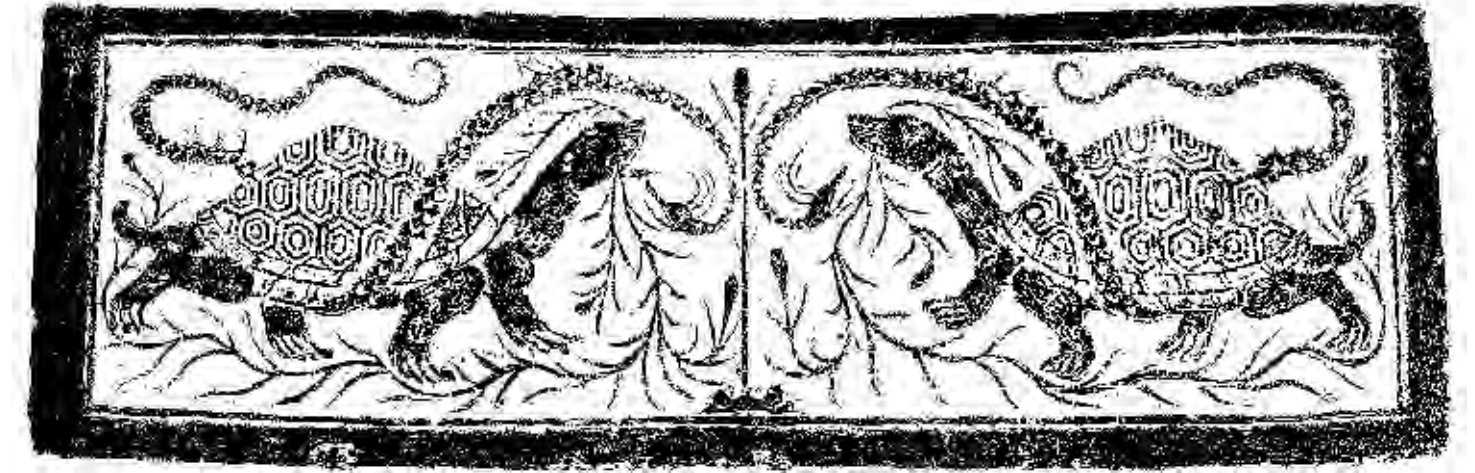


FIGURE 4

Even if the received texts that date to the reign of Emperor Wu associate a turtle with the north, it is evident that the iconography of the north had not yet stabilized in the contemporary visual and material culture. We have no clues as to why Sima Qian called the governor of the Northern Palace a “Dark Warrior” rather than a plain turtle.¹⁷ One of the earliest visual portrayals of the Dark Warrior as a turtle with a snake comes from the decorated bricks at the site of the Mao Mausoleum, in present-day Xingping (Shaanxi) 陕西兴平茂陵, built by Emperor Wu for himself (FIG. 4).¹⁸ In Xianyang 咸陽, archaeologists have also found bricks decorated with the four animals—dragon, tiger, phoenix, and turtle with snake. These bricks were made and reused in smaller and simpler tombs dated to the end of the first century BCE, but they were not placed in the cardinal directions that their design implies.¹⁹ Even so, it appears that the idea and the iconography of the Dark Warrior were introduced no later than the reign of Emperor Wu, and that the Dark Warrior gradually became the standard symbol of the north afterward. In other words, the cardinal emblems were not stabilized until the second half or the end of the first century BCE.

We learn from the received texts that Wang Mang 王莽, who usurped the Han throne for two decades (9–23 CE), emphasized the relative positions of the cardinal emblems. He compiled a book entitled *Signs of the Mandate* to legitimize his reign, and he

dispatched the Generals of Five Majesties to distribute the book among the kingdoms and commanderies of the empire while they delivered the official seals of his Xin dynasty and recalled the Han seals. The carriages that the generals used were decorated with the hexagrams *qian* 乾 and *kun* 坤 from the *Book of Changes* to symbolize Heaven and Earth, but Wang Mang wanted to see more than those hexagrams on the carriages of his subjects. He encouraged his subjects to honor the mandate of the Xin dynasty by also decorating their carriages with the Blue Dragon on the left, the White Tiger on the right, the Red Bird in the front, and the Dark Warrior at the back.²⁰ Archaeologists have retrieved roof tiles with the same motifs at the site of the Nine Temples, which Wang Mang built for his dynasty’s ancestral cult; to justify his usurpation, he had linked his ancestral line to Yu Shun 虞舜 and the Yellow Thearch, two sage kings of remote antiquity. The Nine Temples, located west of the Bright Hall, were the biggest construction project that Wang Mang initiated in the capital. The temple complex was probably composed of twelve identical structures, with eleven clustered inside the walls and one standing in front of the southern wall. Each structure had a central building enclosed by four walls. It took three years, from 20 to 22 CE, to complete the project. We are told that to assemble the building materials, many buildings in the Han imperial park, including Emperor Wu’s Jianzhang Palace 建章宫, were torn down. At the site of Structure 2, archaeologists have discovered

FIGURE 4: Decorated brick excavated in 1974 at Maoling, Xingping (Shaanxi). 117.5 x 37.5 cm. First half of 1st century BCE. Rubbing from Zhongguo Huaxiangzhuan Quanjì Bianjiweiyuanhui 2006, III: pl. 50.



FIGURE 5

FIGURE 5:
Roofing tiles, 20–22 CE excavated in 1959 from Structure 2 at the site of Wang Mang's Bright Hall in Xi'an (Shaanxi). Diam. 18.1–19 cm. 4 CE or earlier. Photographs from Kanasaki 1999: pls. 1-11, 1-12, 1-13, 1-14. (a) Blue Dragon, (b) White Tiger, (c) Red Bird, (d) Dark Warrior.

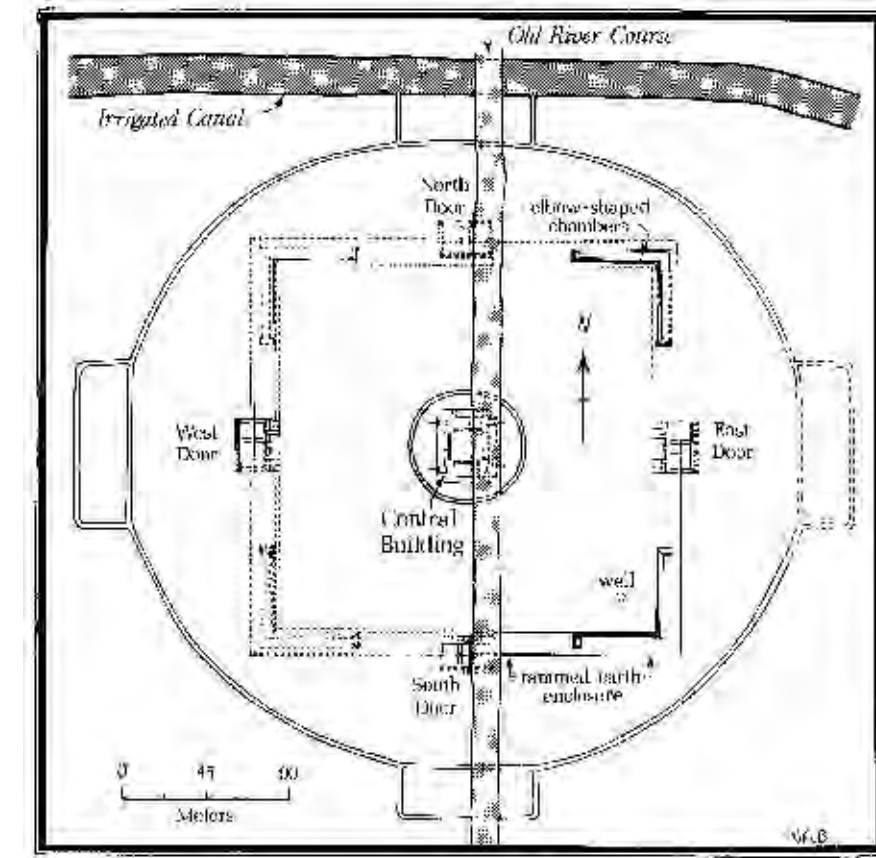


FIGURE 6

tiles with dragons near the eastern gate, tiles with tigers near the western gate, tiles with birds near the southern gate, and tiles with turtles and snakes near the northern gate (FIG. 5).²¹

The design on the Eastern Han-period mirror O-0226, where a winged horse replaces the dragon that one would expect, appears to reverse the long process of standardizing the cardinal emblems.

EMERGING ICONS AND EXPERIMENTAL DESIGNS

ALTHOUGH IT IS UNCLEAR how much Wang Mang's political propaganda influenced contemporary material culture, archaeological finds suggest that the meaning of the so-called TLV mirror underwent a significant transformation during his reign. The design, exemplified in the Cotsen Collection by mirrors O-0883 and O-0856 (see v. 1: PLS. 62, 63), normally consists of a square at the center, four T-shaped marks extending from the square, four horizontal L-shaped marks rendered opposite the Ts, and four V-shaped marks arranged opposite the four corners of the square. The inscription on the mirror unearthed from Tomb 4 at Yinwan in Donghai (Jiangsu) 江蘇東海尹灣 explains that the TLV design was intended to represent the *liubo* 六博 gameboard:

FIGURE 6:
Plan of the Bright Hall in Han Chang'an, 4 CE. Drawing from Wang Zhongshu 1982: fig. 30.

"Engrave the *liubo* [board] at the center and [in the shape of] a square."²² Two other inscribed examples, one in the Tokyo National Museum and the other in the National Museum in Beijing, further enlighten us as to the purpose of this peculiar representation. The inscriptions on both read: "Engrave the *bo* board so as to expel the inauspicious."²³ As I have argued elsewhere, the inscription was inspired by a contemporary divinatory practice that cleverly appropriated the design, terminology, and rules of the *liubo* game, making the mirror back, with its representation of the gameboard, a talisman capable of warding off evil spirits, or so it was believed during the Han dynasty.²⁴

The TLV mirror, with its circular shape and square pattern, came to symbolize the architectural complex of the Bright Hall, which featured the cosmogram of a round Heaven and a square Earth (FIG. 6).²⁵ The following text, inscribed on a TLV mirror in the collection of the Shanghai Museum, makes the symbolism clear: "The Xin Dynasty has established the Surrounding Moat and built the Bright Hall. [May you] be illustrious among promoted scholars and take [your] place among ranked noblemen. . . . Ten thousand huts of students are in the north. [May you] have joy without end."²⁶ The inscription highlights some of Wang Mang's accomplishments: constructing the Bright Hall and the



FIGURE 7

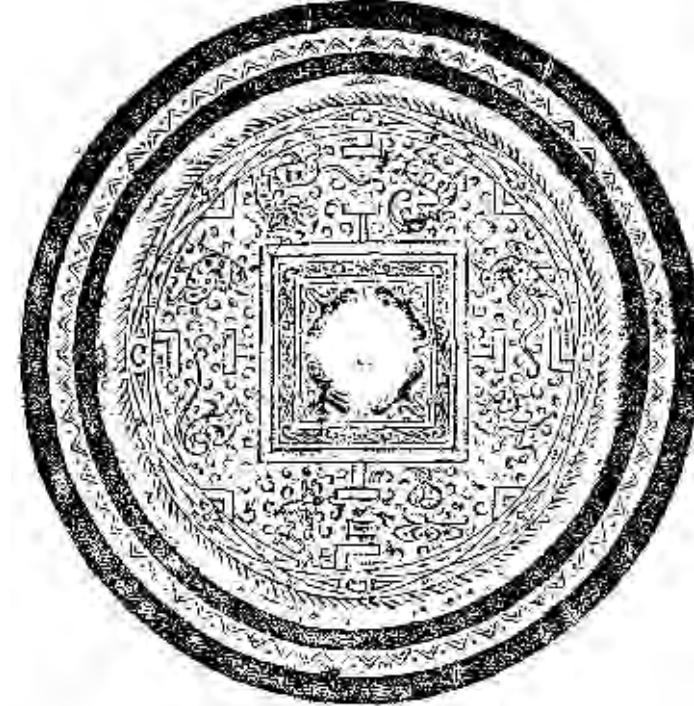


FIGURE 8

Surrounding Moat, expanding the scale of the Imperial Academy, and housing the sudden influx of students in the capital.²⁷ In reality, these projects were all proposed and executed around 4 CE, toward the end of the Western Han dynasty (207 BCE–8 CE), but the credit was transferred to the Xin dynasty for propaganda purposes. Likewise, the design—the depiction of a square gameboard on a circular mirror—was conveniently appropriated to refer to the Bright Hall, including its layout, its representation of the cosmos, and its allusion to Heaven’s mandate.

Han people transferred the TLV design onto bronze mirrors when they began to associate the gameboard with auspiciousness. The earliest dated example comes from the tomb of Dou Wan, where the TLV design is imposed on a pattern of intertwined dragons.²⁸ A Western Han mirror in the Cotsen Collection (mirror O-0883; see v. 1: PL. 62) also bears a TLV design, this one imposed on a leaf pattern. Other Xin and Eastern Han examples show the TLV design no longer imposed on other patterns, but itself decorated with the cardinal emblems (FIG. 7).²⁹ The TLV design and the cardinal emblems complement each other: the square elements of the TLV design allow the cardinal emblems their corresponding cells, and the cardinal emblems, by their presence, reinforce the cosmological implications of the TLV design. When the Han people’s fascination with the gameboard as a vehicle of good omen waned, however, the TLV design gradually lost its prominence in mirror decoration.³⁰

Archaeological finds reveal that the decline of the TLV design and the rise of the iconic representation of the Mother Queen of the West in mirror decoration both took place in the first century CE, as if people in the Eastern Han had more faith in the Mother Queen of the West than in the abstract cosmological relationships encapsulated by the TLV design. It is unclear what Xiwangmu referred to in pre-Han texts—a tribe’s name, a place-name, a deity, a figure, or a human-beast hybrid. The Han people, however, took the term literally and associated it with a goddess, the Mother Queen of the West.³¹ According to the *Book of the King of Huainan*, the legendary archer Yi 羿 begged for the elixir of immortality from the Mother Queen of the West, but his wife, Heng E 姮娥, stole it and ascended to the moon.³² Sima Xiangru 司馬相如 (179–117 BCE), in his *Rhapsody on the Mighty Man*, also addressed the association of the Mother Queen of the West with immortality.³³ Both texts were produced during the reign of Emperor Wu. Later, Han official records reported a religious movement in 3 BCE that established the worship of the Mother Queen of the West. Thousands of people headed to the capital city to fulfill her commandments. Among other dedicatory activities, they distributed a written message declaring, “The Mother says that people who wear this written talisman will not die.”³⁴

The extant texts on the Mother Queen of the West are few, but her pictorial representations were ubiquitous in the Han period, though with regional differences.³⁵ In Henan, the early examples come from tombs built in the second half of the first

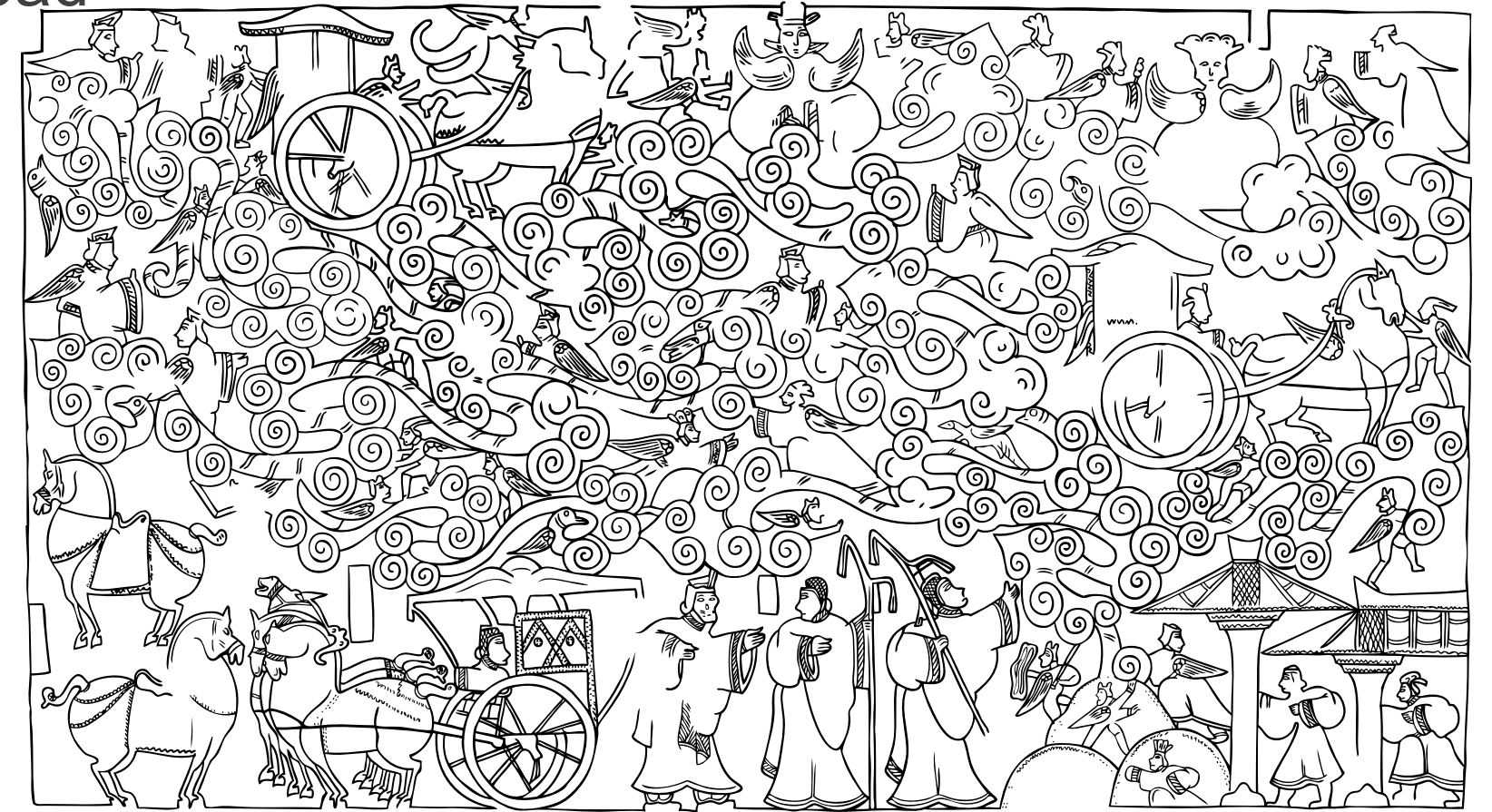


FIGURE 9

century BCE. In these, as on the ceiling of Bu Qianqiu’s 卜千秋 tomb in Luoyang 洛陽, the Mother Queen of the West is shown emerging from clouds and receiving a deceased couple, one of whom is riding on a three-headed phoenix, the other on a snake-like creature.³⁶ Scholars identify the Mother Queen of the West mainly by the unique headgear she is wearing, the *sheng* 勝, which looks like two triangles intersecting a circle.³⁷ When the Han artisans incorporated the Mother Queen of the West into the design of mirrors in the early first century CE, as indicated by one specimen unearthed in Yangzhou (Jiangsu) 江蘇揚州, they adopted the floating image of the goddess, seen at the bottom of FIG. 8.³⁸ They also depicted her either receiving, or being attended by, a winged immortal and juxtaposed with auspicious animals. Visually, the Mother Queen of the West is part of, and subordinated to, the TLV design.

To comply with the *yin-yang* principle, Han people invented the Father King of the East to be the consort of the Mother Queen of the West. Stone carvings in northern Shaanxi suggest that the pairing probably appeared in the first half of the second century CE.³⁹ The Shanghai mirror (see FIG. 1) attests the introduction of the divine pair into the design of mirrors. Instead of sticking close to the TLV design, the artisans gave the Mother Queen

of the West and her consort a new visual prominence. They also reduced the cardinal emblems from four to two, corresponding in number to the divine pair.

Other artisans explored new templates for the emerging icons. One of the most popular designs involved removing the cardinal emblems completely and substituting two chariots pulled by winged horses, as seen in archaeologically excavated mirrors from Shaoxing (Zhejiang) 浙江紹興,⁴⁰ as well as in mirror O-0246 in the Cotsen Collection (see v. 1: PL. 69). The combination is reminiscent of a stone carving in the Wu Family Shrines 武氏祠, built in the second half of the second century CE (FIG. 9).⁴¹ The carving depicts the ascent of a deceased couple to the immortal land governed by the Mother Queen of the West. After their burial, as the two tumuli at the bottom indicate, the deceased are expected to ride on a chariot to reach the Mother Queen of the West and the Father King of the East, both of whom are floating among the clouds at the top of the carving. Like the winged horses pulling the chariots, the Mother Queen of the West and the Father King of the East can fly above the human world. The design seen on mirrors appears to be a simplified version of the stone carving. Although the Han people did consider dragons and tigers great helpers in taking celestial flights, chariots provided a more comfortable means of transportation. At any rate, the

FIGURE 7: Bronze mirror excavated in 1957–58 from Tomb 7052 at Shaogou, Luoyang (Henan). Diam. 16.7 cm. 1st century CE. Rubbing from Zhongguo Shehuikexueyuan Kaogu Yanjiusuo Luoyang Fajuedui 1963: fig. 21-1.

FIGURE 8: Bronze mirror excavated in 1984 from Tomb 5 at Pingshan yangzhichang, Yangzhou (Jiangsu). Diam. 18.5 cm. Early 1st century CE. Rubbing from Yangzhou Bowuguan 1986: fig. 1.

FIGURE 9: Stone carving excavated in 1786 at the site of the Wu Family Shrines in Jiexiang (Shandong). 2nd half of 2nd century CE. Drawing commissioned by the author, based on Hayashi 1989: fig. 16.



FIGURE 10



FIGURE 11

new design, by moving away from the use of the cardinal emblems, indicates that some Han consumers preferred more specific tokens of immortality, such as deities of the immortal land, to a general index of auspiciousness, such as a gameboard.

Archaeological finds in Shaoxing have also brought to light an effort to reconcile the two options. As FIG. 10 shows, some artisans grouped the divine pair with a cardinal emblem (a tiger) and a chariot, a reconciliation that may have appealed to those Han consumers who wanted to see signs of both immortality and auspiciousness on their daily utensils.⁴² Mirror O-0226 in the Cotsen Collection falls into this category (see v. 1: PL. 70). Probably considering a tiger and a chariot an odd pair, the artisan reduced the chariot to a winged horse. A mirror reportedly from Shaoxing has a chariot juxtaposed with a horse, establishing that such a simplification of the chariot symbol could take place (FIG. 11).⁴³ Despite our first impression, then—that the winged horse was a direct replacement for the dragon of the east—this development suggests that the winged horse stood for a celestial chariot.

IMMORTALITY AND OTHERNESS

THE WINGED HORSE HAS ANOTHER CELESTIAL ASSOCIATION: it inevitably evokes the imagery of “heavenly horses.” According to Sima Qian, when Emperor Wu heard that horses whose perspiration was as red as blood dwelled in Dayuan 大宛 (the Ferghana Valley in present-day Uzbekistan), he wanted some. Knowing that the

people of Dayuan had long coveted Han goods, the emperor dispatched envoys to trade for the horses. The Dayuan leaders showed no interest in bargaining and killed the Han envoys, believing that the Han empire was too far away to pose a serious threat. But they underestimated Emperor Wu’s determination. Even though the Ferghana Valley was thirteen thousand kilometers away from the capital at Chang’an, the emperor mobilized soldiers and ruffians from frontier commanderies for expeditions to Dayuan. Thirty thousand Han troops reached the capital of Dayuan in 101 BCE and besieged it for forty days. Dayuan eventually surrendered, and the Han army returned to the homeland with more than three thousand horses. Fewer than thirty of these were ranked as the finest of the breed—the so-called heavenly horses.⁴⁴

In commemoration, Emperor Wu commissioned a song eulogizing the heavenly horses, which he had performed at court.

*The heavenly horses arrived,
Coming from the far west.
They have crossed the moving sands
The nine barbarians have been overthrown.*

*The heavenly horses arrived,
Emerging from spring water.
Like tigers, their backbones are double.
They charge like demons.*

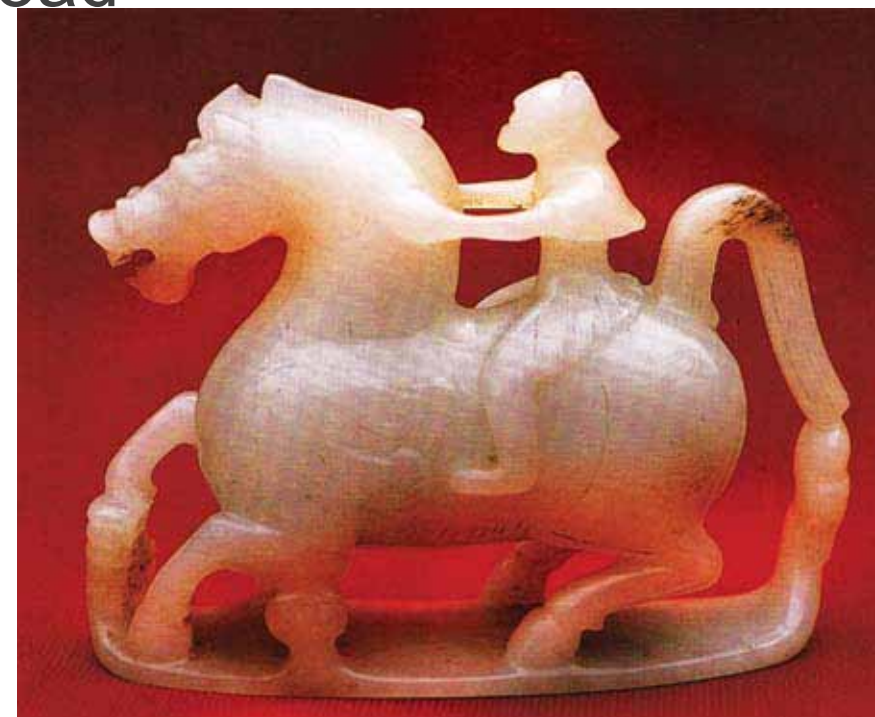


FIGURE 12

*The heavenly horses arrived,
Passing through places without grass.
They covered the distance of one thousand li,
Following the route eastward.*

*The heavenly horses arrived,
In the year when Jupiter resided in the chen position.
Are they preparing to soar up into the air
At who knows what moment?⁴⁵*

The songwriter dramatized the superiority of the heavenly horses by comparing them to charging demons and double-backed tigers. In the Mao Mausoleum, Emperor Wu’s own funerary park, archaeologists discovered a gilded-bronze sculpture of a horse measuring 62 centimeters in height, which may represent a heavenly horse. Slim and tall in build, it is very different from the stone horses on Huo Qubing’s 霍去病 (140–117 BCE) grave, which were carved before the emperor acquired the heavenly horses from Dayuan.⁴⁶

The imperial artisan who cast the gilded-bronze horse found at the Mao Mausoleum may have had a chance to inspect the heavenly horses in person, but many others who portrayed the legendary animals did not. Some of them translated the term “heavenly horses” into pictorial form by adding a pair of wings to a horse. The winged horse impressed on a hollow brick unearthed in Luoyang is an example.⁴⁷ Inevitably, as a consequence the

FIGURE 12: Jade sculpture excavated in 1966 in Xianyang (Shaanxi). 7 x 8.9 cm. 1st century BCE. Photograph from *Zhongguo Meishu Quanji Bianjiweiyuanhui* 1985: pl. 70.

FIGURE 13: Bronze mirror. Present whereabouts unknown. Diam. 19.2 cm. Late 2nd century to early 3rd century CE. Drawing commissioned by the author, based on Liang Shangchun 1940–42, IIc: pl. 30.



FIGURE 13

heavenly horse became the mount of an immortal, another winged creature believed to dwell in the celestial realm. A jade object excavated in Xianyang, approximately 50 kilometers from Chang’an, shows that exact combination: a winged immortal riding a winged horse (FIG. 12).⁴⁸ The heavenly horse, originally the coveted booty of imperial expansion, was thus transformed into a symbol of immortality in the Han popular imagination.

Heavenly horses, either alone or pulling chariots, continued to connote immortality on mirrors that featured the Mother Queen of the West. One inscribed example explicitly identifies a winged horse ridden by a winged immortal as *tianma* 天馬 (“heavenly horse”; FIG. 13).⁴⁹ Another mirror, reportedly from Shaoxing, shows a winged immortal riding a winged horse incorporated into a design that includes the divine pair and the white tiger (FIG. 14).⁵⁰ These examples help us secure the iconography and iconology of the winged horse on mirror O-0226 (see v. 1: PL. 70).

It is noteworthy that the inscription on mirror O-0246, which is decorated with two chariots (see v. 1: PL. 69), refers to national affairs: “Mr. Shi 石 has made this mirror; [may] the four barbarians have submitted; [may] many congratulations be on [our] country (*guojia* 國家) and let the people get rest; [may] the Hu 胡 captives be removed and destroyed, and the world under Heaven be restored; [may] wind and rain come in a timely way, and the five grains ripen; [may you] long preserve [your] two parents and obtain the power of Heaven; [may you] pass [this] down to descendants and enjoy happiness without end.” In other words,

FIGURE 10: Bronze mirror excavated in 1983 at Lishan, Deqing (Zhejiang). Diam. 20.5 cm. Late 2nd century to early 3rd century CE. Photograph from Wang Shilun 2006: epl. 16.

FIGURE 11: Bronze mirror. Present whereabouts unknown. Diam. 21.7 cm. Late 2nd century to early 3rd century CE. Photograph from Umehara 1939: pl. 14.



FIGURE 14

to vanquish non-Han neighbors and thereby to ensure the peace of the country and the well-being of the people is represented as a goal as significant as family happiness.

The artisan who made the mirror, Mr. Shi, did not invent the inscription but adopted a formula (see Brashier, this volume). It is not easy to track the first appearance of the formula, but it is known that artisans used this set of blessings in mirror inscriptions during the reign of Wang Mang, specifying “the house of the Xin dynasty” rather than the generalized “country” to receive congratulations.⁵¹ During that time, it appeared on the then-prevalent TLV mirror, but it did not disappear when that mirror type went into decline; instead, it was attached to the newly emerging design that centered on the Mother Queen of the West.⁵²

Inscriptions and designs were often flexibly combined in mirror decorations, but Eastern Han mirrors with depictions of the Mother Queen of the West are an exception: the majority of known specimens have some version of the formulaic inscription referring to non-Han neighbors. We cannot ignore the intention behind the presentation. Opinions as to where the goddess dwelled were widely divided in the pre-Han and Han texts. The authors of the *Book of the King of Huainan* said the

Mother Queen of the West was at the brink of the Floating Sands through which one of the four rivers originating in the Kunlun Mountains flowed.⁵³ In other words, she was near but not exactly at the Kunlun Mountains. The Mother Queen of the West thus had at least two meanings for the Han people: immortality and the remote west.

The remote west was the location of the land of the immortals, as well as the stage for border disputes. Mr. Shi’s mirror mentions Hu captives. In the Western Han, “Hu” mostly denoted the Xiongnu 匈奴, the longtime enemy of the Han empire, but in the Eastern Han it also referred to other non-Han people, including a new threat, the Qiang 羌 people of the Tibetan borderlands. Warfare broke up at least five times with the Qiang during the Eastern Han, with each period of strife lasting from six to thirty years. The battlefields stretched from the Hexi 河西 corridor to the northern border; the flames of war even reached the vicinity of the old Han capital Chang’an. The frequent and large-scale conflicts caused not only heavy casualties but also a dramatic drop in the population of the northwest. The population registers excerpted into the official histories of the Han dynasty tell us that the household count decreased by 95 percent in Beidi 北地 county (present-day eastern Ningxia) in the second century, compared with the end of Western Han, and by 90 percent in Jincheng 金城 and Longxi 隴西 counties (both in present-day eastern Gansu). The constant warfare exhausted the financial resources of the Eastern Han government, which, after running through 240 million *qian* 錢 in less than two decades, had no choice but to burden the country with heavy taxes.⁵⁴

Constant warfare and a high death toll in the west, combined with heavy taxation, must have contributed to Han people’s hope that the Mother Queen of the West would bring peace to the western frontier. The representations of the deity and the inscribed textual blessings for the individual and the nation on the backs of mirrors must have given their users some confidence. In the Han mind, the heavenly horses similarly shared a double connotation: they came from the remote west, and they were associated with immortals. Pairing the heavenly horse with the tiger, the emblem of the west, further accentuated the direction of Han hopes. The design of the Cotsen mirror with a winged horse thus refers to the west, the wish for immortality, and the promise of peace, and it offers a lingering hint of auspiciousness.

FIGURE 14: Bronze mirror. Present whereabouts unknown. Diam. 19.4 cm Late 2nd century to early 3rd century CE. Photograph from Umehara 1939: pl. 37.

NOTES

1 As Nathan Sivin pointed out to me (personal communication, 2009), “Mother Queen of the West” is a more appropriate translation than “Queen Mother of the West.”

2 Chen Peifen 1987: pl. 49.

3 Translations are mine unless otherwise specified.

4 Ban Gu, *Han shu* “Wang Mang zhuan” 漢書王莽傳 (*Han shu* 99c.4152–53).

5 For an introduction to the system, see Needham 1954–2004, III: 229–252.

6 Sima Qian, *Shi ji* “Tianguan shu” 史記天官書 (*Shi ji* 27.1289–1311). Sima compared only one of the western lodges, Triad, to a white tiger. Somehow the more vivid imagery of a white tiger came to replace the obscure Harmonious Pond as the emblem of the west in Han popular culture.

7 Ban Gu, *Han shu* “Gongsun Hong zhuan” 漢書公孫弘傳 (*Han shu* 58.2613, 1616).

8 Chen Qiyou, *Lüshi Chunqiu jiaoshi* 呂氏春秋校釋 1.1–12.647; Liu Wendian, *Huainan Honglie jijie* 淮南鴻烈集解 5.159–190.

9 Tseng 2011: fig. 4.15; Puyang shi Wenwu Guanliweiyuanhui 1986.

10 Feng Shi 2007: 374–409; Chang Kwang-chih 1990: 91–97.

11 Zhongguo Kexueyuan Kaogu Yanjiusuo 1959b: 27.

12 Hubei Sheng Bowuguan 1989, I: 352–356.

13 Feng Shi 1990: 114–117.

14 Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 1980, I: 253–257.

15 Chen Jiujin 1999.

16 Tseng 2011: fig. 4.19; Yan Genqi 2001: 81–247.

17 For a discussion of the term, see Major 1985–1986.

18 Wang Zhijie 1976.

19 Xianyang Shi Wenguanhui 1983.

20 Ban Gu, *Han shu* “Wang Mang zhuan” (*Han shu* 69c.4152–4153).

21 Ban Gu, *Han shu* “Wang Mang zhuan” (*Han shu* 99c.4161–4162, 4174). For archaeological reports, see Luo Zhongru 1961; Huang Zhanyue 1960. For further discussion of the Nine Temples, see Huang Zhanyue 1989. Each structure in the Nine Temples has four walls, each measuring about 270 m in length.

22 Lianyungang Shi Bowuguan 1997: 160–161, 166, 171.

23 Nishida 1986; Zhou Zheng 1987.

24 Tseng 2004: 177–186.

25 Wu Hung 1995: 176–187.

26 Chen Peifen 1987: 23, pl. 39. The translation is modified from the one in Karlgren 1934: exx. 108–110.

27 Ban Gu, *Han shu* “Wang Mang zhuan” (*Han shu* 99a.4069).

28 Tseng 2004: 207–211; Zhongguo Shehuikexueyuan Kaogu Yanjiusuo 1980, I: 262–266, 337.29 Zhongguo Kexueyuan Kaogu Yanjiusuo Luoyang Fajuedui 1963: fig. 21-1, pl. 8-4.

30 Tseng 2004: 208–215.

31 Fracasso 1988; Cahill 1993: 11–65.

32 Liu Wendian, *Huainan Honglie jijie* 6.217.

33 The Rhapsody is preserved in Sima Qian, *Shi ji* “Sima Xiangru lie zhuan” 司馬相如列傳 (*Shi ji* 117.3060).

34 Ban Gu, *Han shu* “Wu xing zhi” 漢書五行志 (*Han shu*, 27c–a.1476); Loewe 1979: 98–101.

35 Wu Hung 1987a; James 1995; Li Song 2000.

36 Tseng 2011: fig. 70; Luoyang Bowuguan 1977.

37 Sofukawa 1979: 158–163.

38 Yangzhou Bowuguan 1986: fig. 1. For other similar examples, see Xin Lixiang 2000: 149.

39 Li Song 2000: 144.

40 For archaeological finds in Shaoxing, see Wang Shilun 2006: color pls. 12–15, pls. 22–24.

41 Xin Lixiang 2000: 159–161. As Xin points out, Hayashi Minao (1989: 104–118, 157–160) mistook the deities floating among the clouds on the carving as Mother Queen of the West and Yellow Thearch. Failing to see the close connection between the stone carving and the mirror design, Hayashi went so far as to identify the winged horse, the chariots pulled by winged horses, and other animals on mirrors as the representation of specific constellations in the sky.

42 Wang Shilun 2006: color pl. 16.

43 Umehara 1939: pl. 14.

44 Sima Qian, *Shi ji* “Dayuan lie zhuan” 史記大宛列傳 (*Shi ji* 123.3174–3177. Translation is available in Watson 1961: 280–286.

45 Ban Gu, *Han shu* “Li yue zhi” 漢書禮樂志 (*Han shu* 22.1060–1061).

46 Zhongguo Meishu Quanji Bianjiweiyuanhui 1985: pl. 70. Tseng 2008: 47–51.

47 Tseng 2008: 51, cat. no. 8.

48 Zhongguo Meishu Quanji Bianjiweiyuanhui 1985: pl. 70.49 Liang Shangchun 1940–1942, IIc: pl. 30.50 Umehara 1939: pl. 37.51 Chen Peifen 1987: pl. 41.

52 Chen Peifen 1987: pl. 41

53 Liu Wendian, *Huainan Honglie jijie* 4.134, 149.

54 Fan Ye, *Hou Han shu* “Xi Qiang zhuan” 後漢書西羌傳 (*Hou Han shu* 87.2878–2902); Ma Changshou 1984: 111–146. The household counts are based on the record in 2 CE and that in 140 CE; see the chart provided in Ma Changshou 1984: 134.

K. E. Brashier

REED COLLEGE

Han Mirror Inscriptions as Modular Texts

TAIWANESE CHRISTMAS CARDS in the 1990s often defied comprehension. On one such card beneath its “Merry X’mas – Best wishes on the season greeting,” it pictured a cat with the English subtext, “This cat is alone. He live in the New Year. Sad to say. . . .” Another similarly sported the “Merry X’mas” message with the subtext “I am an octopus baby. My body is a little tiny,” even though the card depicted a pile of puppies with no Christmas octopus in sight. Still another promisingly began with angels and a grammatically correct seasonal missive, but its verse then exclaimed:

Up on a house top twinning pulls.

Up just good for Santa Claus.

Down through the cheer the good so close.

*All for the little one X’mas boys.*¹

As is evident in all these cards, it was the *presence* of an English text, not the text itself, that conveyed a meaning, perhaps the simple notion of exoticism in line with this Western holiday. These incomprehensible cards in turn find a close parallel in the West, as people with no personal knowledge of Chinese often get permanent body tattoos of Chinese characters, the results at times just as semantically inappropriate. While we normally regard the purpose of words as indexing particular meanings, in such circumstances they serve a different function—namely, as a kind of decoration that carries the implication of further meaning even when any actual meaning is absent. Such texts function as modules in larger aesthetic programs, their role to augment general appearance rather than to communicate.

When reading a mirror inscription in early imperial China, we should likewise not assume that the main purpose of the text is to have particular signs indexing particular meanings. This inscribed text is one module in a larger picture program, and due to constraints of space, its actual meaning can sometimes become as incomprehensible as the English of a Taiwanese Christmas card or the Chinese of a Western tattoo.² While mirror inscriptions indeed give us valuable glimpses of common rhetoric and popular cosmology, we must handle them warily, fully cognizant that the text’s actual meaning may have been intended as secondary to the modular picture program as a whole.

The term “modular” here refers to a finite repertoire of components from which a variety of units can be constructed, and modularity carries with it implications of mass production and component interchangeability. Such building blocks may regularly fit together in standard patterns, and these patterns in turn allow us to recognize mutations and variances when they occur. In Han mirror inscriptions, the text as a whole serves as a module within the mirror’s picture program, alongside its other modules of geometric and representative art. Yet these texts are themselves also constructed out of modules, their inscribers selecting from and combining a finite number of couplets and phrases that exhibit a degree of interchangeability. A standardized four-line description of transcendent beings could be followed by a set phrase wishing the mirror owner long life, or it could continue with a traditional blessing of many descendants, a desire for high office, or a hope for a peaceful empire.

We might contextualize the following discussion on modular rhetoric by noting that archaeologists in recent decades have excavated manuscripts such as Laozi’s 老子 *Daode jing* 道德經, the *Classic of Changes* (*Yi jing* 易經), and chapters of the *Records on Ritual* (*Li ji* 禮記) which, through comparison with their transmitted cousins, tell us something about this kind of textual propagation in early China.³ Comparison has revealed the componential nature of texts, their original building blocks being the movable segment known as a *zhang* 章 (“unit” or “pericope”). Each *zhang* may have begun on a new bamboo strip, and these strips were then bound together into a *pian* 篇 (“bundle”). These *pian* are the short texts that were later edited and arranged into the transmitted books we have now. William Boltz contends that we might “think of the act of composing texts as in significant part the act of selecting and assembling passages from a reservoir of so-called textual building blocks.” Edward Shaughnessy in turn argues that, if the bundle straps had degraded, the composers might have sometimes reassembled their texts into a substandard order, an order that persists in the transmitted texts of today.⁴

These mirror inscriptions will further complicate our ideas of textual composition because, while the inscriptions are clearly small assemblages of selected couplets with at times messy results, we are here presumably divorced from the medium of bound strips.⁵ The inscriptions themselves even use the term *zhang* or *wenzhang* 文章 with great frequency but in reference to the modular units of the picture program as a whole, not just in reference to the inscription’s textual components. With thousands of mirrors surviving from early China and hundreds of inscriptions readily available to any student, these mirrors thus provide a unique database to continue our study of the modularity of early texts. As mirrors are regularly excavated from all over Han China, we can assume there was a robust marketplace, and as will be seen below, the mirror inscriptions themselves not only refer to that “marketplace” (*shi* 市), they also competed with one another in claims of quality and auspiciousness. In such numbers, these inscriptions offer us an extensive and growing corpus of couplets and regulated expressions through which we can learn about early textual manipulation and variation.⁶

Focusing on the mirrors of the Cotsen Collection, I will examine both the modularity and the meaningfulness of early mirror inscriptions, first by exploring the relationship between inscription and mirror, second by analyzing three inscriptions to show how they represent modular rhetoric, and finally by asking

whether these inscriptions can thus be read “meaningfully”—that is, whether they can truly provide us with solid evidence for beliefs and idea systems in early China.

MIRROR BLESSINGS

THE SELF-REFERENTIAL NATURE of mirror inscriptions ought to be contextualized within a Han culture in which self-referential objects, labels and inventories were the norm. Seals, stelae, tablets, gateposts, spirit paths, and so forth explicitly label themselves as “seals,” stelae,” etc. Labels were permanently affixed to Han bronzes and lacquerware, and they were customarily attached to hampers of foodstuffs and boxes of manufactured goods (on similar inscriptions on silk textiles, see Cahill, this volume). Before addressing the modularity and meaningfulness of mirror inscriptions, therefore, we first must examine the relationship between mirror and inscription, and fortunately the mirror inscriptions themselves are similarly self-referential both in terms of medium and in terms of picture program.

The Cotsen Collection amply attests to how inscriptions refer to their own bronze medium. One of its briefest inscriptions—on mirror O-0877 (see v. 1: PL. 71)—simply declares the following:

青羊為志 *I have made this inscription on the
blue-green auspiciousness.*

At first glance, the characters *qingyang* 青羊 might be read as the “blue-green ram,” but thanks to the modularity of these inscriptions, we find numerous parallels to and variations of this phrase, which show that the character for “ram” (*yang* 羊) clearly should be read as an abbreviation for the character “auspiciousness” (*xiang* 祥). The “blue-green auspiciousness” is a poetic reference to the mirror’s copper, just as other mirrors refer to the “threefold auspiciousness” (*sanxiang* 三羊/祥) of copper, tin and lead.⁷ Still other mirrors speak of the “blue-green dragon” (*qinglong* 青龍) or the “blue-green superior” (*qingsheng* 青勝), the latter for example found on an equally brief inscription that reads “Inscribed on the blue-green superior” (*qingsheng zhi xi* 青勝志兮).⁸

A second mirror from the Cotsen Collection, mirror O-0133 (see v. 1: PL. 74), similarly highlights its metal medium as well as the pains taken to manipulate it.

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吾作明鏡 *I made this bright mirror,*
幽澗三商 *In seclusion refining the three metallic notes.*

This couplet is common and often begins longer inscriptions.⁹ Here the phrase “three metallic notes” draws upon five-phase cosmology as applied to music, the *shang* musical note correlating with metal. In his interpretation of this phrase, Bernhard Karlgren summarized that “the mirror decorations and mirror inscriptions are imbued with Taoistic and general mystical symbolism, astronomical, cosmological and numerical, and it would therefore be perfectly in keeping with their general tenor if ‘three metals’ were expressed by ‘three items of the *shang* element.’”¹⁰

The flowery language of “blue-green auspiciousness” and “three metallic notes” seems to echo the lingo of alchemy and mysticism, an association recognized by many scholars. In the 1930s, Karlgren noted that this kind of formula “refers to the esoteric art of the founder: he works the metal unseen to others, and according to his own private 方 recipe,” whereas much more recently Anthony Barbieri-Low explained that the “two functions of wizardry and manufacturing operated in parallel for some time.”¹¹ Barbieri-Low is here describing the operations of the Directorate for Imperial Manufactories or *Shangfang* 尚方, a prestigious workshop that many mirror inscriptions claim as the mirror’s origin. A common set of rhymed seven-character lines self-referentially describes a particular mirror’s origin and picture program as follows:

尚方作竟 *The Shangfang workshop made this mirror*
大毋傷 *Which is great and without blemish.*
左龍右虎 *To the left is the dragon, to the right the tiger,*
辟不羊 *And they ward off the inauspicious.*
朱鳥玄武 *The red bird and dark warrior*
順陰陽 *Heed the yinyang.*¹²

The blue-green dragon, the white tiger, the red bird, and the “dark warrior” (a tortoise with a snake slung around it) are the four reifications of the cosmic forces correlated with the east/spring, west/autumn, south/summer, and north/winter, respectively.¹³ This type of symbolic discourse, as well as phrases such as “heed the *yinyang*” (*shun yinyang* 順陰陽), can indeed be found in early alchemical cookbooks such as the *Classic of Changes’ Kinship of the Three* (*Zhou Yi cantong qi* 周易參同契).¹⁴

Another common cosmological claim associated with the mirror’s metallic medium is the day of manufacture, often identified as *bingwu* 丙午 on the sexagenary calendar because the Heavenly Stem *bing* is associated with fire and the Earthly Branch *wu* is associated with high noon.¹⁵ *Bingwu* thus exemplified the proper time for casting mirrors. A dated mirror might begin “On the twenty-seventh day—which was a *bingwu day*—of the first month of the second year of the Jianning reign period [i.e., 169 CE], I made this bright mirror from the threefold auspiciousness, and I have my own recipe” (*Jianning ernian zhengyue nianqi bingwu, sanyang zuo mingjing, zi youfang* 建寧二年正月廿七丙午，三羊作明鏡，自有方).¹⁶ In Liu Yongming’s corpus of forty-four dated Han mirrors, twelve clearly denote *bingwu* days of manufacture, whereas only eleven denote any of the other fifty-nine days. Interestingly, the *bingwu* claim seems to stop around 189 CE, whereas most of the non-*bingwu* dates come after 209 CE. I do not know why such would be the case.

Adding to the mysticism, these mirror casters claim to refine their ore “in seclusion,” often boasting that “I have my own recipe,” as above.¹⁷ In these inscriptions, the word standing in the position of “recipe” is highly variable, and other casters claim to have their own “method” (*ji* 紀), “norm” (*jing* 經), “rule” (*chang* 常), “principle” (*yi* 意), “truth” (*zhen* 真) or “way” (*dao* 道).

These various poetic terms for metal and the accompanying appeals to secrecy indeed seem to resonate with the mysteries of alchemical lore, but it may be more pragmatic to recognize such language as part of an argument being made: “You should consider my mirror extremely special, and you should buy it.” Mirrors were not just self-referential; they were other-referential as well. Inscriptions sometimes exclaim that a mirror “is distinct from the host of others” (*yuzhong yi* 與眾異) or “is rare in the world” (*shi shaoyou* 世少有).¹⁸ To have one’s own recipe or method was to separate oneself from the crowd and inflate the mirror’s value in the marketplace. Inscriptions directly refer to the mirror being “suitable for the marketplace” (*yi gushi* 宜古市) and the mirror’s “buyer” (*mairen* 買人或 *maizhe* 買者) becoming prosperous, having many children, and securing a long life.¹⁹ This marketplace mentality extends to assertions of manufacture, and Barbieri-Low strongly questions whether the Shangfang-origin claims on mirrors are genuine.²⁰ Similarly, the first month of the second year of the Jianning-reign period in fact had no *bingwu* day despite the claim of the mirror inscription above, and Michael Loewe has rightly

expressed anxiety about the authenticity of some of these assertions as well.²¹ Mirrors were trafficked in the marketplace and subject to colorful, pushy, and even deceptive advertising, and that context in itself should perhaps temper how we read their inscriptions.

So far, we have focused on what inscriptions say about the mirror’s bronze medium, but as already seen in the Shangfang inscription above, they sometimes refer to the mirror’s picture program as well. Often after referencing how the mirror was cast, an inscription may proceed by listing the elements of the picture program, such as “On it are transcendents who do not know old age” (*shang you xianren bu zhi lao* 上有仙人不知老) as on the Cotsen mirror O-0856 (see v. 1: PL. 63) and discussed at length below. Others may list how the blue-green dragon is to the left, the white tiger to the right, both standing alongside the Queen Mother of the West and King Father of the East, with “everything in its place” (*xi jie zai* 悉皆在). More commonly, the mirror does not explicitly refer to its own picture program, but the inscription’s list of auspicious symbols may still coincide with some of the images found on the mirror surface.

As will be seen in the next section, most inscriptions are not unique, and either whole inscriptions or their components can be shuffled into a finite number of subsets. Han picture programs can similarly be divided into identifiable groups. For example, Kong Xiangxing and Liu Yiman divvied up their corpus of 320 Han mirror rubbings into eighteen basic categories or picture programs, some categories having as many as five subcategories. The conceptualization of such inscription and picture categories logically leads to the following question: do certain types of inscriptions usually accompany certain types of pictures?

To address this question, let us take the three Cotsen mirrors to be analyzed at length in the following section and compare their picture programs with those of similarly inscribed mirrors. I chose these three particular mirrors simply because they carry the longest inscriptions, and I have arbitrarily distinguished them from one another in terms of their content—that is, the blessings they offer (1) within the realm of humans, (2) within the realm of transcendents, and (3) within the realm of deities.

Beginning with blessings within the realm of humans, the “Inscribed icon mirror” O-0246 (see v. 1: PL. 69) praises the state in a time of peace when barbarians are no longer a threat, the people are at rest, and the lineages can thrive. Within Kong Xiangxing and Liu Yiman’s corpus, there are ten mirrors with extremely

similar inscriptions, but they are spread out across four of their eighteen basic categories or picture programs, which are as follows:

- “Multi-nipple mirrors with birds and animals” (*Duoru qinshou jing* 多乳禽獸鏡);
- “Dragon and tiger mirrors” (*Longhu jing* 龍虎鏡);
- “Game board with four spirits mirrors” (*Sishen boju jing* 四神博局鏡), also known as TLV mirrors because their line patterns among the four cosmological creatures (the blue-green dragon, white tiger, and so forth) look like T’s, L’s and V’s; and
- “Pictorial figures mirrors” (*Huaxiang jing* 畫像鏡).

The Cotsen mirror belongs to the last category. In this case, the inscription and picture program do not seem to be tightly bound to one another and are modularly interchangeable.

The second mirror to be considered, the “Inscribed TLV mirror with mythical animals” (see v. 1: PL. 63), moves us up to the realm of the transcendents who do not know old age, who dine on jade springs and jujubes, and who drift above the world. Kong Xiangxing and Liu Yiman’s corpus includes nine similar inscriptions divided between two picture programs, the “Pictorial figures mirrors” and the “Game board with four spirits mirrors” described above. The Cotsen mirror belongs to the latter category. If we add eight inscriptions that include substantial components deriving from this full inscription, the number of picture programs doubles to include “Multi-nipple mirrors with birds and animals” and “Four-nipple mirrors with birds and animals” (*Siru qinshou jing* 四乳禽獸鏡).²² As these first two Cotsen mirrors demonstrate, a single picture program can accompany more than one kind of inscription, just as a single inscription type can accompany more than one kind of picture program, thereby evincing modularity.

Finally, we move further up to the realm of deities, to the four cosmological creatures, the five deities who represent the Five Phases, the Yellow Emperor, and so forth, who are listed on the “Inscribed mirror with deities and animals in registers,” mirror O-0349 (see v. 1: PL. 72). Kong Xiangxing and Liu Yiman’s corpus has only three starkly similar inscriptions, and they all belong to mirrors in their category “Mirrors with spirits and animals” (*Shenshou jing* 神獸鏡) and, more specifically, in his subcategory “Mirrors with spirits and animals arranged in registers” (*Chonglie shi shenshou jing* 重列式神獸鏡). The Cotsen mirror easily fits

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into this subcategory as well. This design is unique because the figures are all facing the same direction and are lined up in rows so that the mirror is to be viewed from one angle only, unlike most other mirrors in which only the bottom figures are upright as one turns the mirror in one’s hand. Significantly, if we include here Liu Yongming’s corpus of forty-four dated Han mirrors, we add seven inscriptions that are extremely similar to that of the Cotsen mirror, all dated to the Jian’an-reign period (196–220) and all also belonging to this same pictorial subcategory. In other words, here is a case in which an inscription seems to belong to a single picture program. However, the reverse is not entirely true, as there are a few “mirrors with spirits and animals arranged in registers” that sport other kinds of inscriptions.

To summarize from this limited evidence, inscriptions are usually not picture-program dependent nor vice versa, but certain types of inscriptions tend to be mixed and matched with certain types of picture programs. That is, certain inscriptions may usually be found in four or five of Kong Xiangxing and Liu Yiman’s picture categories but not in all eighteen, and, as is apparent in mirror O-0349, there are cases in which the bond between inscription and image is much stronger.

MODULAR BLESSINGS

IN THE PREVIOUS SECTION of this article, I explored the relationship between mirror inscription and picture program, concluding with the question of whether different inscriptions could be mixed and matched with different picture programs. I now take up the question of modularity as it relates to just the inscriptions themselves and consider how textual components snapped together in different ways. As already noted, I will focus on three Cotsen mirrors that describe the idealized realms of humans, transcendents, and deities, and in each case I will compare the Cotsen inscription first to other extremely similar, complete inscriptions, then to other inscriptions that share multi-line components, and finally to other inscriptions that share only single-line segments or key phrases. By thoroughly exploring this conceptual marketplace where blessings are trafficked, we may better understand what is here being dubbed the modular rhetoric of early China.

Blessings within the Realm of Humans

In his study on mass production in Chinese art, Lothar Ledderose contended that one of the side effects of modularity was the recognition that the grandest ruler and the pettiest official each used goods produced by the same techniques. “Modular production thus contributes to the fostering of social homogeneity and cultural and political coherence,” he wrote.²³ Han mirrors may indeed have been the same for the Son of Heaven and district clerk, and so we appropriately begin with an inscription, that of the “Inscribed icon mirror” O-0246 (see v. 1: PL. 69), which explicitly vaunts cultural and political coherence.

石氏作鏡	<i>Mr. Shi has made this mirror.</i>
四夷服	<i>The barbarians of the four directions have submitted.</i>
多賀國家	<i>We very much congratulate the imperial state,</i>
人民息	<i>And the people are at rest.</i>
胡虜殄滅	<i>The Hu slaves (of the north) have been scattered and annihilated,</i>
天下復	<i>And the empire has been restored.</i>
風雨節時	<i>Wind and rain are proper to the term and season,</i>
五穀熟	<i>And the five varieties of grain have ripened.</i>
長保二親	<i>May you long protect both your parents</i>
得天力	<i>And gain the strength of heaven.</i>
傳告後世	<i>May you hand it down to and inform later generations,</i>
樂無極	<i>And may your pleasure be limitless.</i> ²⁵

This inscription of six heptasyllabic lines is relatively stable in the sense that it can appear on many mirrors with little deviation. When all these similar inscriptions are grouped together, their variances are generally limited to the following:

- A few inscriptions swap minor phrases so that “The Hu slaves (of the north)” becomes “The Hu (of the north) and the Qiang (of the northwest);” “wind and rain” becomes “clouds and rain” (*yuyu* 雲雨); and “May your pleasure be limitless” becomes “May you attain the blessings of heaven” (*De tianfu* 得天福).²⁶
- Most minor variations occur at the end of the inscription, either removing the final two lines, removing the final line, or removing the final two characters—thereby concluding with the simple exclamation “What pleasure!”

(*Le* 樂)—or adding a final line wishing the bearer extra progeny. Presumably this type of change accommodated the physical space available for the inscription.²⁷

- Perhaps the most significant regular change occurs on a few mirrors that date themselves to the Xin dynasty (9–23 CE), altering the line “We very much congratulate the imperial state” to “We very much congratulate the house of the Xin dynasty” (*Duohe Xin jia* 多賀新家). These inscriptions then make other changes, most notably adding a heptasyllabic line so that the inscription ends as follows:

長保二親	<i>May you long protect both your parents</i>
子孫力	<i>And may your sons and grandsons be strong.</i>
官位尊顯	<i>May your official position be respected and illustrious,</i>
蒙祿食	<i>And may you receive your emoluments.</i>
傳告後世	<i>May you hand it down to and inform later generations,</i>
樂無極	<i>And may your pleasure be limitless.</i>
大利兮	<i>Great profit!</i> ²⁸

The insertion of this line may again be to accommodate the physical space on the mirror. Regardless, the basic inscription exhibits a high degree of stability and would have been recognized as a standard or set piece.

More interesting is what happens when this set piece is deconstructed and its components are used as the foundation of other inscriptions.²⁹ For example, a mirror might cite just the first two heptasyllabic lines (i.e., through “and the people are at rest”) and then add its own two heptasyllabic lines on attaining high office and securing generations of filial offspring. Another might cite the first four heptasyllabic lines (i.e., through “and the five varieties of grain have ripened”) and then add its own four heptasyllabic lines on the people being happy, parents being blessed, descendants being strong, and pleasure lasting ten thousand years. Still another might cite all six heptasyllabic lines of the standard and continue with tetrasyllabic lines about riding off on the clouds, yoking a team of horses, and leading the host of spirits before simply concluding “and may you have descendants” (*yi zisun* 宜子孫).³⁰ This extraction of lines from an original block of text and/or the addition of new blocks of text demonstrates what I am calling the modular rhetoric of early China.

Two post-Han mirrors, both dated 282 CE, further demonstrate how the original standard could be modified. The first incorporates its date of manufacture into the meter and even uses a line now familiar to us from inscriptions earlier in this article:

太康三年	<i>In the third year of the Taikang reign period –</i>
歲壬寅	<i>A renyin year (on the sexagenary cycle) –</i>
二月廿日	<i>On the twentieth day of the second month,</i>
吾作竟	<i>I made this mirror.</i>
幽澗三商	<i>In seclusion I refined the three metallic notes;</i>
四夷服	<i>The barbarians of the four directions have submitted.</i> ³¹

This last line begins the insertion of our standard inscription, and this post-Han version continues by citing its next three heptasyllabic lines, adding “Great peace and prolonged pleasure!” (*Daping changle* 大平長樂) at the end. The second mirror similarly begins with its manufacture date and the phrase “In seclusion I refined the three metallic notes,” but then it takes three of our original heptasyllabic lines and converts them to six tetrasyllabic lines:

四夷自服	<i>The barbarians of the four directions submitted of their own accord,</i>
多賀國家	<i>And we very much congratulate the imperial state.</i>
人民安息	<i>The people are at peace and at rest,</i>
胡虜殄滅	<i>And the Hu slaves (of the north) have been scattered and annihilated.</i>
時雨應節	<i>The seasonal rains accord with the proper divisions of the year,</i>
五穀豐(孰)[熟]	<i>And the five varieties of grain have abundantly ripened.</i>
天下復	<i>The empire has been restored.</i> ³²

The dates on these mirrors may be significant because the empire had become briefly reunited in 280 CE, after having been split among different local régimes for more than half a century. Perhaps restoration led to resurrecting this Han rhetoric of a united and peaceful state.

Finally, it should be noted that many of the individual trisyllabic and tetrasyllabic phrases found in the Cotsen inscription are regularly woven into other inscriptions. As we have already seen, the opening line identifying the mirror caster is common,

^[1] 104

^[2] 105

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as is the phrase “May you long protect both your parents.” The desire to “very much congratulate the imperial state” and to “gain the strength of heaven” also find expression elsewhere, although none of these set phrases would necessarily have alluded to the above set piece in particular. They simply demonstrate the modular nature of these inscriptions on a much smaller scale.

Blessings within the Realm of Transcendents

In early China, bronze mirrors exemplified the notions of sturdiness and constancy, their inscriptions vaunting the durability of the metallic medium and wishing for its bearer a comparable “longevity like metal and stone” (*shou ru jinshi* 壽如金石).³³ Not surprisingly, the picture programs often depict longevous transcendents playing games, interacting with fanciful animals, or attending to the Queen Mother of the West. Likewise, their inscriptions illustrate this ideal realm that sits out on the mountainous periphery of humanity, as in the following inscription from the “Inscribed TLV mirror with mythical animals,” mirror O-0856 (see v. 1: PL. 63):

尚方作竟	<i>The Shangfang workshop made this mirror</i>
真大巧	<i>Which is truly great and well-crafted.</i>
上有仙人	<i>On its surface there are transcendents</i>
不知老	<i>Who do not know old age.</i>
渴飲玉泉	<i>When thirsty, they drink from jade springs,</i>
飢食棗	<i>And when hungry, they eat jujubes.</i>
浮(由)[游]天下	<i>They floatingly roam the world</i>
遊四海	<i>And ramble everywhere within the</i> <i>surrounding seas.</i>
樂兮	<i>What pleasure!</i> ³⁴

Again except for minor variances, this inscription is a set piece, judging from how often it appears on other mirrors.

Perhaps because it is shorter than the inscription on mirror O-0246, which had six heptasyllabic lines, this basic text was regularly padded out with one or two extra lines, the position and content of which were variable to some degree. For example, compare the inscription on mirror O-0856 to the following from a mirror preserved in the Palace Museum, Beijing:

尚方作竟	<i>The Shangfang workshop made this mirror</i>
真大好	<i>Which is truly great and excellent.</i>

上有仙人	<i>On its surface there are transcendents</i>
不知老	<i>Who do not know old age.</i>
渴飲玉泉	<i>When thirsty, they drink from jade springs,</i>
飢食棗	<i>And when hungry, they eat jujubes.</i>
徘徊神山	<i>They dart about the spirit mountains,</i>
采芝草	<i>Plucking their fungi and grasses.</i>
浮游天下	<i>They floatingly roam the world</i>
教四海	<i>And ramble everywhere within the surrounding seas.</i>
壽敵金石	<i>May your longevity outstrip that of metal and stone,</i>
為國保	<i>And may you become a protector of the state.</i> ³⁵

In most cases, the first three heptasyllabic lines found on both the Cotsen and Palace Museum mirrors hang together, whereas the fourth was sometimes moved and even eliminated. The extra lines usually refer to the transcendents’ horticultural endeavors and a wish for longevity, but these extra lines are much more variable.

This modularity is further evident when we turn to mirrors that cite only brief components of this set piece. For example, some mirror inscriptions consist of nothing more than the opening couplet found on mirror O-0856, and in such cases their picture programs can be completely different from one another.³⁶ Alternatively, this opening couplet can be nestled within longer inscriptions that otherwise have nothing to do with the standardized text. Liu Yongming’s collection of dated mirrors includes the following mirror inscription dated 64 CE:

尚方作竟	<i>The Shangfang workshop made this mirror</i>
大毋傷	<i>Which is great and without blemish.</i>
巧工刻之	<i>A skilled artisan has engraved it,</i>
成文章	<i>Achieving a refined ornamentation.</i>
左龍右虎	<i>To the left is the dragon, to the right the tiger</i>
辟不羊	<i>Who ward off the inauspicious.</i>
朱鳥玄武	<i>The red bird and dark warrior</i>
順陰陽	<i>Heed the yinyang.</i>
上有仙人	<i>On its surface there are recluses</i>
不知老	<i>Who do not know old age.</i>
渴飲玉泉	<i>When thirsty, they drink from jade springs,</i>
飢食棗	<i>And when hungry, they eat jujubes.</i>
永平七年五月造	<i>Manufactured in the fifth month of</i> <i>the Yongping-reign period’s seventh year.</i>
真	<i>Genuineness!</i> ³⁷

We have already encountered the four cosmological creatures in other inscriptions, and here it is clear that various heptasyllabic couplets are being snapped together, even to the detriment of the rhyme scheme.

Finally, there are a few inscriptions that even truncate these couplets to single lines, such as one that begins like the inscription immediately above but concludes as follows:

壽如金石	<i>May your longevity be like metal and stone,</i>
佳且好	<i>Beautiful and excellent.</i>
上有仙人	<i>On its surface there are transcendents</i>
不知老	<i>Who do not know old age.</i> ³⁸

Like an allusion to a poem committed to memory, such brief-but-recognizable citations perhaps still sparked the imagination to evoke the jade springs and jujubes that would have followed in the well-known standardized text.

Blessings within the Realm of Deities

As already noted, the “Inscribed mirror with deities and animals in registers,” O-0349 (see v. 1: PL. 72) belongs to a distinctive genre that (1) only dates from the very end of the Han and (2) closely allies one particular picture program with one particular inscription. Given these facts, we might surmise that this last inscription will not exhibit the degree of modularity evident in other mirrors, and such indeed seems to be the case. In general, “mirrors with spirits and animals arranged in registers” appear to be somewhat removed from the marketplace of rhetoric, from the tradition of interchangeable couplets that could be swapped and snapped together in different ways. The inscription begins with familiar language found on many mirrors, but it then becomes a unique set piece found only on mirrors of the same date and design.

吾作明鏡	<i>I made this bright mirror;</i>
宮凍三商	<i>From the earth note I refined the three</i> <i>metallic notes.</i>
周刻容像	<i>I have all around engraved these forms and figures,</i>
五帝主天皇	<i>The five lords and the heavenly august one.</i>
佰牙彈琴	<i>Boya strums his zither,</i>
黃帝除凶	<i>And the Yellow Lord averts the inauspicious.</i>
朱鳥玄武	<i>(Also present are) the red bird and dark warrior,</i>
白虎青龍	<i>The white tiger and blue-green dragon.</i>

君宜高官	<i>May you, sir, be suitable for high office.</i>
□□□	<i>[Lacuna].</i> ³⁹

Despite a couple of minor variances, the inscription on mirror O-0349 well represents this type of mirror’s set piece, with one major exception. In the inscription collections of Karlgren, of Kong Xiangxing and Liu Yiman, and of Liu Yongming, all eleven examples of this mirror type include an explicit date from the Jian’an-reign period. I am uncertain how to assess the notable absence of such a date from mirror O-0349.

While the language that appears on this type of mirror is not repeated elsewhere, the themes are. As seen above, the four cosmological animals are not uncommon, and they appear in contemporaneous texts at least as early as the *Huainanzi* (compiled before 122 BCE) and *Li ji* (probably compiled during the second half of the first century BCE). As will be seen below, many inscriptions not only refer to their own engraved decorations, but also boast about how every nook and cranny is filled with ornamentation. References to the famous zither player Boya are rare beyond this category of mirror, but other allusions to music, such as “May flutes and lutes surround you” (*yuqin hui* 琴琴會), are not.⁴⁰ Regardless, this inscription is unlike its predecessors in that it rarely (if ever) gets deconstructed into modules that appear elsewhere, and, except for the opening couplet, it does not include modules from other mirrors within itself.

Why is this mirror so different from the others in both design and inscription? Perhaps these Jian’an mirrors, which mostly date from the very end of the Han (specifically ca. 205 CE), represent a new phase of mirror development, or perhaps they simply come from an anomalous, regional production line that managed to make a significant number of mirrors during this chaotic period. Without further evidence, we can only speculate.

MEANINGFUL BLESSINGS?

THE INTERPRETATION OF ANY GIVEN SIGN is more than simply “symbol x indexes meaning y,” and as Charles Sanders Peirce influentially argued more than a hundred years ago, a sign consists of three components: (1) the *representamen* or the thing that does the representing, (2) the *interpretant* or how that thing then plays in the interpreter’s mind, and (3) the actual *object*

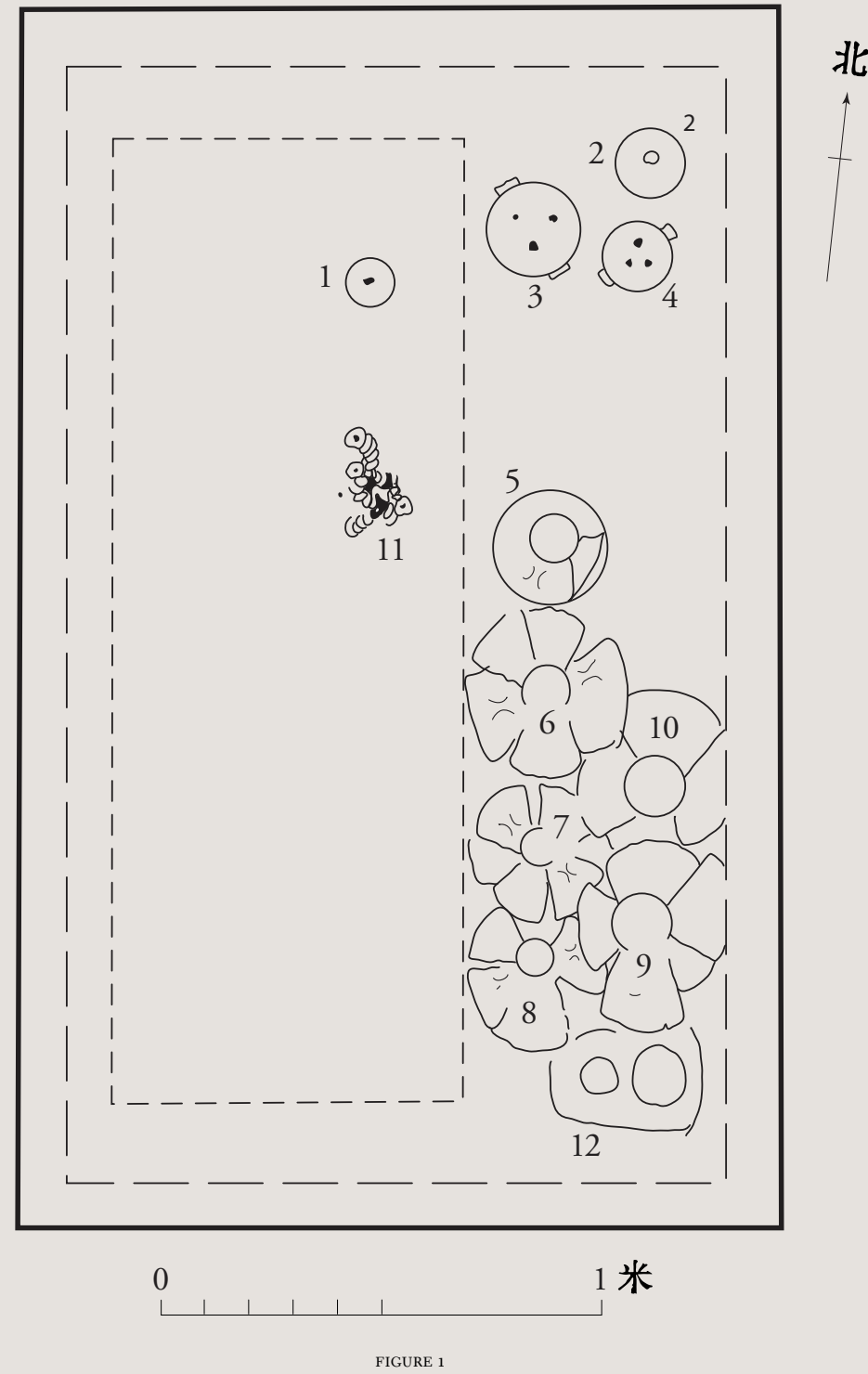


FIGURE 1:
Mirror (no. 1) in a Han grave
at Shangmashan 上馬山,
Anji 安吉 (Zhejiang province).
Drawing from Anji Xian
Bowuguan 1996: 49.

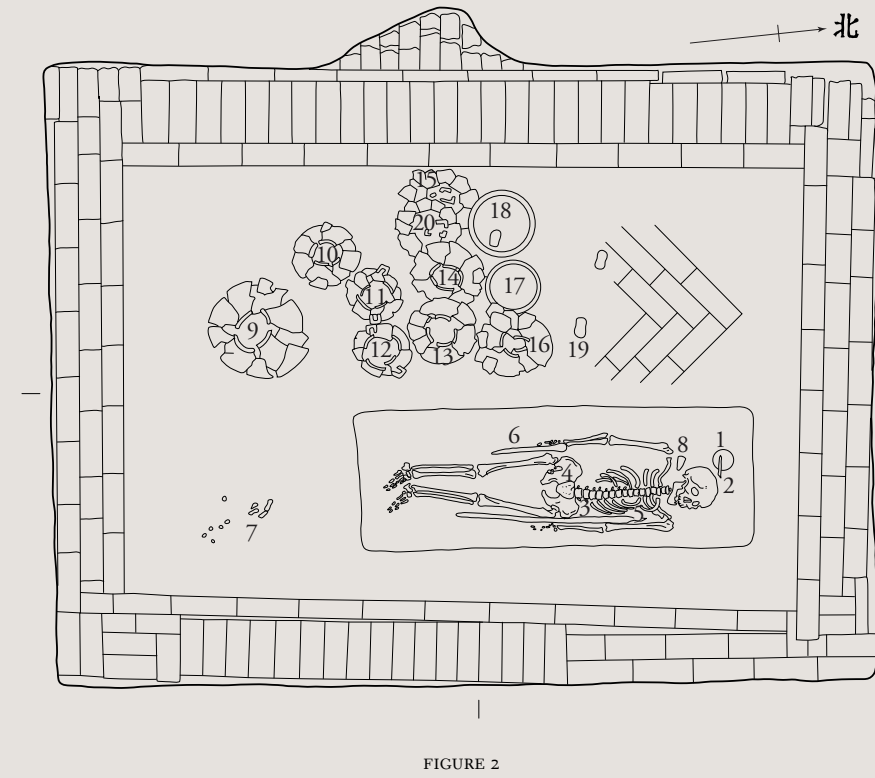


FIGURE 2:
Mirror (no. 1) positioned near
head in a Han grave at Datidong
大天東, Weihai 威海 (Shandong
province). Drawing from Weihai
Shi Bowuguan 1998: 26.

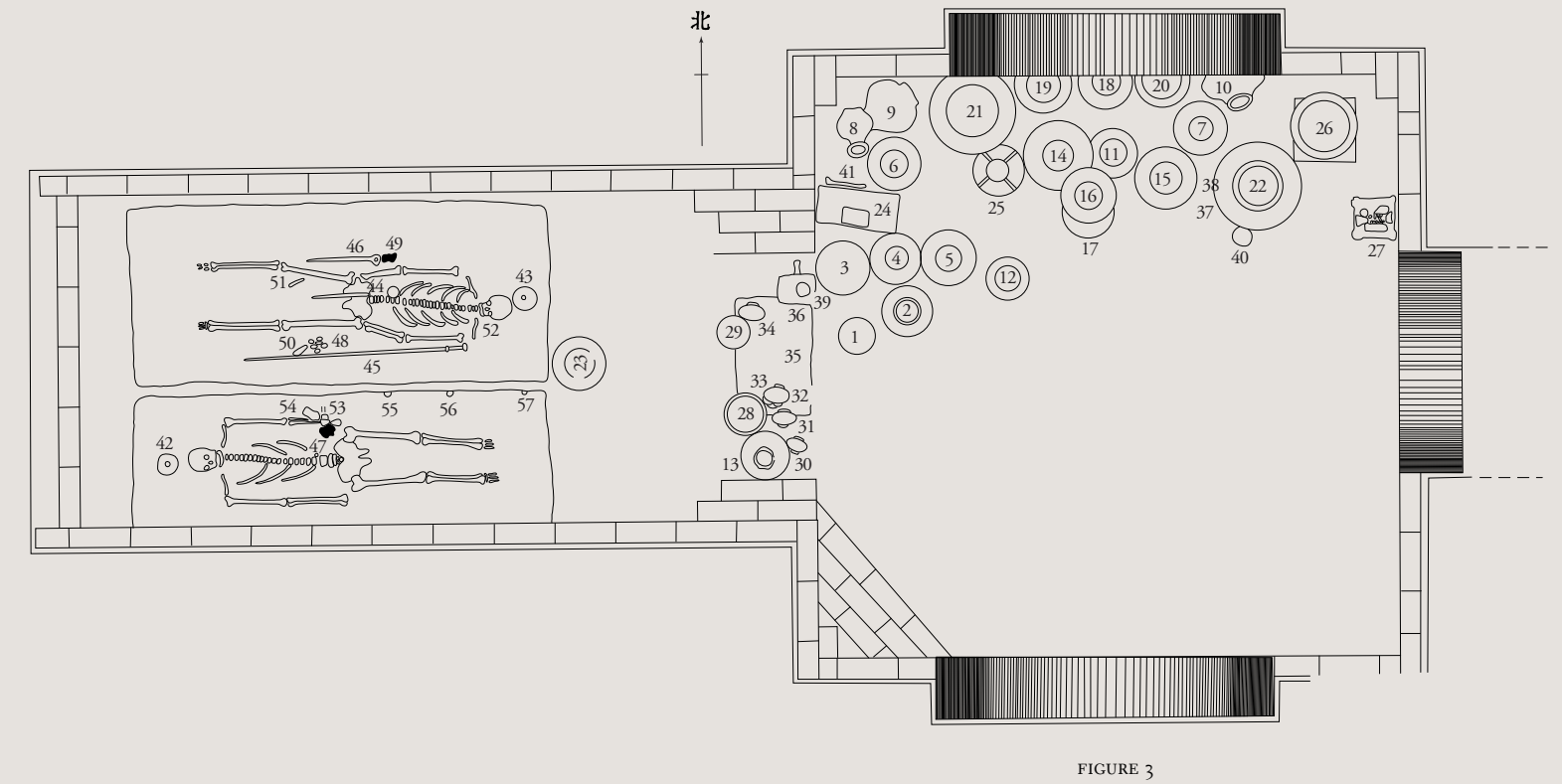


FIGURE 3:
Mirrors (nos. 42, 43) positioned
near heads in a Han grave
at Juanyan 卷煙, Xi'an 西安
(Shaanxi province). Drawing
from Shaanxi Sheng Kaogu
Yanjiusuo 1997: 4.

or referent to which the thing is pointing.⁴¹ Peirce separated a symbol that exists “out there” from an individual’s interpretation of it, because the context between the symbol and interpreter thoroughly mediates that symbol’s meaning. As Marcel Danesi explains, “In our culture, a cat is considered to be a domestic companion, among other things; in others it is viewed primarily as a sacred animal (akin to a sacred cow in some societies); and in others still it is considered to be a source of food (cat meat).”⁴² Simply put, symbols don’t exist out of context, a context that modifies the symbol to produce meaning in the interpreter’s mind. Peirce was famously known as a pragmatist because he maintained that the significance of any theory lies in the practical effects of its application. In semiotics—the study of what signs and symbols mean to their interpreter—the on-the-ground context affected meaning so much so that the representamen and interpretant had to be regarded as different.

In terms of the symbols on Han mirrors, we must be wary about simply maintaining that “Symbol X indexes Meaning Y”; like Peirce, we must duly recognize the separation between representamen and interpretant. More specifically, I would suggest that the separation between representamen and interpretant does not just indicate *what* the meaning was but *whether* the meaning was. To put it another way, we might separately consider “meaning” (i.e., what the symbol indexes) and “meaningfulness” (whether the symbol meant much to the interpreter, whether it consciously registered in his or her mind or was instead easily ignored). Eventually, loss of meaningfulness could of course lead to loss of meaning, and so when weighing meaningfulness, we need to look for evidence as to whether the symbol was consequential, banal, or even unfathomable:

- Was the symbol (or, more technically, the representamen) clear and robust, closely aligning with a particular and predictable meaning in the viewer’s mind (or, more technically, the interpretant)?
- Or had the symbol become diluted through sheer ubiquity, through accumulated additional meanings, or through its subordination to other roles beyond indexing a meaning such as decoration?
- Or, in its extreme form, had the symbol’s meaning simply become lost, its reception in the mind drowned out

by the contextual noise that exists between representamen and interpretant?⁴³

I would suggest that the case of Han mirrors leads us to necessary speculations and better nuanced understandings of how popular symbols functioned in early China. The discussion that follows may have implications for other symbol sets, ranging from ritual vessels to cemetery shrines, from inventories of grave goods to the iconography on a coffin. While we tend to ask “What does it mean?” we rarely ask “Was it actually that meaningful to the casual observer?” While the latter question is harder to answer, we cannot simply assume an affirmative answer. Regardless, we must here focus only on the meaning and meaningfulness of Han mirror inscriptions and refrain from making grander generalizations about semiotics.

Robust Meanings

In the past, students of early China—myself included—tended to look at Han mirror inscriptions, their picture programs, and the mirrors in general as readily indexing particular meanings in the minds of the people using them. As recently as the publication of the first volume of this book, Suzanne Cahill draws upon the Cotsen mirrors’ imagery and inscriptions to demonstrate an active and growing Taoist religion in which the elite partook. “The mirror is an aid to devotion, meditation, and visualization, as well as a reminder of stories about the great gods,” she writes, dubbing mirrors “tools of Taoist self-cultivation” (v. 1: 41, 47). She even contends that inscriptions such as “May you be suitable for office” (*Yiguan* 宜官) in fact “honor the deceased by suggesting he was worthy of a high position” in the afterlife and that these should be read as “prayers for posthumous celestial office” (v. 1: 43). Cahill is here arguing for a robust relationship between representamen and interpretant, for a clear and particular meaning that even leads to direct action: meditations, visualizations, and prayers.

Analyzing the picture program of the TLV mirrors, Michael Loewe has argued that this design was an idealized map where it was hoped the dead would enjoy paradise. “For, above all, the TLV mirrors served to provide a means of communication between the dead and those known realms of the cosmos to which philosophers had been content to restrict their attention.”⁴⁴ Loewe maintained there was indeed a robust relationship between representamen

and interpretant—for example, noting that “Each one of the Ls encloses a symbol whose meaning is clear for all, literate or not, to understand; for they display the four beasts of the four directions, which correspond with four of the Five Phases.”⁴⁵

In 1995, I also argued for a certain robustness of symbol interpretation, speculating that what here mattered most was not so much the inscriptions or picture programs but the mirror as a whole. Surveying published archaeological reports, I had noticed that in numerous Han grave plans, the mirror regularly enjoyed a privileged and perhaps ritualized position, usually next to the head within the coffin, and subsequent archaeological reports continue to affirm that pattern (FIGS. 1–3).⁴⁶ Using contemporaneous texts, mirror inscriptions, and stone reliefs from Han graves, I theorized that the mirror exemplified the desired stasis and constancy of the tomb and of postmortem existence generally—a “longevity like metal and stone,” as the inscriptions themselves frequently vaunt. Like Cahill and Loewe, I assumed the mirror’s role was a simple case of “Symbol X indexes Meaning Y.” I assumed the symbol both indexed meaning *and* was meaningful.

My main purpose in noting these robust interpretations is not to argue against them,⁴⁷ but rather to highlight how we tend not to consider the possibility of a more nuanced and changing relationship between symbol and symbol interpreter. We forget to question whether the meaningfulness of such symbols was diluted or even lost in the process of their decoding.

Diluted Meanings

What contributing factors might dilute meaningfulness when it comes to the symbolism of Han mirrors? I would suggest the sheer ubiquity of mirrors, their accumulation of diverse associations, and their inscribed imagery’s role as decoration (rather than as vehicle for meaning alone) together watered down a robust relationship between representamen and interpretant. Furthermore, I believe the mirrors themselves provide evidence for this dilution.

By way of analogy, within the United States we also mass-produce and daily use flat metal disks that, like the Han mirrors, explicitly allude to a religious idea system, in our case with the words “In God we trust.” While the meaning is explicit, we rarely if ever think about those inscribed words; and just because I have some coins in my pocket, it does not follow that I embrace a monotheistic religion. In fact, the Supreme Court in *Lynch v. Donnelly*

(1984) recognized that this motto has “lost through rote repetition any significant religious content.” In other words, there are contextual factors of coinage ubiquity, decoration and so forth that intervene between representamen and interpretant, diluting a robust relationship. Those words simply are not that meaningful to me relative to the object that bears them. For the same reasons, my receiving a Christmas card in December does not mean I am a Christian. When dilution of meaningfulness reaches an extreme, meaning itself can become lost altogether, at least on a popular level. Unknown to most people, the expression “Goodbye” was also an indication of monotheistic belief, originally a contraction of “God be with you.” In summary, the presence of symbols does not in itself indicate robust belief systems or even knowledge of their meaning.

The sheer ubiquity of Han mirrors alone is a precondition that could potentially lead to dilution of symbol meaningfulness. Instead of imagining a master craftsman creating a singular piece of art, we should perhaps envision a factory engaged in mass production, many thousands of that product surviving even after two millennia. Modularity in itself carries with it implications of mass production, and the marketplace of rhetoric described above is in fact dependent on a real, vast marketplace. Indeed, these inscriptions regularly allude to that market in which individual mirrors claim to be “distinct from the host of others”; and as mirrors vied with one another to be bought, their inflated language in itself potentially devalues the meaningfulness of their individual assertions.

Ubiquity alone does not imply a dilution of meaningfulness, just as the mass production of crucifixes does not in itself mean their primary robust meaningfulness has dissipated. Yet it does increase the potential for these symbols to become profane, banal, and individually less evocative of meaning. Historically, scholars of comparative religion such as Durkheim, Otto, and Eliade have long emphasized the distinction between sacred and profane by defining “sacred” as the opposite of profane, as a break in homogeneity, as the *ganz andere*.⁴⁸ Sacred is extraordinary, is extra-ordinary. On a lower level, when anything becomes ubiquitous or ordinary, it by definition loses its distinctiveness, its meaningfulness dissipated or its meaning even lost or changed.

That ubiquity also leads to a potential accumulation of additional meanings assigned to the mirror, and here we can turn to the mirror inscriptions themselves. Mirrors self-referentially highlight their brightness, their durability, and occasionally their

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utility of allowing the bearer to examine his or her appearance. More often, their inscriptions articulate a long list of blessings, the following ten being perhaps the most common:

1. Eliminations of the inauspicious
2. Endless joy
3. High office or rank
4. Longevity
5. Mutual remembrance
6. Numerous offspring
7. Peacefulness for self or state
8. Preservation of parents
9. Seasonal/agricultural harmony
10. Wealth and emoluments

Usually the easiest reading of these inscriptions is to regard such rhetoric as wishes only, but many inscriptions claim a relationship between owning the mirror and securing these blessings. Such mirrors will “*cause* you to attain a high position” (*ling jun gaowei* 令君高位), “*cause* one to attain riches and honor” (*lingren fugui* 令人富貴), or “*cause* one long life without knowing old age” (*lingren changming bu zhilao* 令人長命不知老).⁴⁹ Sometimes it is ambiguous whether the mirror itself possesses a supernatural power or it is the images on it that exert such muscle. A mirror might contend that “it will eliminate the inauspicious” (*biqu buxiang* 辟去不羊[祥]), but more often the inscription will describe the various divine creatures of the type depicted on the mirror’s surface as eliminating the inauspicious, the implication perhaps being that it is their representations that have that power. There are still other mirrors that are more ambiguous when distinguishing between “May you get X” and “The mirror causes X.” The phrase *fuzhi shoukao* 服之壽考 could be “May the bearer enjoy longevity,” or it could be “Its bearer will enjoy longevity,” just as the phrase *quzhe daji* 取者大吉 could be “May the one who takes hold of (this mirror) have great auspiciousness,” or it could be “The one who takes hold of (this mirror) will have great auspiciousness.”⁵⁰

Regardless of these rhetorical claims, Han mirrors ultimately accumulated a large number of associations, from utility to brightness, from forget-me-not to talisman, and it is necessary to recognize this diversity of associations when ascertaining the validity of earlier claims of a robust relationship between representamen and interpretant. For example, Cahill argued that the phrase “May you be suitable for office” was a prayer for celestial

rank in the afterlife, but as seen here, a wish for high office is just one among many other blessings, blessings that do not refer to postmortem circumstances. In fact, a wish for high office can occur beside wishes for a good harvest, a peaceful state, and many children, all on the same mirror. There is no reason to associate that wish for high office with Taoist religion. Shifting to the mirror’s picture program, the same argument applies to Loewe’s conjecture that the TLV mirror is a map for the dead. If only TLV mirrors had accompanied the dead in the burial, such an argument might have been plausible, but it is not hard to find representatives of almost all of Kong Xiangxing and Liu Yiman’s eighteen categories in Han tombs. In both cases, the Han mirror’s accreted diversity of inscribed wishes and picture programs will dilute these arguments that “Symbol X indexes Meaning Y.”

Sometimes, too, symbols are simply decorations and are dependent upon the thing decorated. As Hans-Georg Gadamer argued when analyzing the hermeneutics of aesthetic objects, decorative symbols are traditionally regarded as “only a means, subordinated to what it is supposed to decorate, and can therefore be replaced, like any other means subordinated to an end, by another appropriate means.”⁵¹ Here he directly links decorative symbols and the idea of modularity. Such is not to say that decorative symbols have no meaning, but the physical context of that symbol suggests that its meaning might be secondary.

The most common error found in mirror inscriptions—“error” from a meaning-seeking reader’s perspective, although perhaps not from that of the craftsman who had other priorities—is the inscriber simply running out of space, sometimes with humorous results. A common inscription cited above described how the dragon and tiger ward off the inauspicious while the red bird and dark warrior “heed the *yinyang*” (*shun yinyang* 順陰陽). It is not unknown for this inscription to fall one character short, leaving these animals to heed only the *yin*, or to fall two characters short, leaving them simply “heeding.”⁵³

Han mirrors are first and foremost mirrors, objects of daily utility upon which there happens to be a space for decoration. That empty canvas or blank slate naturally encouraged embellishment, and the mirror inscriptions themselves frequently allude to such. After boasting of the mirror’s metallic medium, the inscriptions on scores of surviving mirrors then continue with the words, “It is suitable for refined ornamentation” (*Yi wenzhang* 宜文章) or “A skilled artisan has engraved it, achieving a refined ornamentation”

(*Qiaogong ke zhi, cheng wenzhang* 巧工刻之，成文章). These inscriptions generally seem to exemplify the notion of *horror vacui*, stating that “I have personally engraved it without ceasing” (*zike wuji* 自刻無極) or “I have all around engraved images up to every edge” (*zhouke xiang wanjiang* 周刻象萬疆). Occasionally a mirror will be more specific, claiming “I have engraved and worked the animals proper to their regions so that they are all present” (*you kezhi fenshou xi jie zai* 有刻治分〔守〕〔獸〕悉皆在). The blue-green dragon and the white tiger may be there to ward off evil, but they were first put there to fill space and look nice.

The strongest evidence for our being wary about over-reading meaningfulness into these symbols is supplied by the inscriptions themselves, in that, with surprising frequency, they are badly written. According to Barbieri-Low, craftsman literacy was held to a much lower standard than that of the literati or account keepers, and for them, “close was usually good enough.”⁵² Mirror inscriptions amply attest to the fact that, sometimes at least, they didn’t even get that close.

The standard inscriptions of all three Cotsen mirrors analyzed above also have their less-than-perfect cousins. By way of demonstration, let me here focus on alternate versions of just the mirror that describes the transcendent realm, mirror O-0856. To repeat its standard four heptasyllabic lines:

尚方作竟	<i>The Shangfang workshop made this mirror</i>
真大巧	<i>Which is truly great and well-crafted.</i>
上有仙人	<i>On its surface there are transcendents</i>
不知老	<i>Who do not know old age.</i>
渴飲玉泉	<i>When thirsty, they drink from jade springs,</i>
飢食棗	<i>And when hungry, they eat jujubes.</i>
浮(由)[游]天下	<i>They floatingly roam the world</i>
遊四海	<i>And ramble everywhere within the surrounding seas.</i>

Now consider how the following nine inscriptions found on other mirrors in Kong Xiangxing and Liu Yiman’s corpus and elsewhere truncate this text, here listed in order of increasing brevity:

- The first mirror shortened the last seven characters to four, to “they floatingly roam the world” (*fuyou tianxia* 浮游天下). While the truncation throws off the rhyme and meter, the meaning is not greatly affected.⁵⁴

- A second drops the fourth heptasyllabic line completely, as well as the last character of the third, resulting in the transcendents, when thirsty, drinking from their jade springs and, when hungry, simply eating, their particular foodstuff now left unspecified.⁵⁵
- A third truncation removes one more character and so leaves the transcendents in a somewhat worse state. They still drink from their jade springs, but now they possess an oddly unresolved “hunger” (*ji 飢*).⁵⁶
- A fourth dispenses with hunger and food altogether and ends, “When thirsty, they drink from jade springs” (*Ke yin yuquan* 渴飲玉泉).⁵⁷
- A fifth is similar to the fourth but removes their thirst, simply having them “drink from jade springs” (*Yin yuquan xi* 飲玉泉兮).⁵⁸
- A sixth dries up the jade springs to leave them thirsty—*ke* 渴—just as the third left them hungry.⁵⁹
- A seventh dispenses with the third line completely and begins the truncation of the second, removing the last character. It also changes “transcendents” (*xianren* 仙人) to “mountain people” (*shanren* 山人), which in itself is not an uncommon variation. Here, instead of “transcendents who do not know old age” (*xianren bu zhi lao* 仙人不知老), we are left with a nonsensical statement that “mountain people who do not know” or “mountain people don’t understand” (*shanren bu zhi* 山人不知).⁶⁰
- An eighth removes one more character, and so instead of “mountain people who do not know,” we are left with transcendents who simply “do not” (*bu* 不).⁶¹
- Finally, a ninth simply records “On its surface there are mountain people” (*shang you shanren* 上有山人).⁶²

It is possible that these truncations should be read with the assumption that the reader knew the ditty well enough and could supply the ending, but quotations that end mid-line are not common in the received literature from early China. Furthermore, as we will now see, mirror inscriptions were also prone to straight-forward mistakes, and so it seems likely that the more nonsensical truncations above were similarly the result of shoddy craftsmanship. While running out of space was the most prevalent mistake, simple sloppiness was not uncommon. Again, the Cotsen mirror

inscriptions have less-than-perfect cousins that can serve as examples. The first mirror we examined addressed blessings within the human realm and began by announcing that the mirror caster “has made this mirror; the barbarians of the four directions have submitted” (*zuojing*, *siyi fu* 作鏡, 四夷服). One version of the same inscription begins by dropping two characters so that the mirror caster literally “made the four submit” (*zuo si fu* 作四服).⁶³ Yet it is the Jian’an mirrors describing the realm of deities that seem most prone to nonsensical corruptions. Sometimes one can imagine how a mistake began, after which the entire inscription derails. Recall how the mirror O-0349, reflecting the standard version, lists the supernatural agencies as follows:

佰牙彈琴 *Boya strums his zither,*
 黃帝除凶 *And the Yellow Lord averts the inauspicious.*
 朱鳥玄武 *(Also present are) the red bird and dark warrior,*
 白虎青龍 *The white tiger and blue-green dragon.*

On one of these other mirrors, the inscriber began well with the first couplet, only substituting the character *bo* 白 meaning “white” for *bo* 伯 of Boya, which in itself is not an uncommon variant. Yet, when he got to the third line, he started the first couplet again, so that it reads “(Also present are) Boya and the red bird, the dark warrior, and the white tiger. Blue-green” (Boya *zhuniao*, *xuamwu baihu*, *qing* 白牙朱鳥, 玄武白虎, 青), which is where it ends.⁶⁴ Sometimes identical errors occur on mirrors with identical dates, such as the white tiger being listed twice to the detriment of the dragon who was excluded for lack of space.⁶⁵ Longer mirror inscriptions are usually confined to a circular band that runs around the perimeter of the mirror, its text reading clockwise, but this particular type of mirror regularly includes a secondary inscription within the picture program itself, an inscription that usually says, “May you, sir, be suitable for office” (*Jun yi guan* 君宜官) once or twice. Yet one version left out the complementary verb, simply hoping “May you, sir, be suitable” (*Jun yi* 君宜) twice.⁶⁶

Beyond these space and sloppiness mistakes, we do find other types of errors, including one inscription in which twenty of the sixty-seven characters were inscribed backward.⁶⁷ Overall, this relatively high proportion of poorly inscribed mirrors suggests that such texts may not have been intended to communicate meaning—other than as one decorative module of a larger picture program. Like Taiwanese Christmas cards or Western body

tattoos, the presence of text in the appropriate place may have mattered more than the desire for communication. Within the context of this apparently vast market of mass-produced mirrors with their varied associations and decorations, it should not be surprising that meaningfulness, at least in the robust sense, appears to have become somewhat diluted. Thus we must be wary before using these inscriptions and picture programs to draw conclusions about early Chinese idea systems.

Lost Meaningfulness and Lost Meaning

“Like living beings, [symbols] grow and die,” the theologian and philosopher Paul Tillich wrote. “They grow when the situation is ripe for them, and they die when the situation changes. . . . They die because they can no longer produce response in the group where they originally found expression.”⁶⁸ If the relationship between representamen and interpretant can be robust or diluted, it can also break down entirely. To us, the TLV mirror pattern remains a mystery, even though we know that it was linked to an extremely popular board game that had cosmological implications in the Han. That is, the distance between representamen and interpretant in this case has become so stretched as to seem unconnected. In turn, it is hard to know precisely what symbols had lived and died over the course of the Han’s four centuries, and perhaps some of the symbols persisted on Han mirrors long after anyone could remember what objects they had originally referenced. Here I can offer no arguments as to dead symbols in the Han, but the existence of lost meanings on these mirrors, even for their Han interpreters, should still be acknowledged as a possibility. If the meaningfulness and then the meaning of any given symbol have dissipated, then we must seek other explanations for its continued presence, such as a change of meaning or the simple inertia of tradition.

Yet our recognition of the fact that symbols have a life cycle—that they can grow into a robust state, become diluted, and eventually die—need not curtail our speculations; on the contrary, it can in fact enhance them with better nuanced questions. Let me conclude this contextual survey of the Cotsen mirror inscriptions on a positive note, with a hypothesis based on this idea that symbols go through life cycles.

As noted above, mirrors were buried with the dead, usually next to their heads, in both Western and Eastern Han graves, and so it can be argued that, because of this ritualized regularity and

because a cost was being incurred, that mirrors probably possessed meaning beyond mere habituated activity or decoration. If mirror inscriptions are to be any help in determining what that meaning was, and if symbols generally have life cycles in which meaning can become diluted and eventually even die, then it would seem logical that, of all the inscription motifs existent in the Han, we should privilege the earliest ones, those made before any dilution is likely to have occurred. (We have no idea when that dilution might have happened, and the mirror’s role in the burial may have been well established before inscribed mirrors become common, but here I am only offering a hypothesis.)

Scientifically excavated sites are now giving us the opportunity to discern a chronological order of inscription motifs, and one of the earliest seems to have been that of mutual remembrance.⁶⁹ Different from their later good-wishes-oriented counterparts, these short Western Han inscriptions say: “Let us never forget one another” (*Chang wu xiangwang* 長毋相忘), “Let us long think of one another; let us not forget one another” (*Chang xiangsi*, *wu xiangwang* 長相思, 毋相忘), and, most commonly, “Whenever we see the radiance of the sun, let us never forget one another” (*Jian ri zhi guang*, *chang wu xiangwang* 見日之光, 長毋相忘).⁷⁰ Significantly, this phrase is not limited to mirror inscriptions. For example, during the Western Han, the famous Emperor Wu had a tomb park built for his late consort (and mother of the future Emperor Zhao) Zhao Jieyu 趙婕妤. A roofing tile believed to be from its sacrificial hall bears the same command, “Let us never forget one another” (*Chang wu xiangwang* 長毋相忘).⁷¹ That coincidence of inscription on the mirrors and at the tomb site may be telling. I am not suggesting that these forget-me-not mirrors were made for the tomb, and it would seem more plausible that the mirror was a common farewell token, death being just one occasion of departure alongside taking up office or going to the capital to study. The mirror was the exemplar of unchanging solidity in the face of changing circumstances; it spoke of constancy even when separation was inevitable. Despite gradual changes in picture programs and an accretion of inscription motifs, the solid bronze mirror would continue to embody endurance and “longevity like metal and stone,” and it would continue to wish that quality upon the tomb and its unforgotten occupant. Yet this scenario is only a hypothesis, a hypothesis based on the earliest inscriptions before the symbolic meaningfulness of the mirror potentially underwent dilution and death.

CONCLUSION

THE HAN MIRROR INSCRIPTION was modular in two ways. First, it was a module within the larger picture program, akin to the white tigers and immortals, the arc patterns and nipples, the T’s, L’s, and V’s. In this sense, we should not assume text and picture were two separate media; and the fact that these texts were often faulty suggests that their presence on the mirror was not merely to communicate data. Second, these inscriptions were in themselves modular, as this popular rhetoric of blessings could be deconstructed into blocks and phrases, mixed and matched to suit the inscriber and to fit the space.⁷²

This mix-and-match marketplace of rhetoric in turn raises the question of how meaningfully we should regard any particular product of that marketplace. I suggested that we need to develop a more nuanced understanding of symbol interpretation, acknowledging that symbols should not automatically be read as evidence of firmly held idea systems. Just as we ourselves become habituated to certain symbols, use them for decorations, and even forget where they came from, Han Chinese no doubt witnessed the life cycles of symbols, as robust representamens became diluted and died. Recognizing the life cycles of symbols may lead us to better nuanced questions, and the next concrete step in this process would be to build a substantial corpus of mirror rubbings and inscriptions drawn solely from scientifically excavated sites, thereby helping us ascertain where and when symbols originated, why they became popular, and whether they lost their meaningfulness.

Yet even a meaningless symbol can still have meaning. While a modern holiday card may puzzlingly refer to the Christmas octopus or a Han mirror inscription might inadvertently assert that “mountain people don’t understand,” *something* had to go into that space—and not necessarily another decorative garnish. The very fact that a faulty text could be either mass produced for the seasonal market or permanently engraved in bronze in itself reveals an almost mystical respect for texts as texts, for the aesthetic power of the written word.

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ACKNOWLEDGMENTS

I wish to extend my thanks to the anonymous reviewers for their constructive remarks and to my Reed colleague Michael Foat for pointing me in the direction of Cadamer and Tillich. While my argument extends to mirror inscriptions (and indeed to other forms of Han rhetoric) in general, the Cotsen inscriptions have served as an excellent case study, and so I would also extend my thanks to Lloyd Cotsen for creating this worthy resource. It should be noted that there are several places where I consciously deviate from the transcriptions and translations of the mirrors in v. 1, and whereas I endeavor to explain my readings, all potential errors of judgment are of course my own.

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NOTES

1 As an English teacher living in Chiayi in the 1990s, I received this last card from my students, and I was happy to see that their own message inside the card was grammatically correct and comprehensible. Their card moved me to visit various stationers in Chiayi and collect a cross section of others.

2 While mirror inscriptions can sometimes be as incomprehensible as these Christmas cards and similarly indicate that their texts were present more for decoration than meaning (as will be seen below), it should be noted that there are also issues of cross-cultural unfamiliarity unique to the Christmas cards.

3 For studies on the excavated versions of the *Daode jing*, see Henricks (1989, 2000); for the *Classic of Changes*, see Shaughnessy (1996); and for the *Records on Ritual*, see Shaughnessy (2006: 63–130). Other chapters from the *Records on Ritual of Dai the Elder (Da Dai liji 大戴禮記)*, as well as from the *Ceremonies and Rituals (Yili 儀禮)*, also have their excavated but less studied counterparts.

4 Boltz 2005: 59; Shaughnessy 2006: 91. I do not wish to imply these textual units or pericopes were as completely interchangeable as the modular mirror rhetoric may have been. When it came to rearrangement potential, there were no doubt differing degrees of flexibility, depending on the genre of text.

5 This is not to argue that the texts for such inscriptions weren’t also preserved in bamboo books used by the craftsmen, but the brevity of the interchangeable textual blocks in these mirror inscriptions suggests their textual divisions did not necessarily conform to bamboo strip length.

6 Already in the mid-1970s, Noel Barnard and Satō Tamotsu (1975: 128) catalogued more than a thousand Han mirrors from 172 sites. Needless to say, that already large number has since mushroomed. For the purposes of this article, I have relied upon four mirror inscription corpuses, all of which provide transcriptions of the inscriptions: Karlgren 1934 (257 Han inscriptions); Kong Xiangxing and Liu Yiman 1994 (320 Han through Period of Disunion inscriptions); Liu Yongming 1999 (44 Han inscriptions); and He Lin 2007 (32 Han inscriptions). There is no doubt some overlap among these corpuses, and, as will be noted below, we must also be wary that a certain percentage of later forgeries are included among them. For ease of reference, I will footnote inscription numbers in each corpus rather than page numbers.

7 Suzanne Cahill (v. 1: 42) suggests that the phrase remain as “blue-green ram” and that it might refer to the city of Chengdu, whereas Kong Xiangxing and Liu Yiman (1994: no. 481) note that some scholars believe *qingyang* refers to a mirror workshop in Zhejiang where some mirrors inscribed with this expression have been excavated. I am here following Karlgren (1934: 35–38) who discusses the phrase *qingxiang* 青羊 and its variations at length. Only his explanation adequately accounts for variations such as *sanyang* 三羊 and *huangyang* 黄羊 or *qinglong* 青龍 and *qingsheng* 青勝 (see immediately below). Furthermore, the equivalency between *yang* and *xiang* is attested in Han lexicons; see *Shiming shuzheng* (1985: 226) and *Shuowen jiezi zhu* (1995: 145). *Yang* substitutes for *xiang* elsewhere in mirror inscriptions, such as in the phrase *da jiyang* 大吉羊 or “greatly propitious and auspicious” (see, for examples, Liu Yongming 1999: nos. 31–35), and the visual pun of rams symbolizing auspiciousness were also utilized in Han tomb art.

8 For the blue-green dragon, see Karlgren 1934: no. 154; for the blue-green superior, see Karlgren 1934: no. 114, and Kong Xiangxing and Liu Yiman 1994: no. 481.

9 For examples, see Karlgren 1934: nos. 176–179, 182, 189, 191, 195.

10 Karlgren 1934: 53. Karlgren argues that *shang* refers to both the idea of measuring (which can also be rendered as *shang*) as well as five-phase musicology, and early texts glossing the meaning of the *shang* musical note also equate it with measuring. For his full explanation of *sanshang*, see Karlgren 1934: 52–55. He ultimately renders the term *sanshang* as the “three measured [metals],” giving priority to the notion of measuring. However, I am here giving priority to the notion of musicology because other inscriptions also reference the musical note *gong* 宮 (correlated with earth) alongside *shang*. For examples, see Kong Xiangxing and Liu Yiman 1994: nos. 426–428; Karlgren 1934: no. 205; and the Cotsen mirror O-0349 translated below.

11 Karlgren 1934: 41; Barbieri-Low 2007: 196

12 Kong Xiangxing and Liu Yiman 1994: no. 268, using rhyme sequence *yang* 陽 (*-aŋ). (Throughout this article, I use the system of Luo Changpei and Zhou Zumo [1958] to denote rhyme groups, and I use William Boltz [1999] for his Western annotation of those rhyme-group pronunciations.) Note that *xiang* 祥 is again truncated to *yang* 羊.

13 Other inscriptions refer to them as the “four animals” (*sishou* 四獸), the “ancient animals” (古獸), or the “marvelous animals” (*qishou* 奇獸).

14 For examples, see *Zhou Yi cantong qi* 1990: 16, 23, 34.

15 The sexagenary calendar uses the two interlocking cycles of ten Heavenly Stems (Tiangan 天干) and twelve Earthly Branches (*Dizhi* 地支), which form sixty distinct combinations. The numbering of days by these two-character combinations is attested as early as the fourteenth century BCE.

16 Karlgren 1934: no. 159.

17 As to the nature of these recipes in the light of modern science, see Scott, this volume.

18 For examples, see Karlgren 1934: nos. 150, 231–234, 253; Kong Xiangxing and Liu Yiman 1994: nos. 482–483.

19 For examples, see Karlgren 1934: nos. 139, 140, 159; Liu Yongming 1999: nos. 16, 18, 19, 20, 23, 28. Interestingly, dated mirrors are more likely to refer directly to the mirror’s buyer. Although Karlgren does not clarify, he apparently read 吉 as 沽 in *yi gushi* 宜古市.

20 Barbieri-Low 2007: 145–147.

21 Karlgren (1934: no. 159) already drew attention to this inconsistency. Loewe (2001–2002) expresses reservations about seven particular “Han” mirrors. These reservations are definitely justified, but I would note that much of his analysis assumes “a postulated measure of uniformity” (p. 245) in the picture programs; and while he does recognize that irregular features can occur without raising the question of authenticity (p. 253), I would suggest there may in fact be as much variation in the picture programs as there is in the inscriptions (as will be seen below). They are both modular works that allow a great deal of interchangeability among the components.

22 For a mirror excavated in Zhejiang with an extremely similar inscription and picture program, see Kong Xiangxing and Liu Yiman 1994: no. 439.

23 Kong Xiangxing and Liu Yiman define “multi-nipple” as more than four, four being much more common than anything else. It should be footnoted that, if we in this case turn to the subcategories and not just the general categories, the mirror types would be much more distinctive than these vague names imply.

24 Ledderose 2000: 5.

25 This inscription uses rhyme sequence *zhi* 職 (*-ək) for the first and third couplets and 沃 沃 (*-ək*) for the second. The inscription on mirror O-0246 has one minor variation from most versions of this text—namely, that the phrase about the wind and rain heeding “terms and seasons” (*jieshi* 節時) is usually inverted, meaning that the wind and rain heed “the seasonal divisions” (*shijie* 時節). For examples, see Karlgren 1934: no. 127; Kong Xiangxing and Liu Yiman 1994: nos. 439, 452, 453.

26 For examples, see Karlgren 1934: nos. 124, 129, 132.

27 For examples, see Karlgren 1934: nos. 128, 130; Kong Xiangxing and Liu Yiman 1994: nos. 341, 342; He Lin 2007: no. 42.

28 Kong Xiangxing and Liu Yiman 1994: no. 271, using rhyme sequence *zhi* 職 (*-ək). For others with the same added couplet, see Karlgren 1934: nos. 123, 124, 126.

29 At first glance, one might ponder whether it is a “deconstruction” process—a longer original text broken down into parts—or a “construction” process—numerous parts gradually coalescing to become a longer text. The latter is possible, but as will be seen below, those smaller parts are often so fragmented that they are sometimes not comprehensible on their own. The smaller parts may truncate lines and drop characters in such a way that they only make sense if the reader knows the longer version of the text. Such a situation suggests the longer texts came first. Hence, I refer to the longer texts as the originals from which citations are made.

30 See, respectively, Karlgren 1934: no. 133; He Lin 2007: no. 22; and Karlgren 1934: no. 134.

31 Karlgren 1934: no. 194.

32 Karlgren 1934: no. 195, the rhyme sequence being unclear. The first and third lines use rhyme sequence *zhi* 職 (*-ək), whereas the fourth and fifth lines use rhyme sequence *yue* 月 (*-at). For another contemporaneous example of shifting the poetic meter for the same material, note how the same lines by Zhongchang Tong 仲長統 (fl. late Eastern Han) appear as tetrasyllabic meter in *Hou Han shu*, 49.1645–1646, but in pentasyllabic meter in *Wenxuan*, 31.1464 (commentary). My thanks to Stephen Owen for drawing my attention to this example.

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K. E. BRASHER

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A Han bronze mirror with a circular knob in the center.

A Han bronze mirror with a circular knob in the center, similar to the one above, but with a different knob design.

33 For a detailed discussion on these associations, see Brashier 1995.

34 The first three heptasyllabic lines use rhyme sequence *you* 幽 (°–ɔw). As in the case of the inscription of mirror O-0246, we know this core text dates to at least the Xin dynasty because one variation begins with the sentence “The Xin dynasty has quality bronze being produced at Danyang and refined” (*Xin you shantong chu* Danyang, *lian*新有善銅出丹陽，濂). See Kong Xiangxing and Liu Yiman 1994: no. 267. The inscription on mirror O-0856 includes two minor variations, neither affecting the meter or rhyme. First, the phrase “which is truly great and well-crafted” usually reads “which is truly great and excellent” (*zhen dahao* 真大好), but this variance is also attested on other mirrors. Second, its concluding exclamation “What pleasure!” is usually absent; it is probably just a space filler.

35 He Lin 2007: no. 23, all lines except the fifth using rhyme sequence *you* 幽 (°–ɔw). Karlgren 1934: no. 223 is similar except for the order of lines. It is clear that the last line requires a subject change to the second person. This longevity wish is a standard blessing on Han mirrors, and transcendents were rarely regarded as protectors of the state.

36 For example, Kong Xiangxing and Liu Yiman 1994: nos. 302 and 437 are identical to each other (and to the opening couplet in the inscription of mirror O-0856) in their brief inscription which reads, “The Shangfang workshop made this mirror which is truly great and well-crafted. On its surface there

A Han bronze mirror with a circular knob in the center, similar to the one above, but with a different knob design.

are transcendents who do not know old age.” Yet in terms of their picture programs, no. 302 is a TLV mirror and no. 437 is a “spirits, carts and horses pictorial figures mirror” (*shenren chema huaxiang jing* 神人車馬畫像鏡).

37 Liu Yongming 1999: no. 8, the first four lines using rhyme sequence *yang* 陽 (°–aŋ) and the last two using rhyme sequence *you* 幽 (°–ɔw). I am uncertain how to render “Genuineness!” or “It’s genuine!” (*zhen* 真) at the end of the inscription. After giving the date of “manufacture” (*zao* 造), other dated mirrors sometimes add a short expression such as “Greatly auspicious” (*Da jixiang* 大吉祥) or “May you have sons and grandsons” — alternatively, “Suitable for sons and grandsons”(Yi *zusun* 宜子孫) — probably just to fill the remaining space.

38 Karlgren 1934: no. 170, using rhyme sequence *you* 幽 (°–ɔw).

39 The second and fourth lines use rhyme sequence *yang* 陽 (°–aŋ), whereas the sixth and eighth use rhyme sequence *dong* 東 (°–aŋʔ). As Cahill indicates in her transcription, the characters *ming* 明, *jing* 鏡, *san* 三, *shang* 尚, *di* 帝, *xiong* 凶, *xuan* 玄, and *hu* 虎 are unclear due to corrosion, and I find the last three characters indecipherable. Where she tentatively reads *bi* 避, I tentatively read *chu* 除, and *chuxiong* 除凶 is indeed the norm for this inscription. I am also uncertain whether her *tianhuang* 天皇 is in fact *sanhuang* 三皇, and there is precedence for both.

This inscription includes two other variants. First, instead of “From the earth note I refined three metallic notes,” the standardized text (i.e., the text found on almost every other version of the dozen comparable texts I have

A Han bronze mirror with a circular knob in the center, similar to the one above, but with a different knob design.

found) states, “In seclusion I have refined the earth and metal notes” (*You lian gongshang* 幽濂宮尚). Karlgren (1934: no. 205) finds this latter phrase curious but not too problematic. In my opinion, the version on mirror O-0349 actually makes more sense. With regard to the second variant, the latter’s *zhu* 主 (in *wudi zhu tianhuang* 五帝主天皇) is absent in other versions of this inscription.

There are two minor secondary inscriptions on this mirror that Cahill renders *Jun yi ren* 君宜任 (“May your lordship have official responsibilities”) and *Yi guan* 宜官 (“May [your lordship] hold office”). With regard to the former, I know of no other inscription that uses *ren* in this manner, and I read the character on the mirror as *wang* 王. While I also do not know of any mirrors of this particular style using *wang*, the phrase *Jun yi houwang* 君宜侯王 (“May your lordship become a marquis or king”) is not uncommon on mirrors of other styles.

40 Another mirror (Kong Xiangxing and Liu Yiman 1994: no. 431) refers to Boya “putting forth his music” (*chenyue* 陳樂). Cahill (v. 1: 44–46) has already recounted the famous story of Boya smashing his zither after his prized listener had died, a narrative that Karlgren (1934: no. 205) also cites. Yet I am uncertain whether this particular story is intended in these inscriptions, and they may only be evoking the general notion of great music. That is, just as the cosmic forces are here being anthropomorphized, great music is here also denoted via this exemplary musician.

41 Chandler 2007: 29–35.

42 Danesi 2007: 21.

A Han bronze mirror with a circular knob in the center, similar to the one above, but with a different knob design.

43 In semiotics, “noise” refers to the distortion or alteration of meaning during the transmission of a message, whether intended or not.

44 Loewe 1979: 61.

45 Loewe 1979: 82. For my arguments against his interpretation, see Brashier 1995. I do not intend to repeat those arguments here and instead only want to highlight how robust we have perceived the relationship to be between representamen and interpretant.

46 All three of these grave plans were published *after* Brashier 1995, and I chose them because of their geographic diversity. They are just a small sampling of this pattern in which mirrors were given a prominent position in the burial.

47 On the contrary, I still maintain the merits of my earlier argument (see below).

48 See Durkheim 1995: xliii–xlix; Otto 1958: 25–30; Eliade 1987: 8–18.

49 Karlgren 1934: nos. 106, 175, and 139, respectively.

50 Karlgren 1934: nos. 155 and 199, respectively.

51 Gadamer 1975: 141. Gadamer would modify this traditional view by arguing that decoration is not a wholly independent component, that it must be seen in relation to what it decorates. That is, decoration does not possess an aesthetic import in its own right but only in conjunction with the thing decorated.

52 Barbieri-Low 2007: 65.

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Charlotte Horlyck
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Mirrors in Early Korea

INTRODUCTION

BRONZE MIRRORS HAVE a long history in Korea, spanning two and a half millennia, from the Bronze Age (ca. 800–300 BCE) to the Chosŏn kingdom (1392–1910 CE). In addition to their primary role as reflectors of the human body, they functioned as ritual objects, burial goods, and trade items. Mirrors began to be cast in the Korean peninsula by the fourth century BCE at the latest, and their manufacture and distinctive iconography suggests a mature and well-established indigenous tradition of mirror production and use. A series of notable changes to this tradition happened in the region after the late second century BCE, when the Han Chinese founded four commanderies between the Liao River in southwestern Manchuria and the Han River estuary in present-day South Korea. The increased presence of the Chinese and the subsequent influx of Han mirrors coincided with the rise of the local polities of Mahan 馬韓, Pyŏnhan 弁韓, and Chinhan 辰韓, collectively known as the Three Han (Samhan 三韓, first century BCE–CE third century), in the south of the peninsula (FIG. 1). These events had a profound impact on the production, distribution, and use of bronze mirrors.

Of particular interest here is the importation of Chinese mirrors into the southern part of the peninsula and their local imitations found in this region, which were made in the first and second centuries CE. The history and reasons underlying the disappearance of early native-style mirrors, the ensuing dominance of their Chinese-style counterparts, and the rise of their local imitations are yet to be fully understood. Highlighting the multilayered

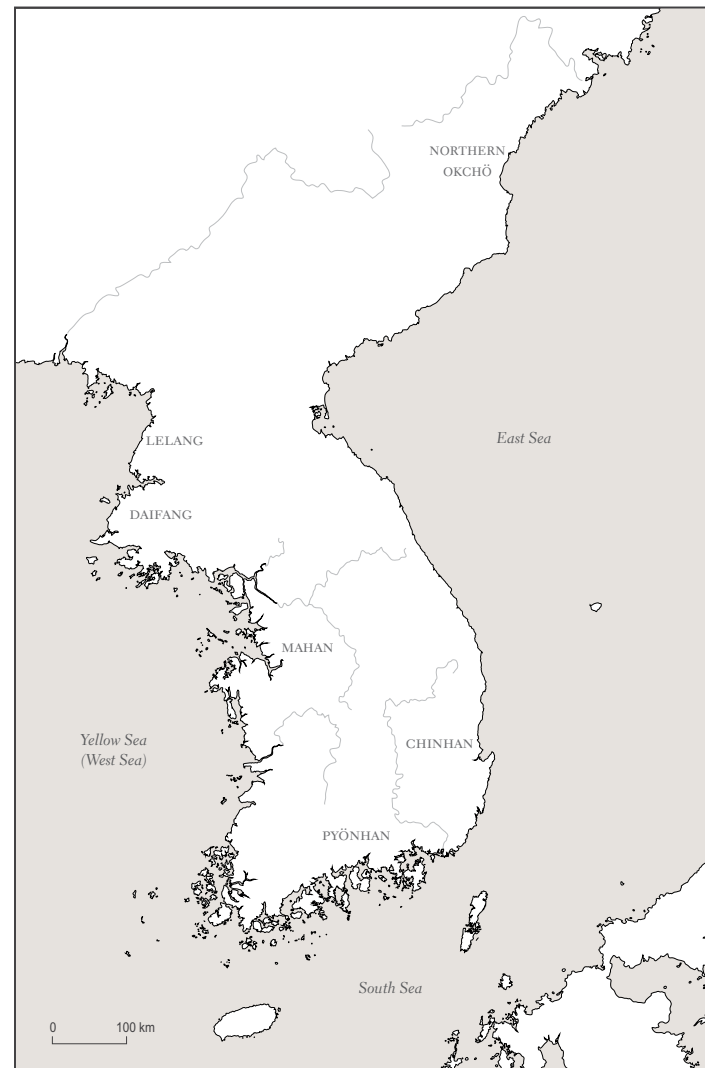


FIGURE 1

FIGURE 1:
The Korean peninsula in the mid-second to mid-third century CE. Map from Byington w: 6.

contexts that shaped the production and social roles of mirrors within the Korean peninsula, this chapter explores how mirrors fitted within the dynamics of such networks. It does so through a discussion of mirror production and use in the late Bronze Age and during the Samhan period; in particular, I attempt to clarify the impact of imported Han mirrors on local mirror traditions.¹ The starting point for the arguments presented in the following is the conviction that mirrors conveyed meaning through iconography and patterns of use. I argue that the production of mirrors and their roles in society were shaped by cultural exchanges between different social groups. Various factors, including the presumed aims and interests of the main actors, affected such exchanges.

BRONZE AGE AND EARLY IRON AGE MIRRORS

THE HISTORY OF THE KOREAN BRONZE AND IRON AGES is fraught with questions. Historical sources describing the peninsula during the Early Iron Age (ca. 300 BCE–0 CE) are scant, although better accounts of Samhan societies have survived.² Moreover, the often fragmentary archaeological material has made studies of this period difficult. Problems concerning social strata and the religious framework, both closely affecting mirror production and use, have not been resolved. Even the absolute chronologies of these periods are under continuous debate. Some scholars maintain that the peninsula entered the Bronze Age around the tenth century BCE or earlier, while others have argued for a date around 800 or 700 BCE.³ However, it is generally assumed that between approximately 700 BCE and the mid-fourth century BCE, a number of significant social changes took place in the peninsula: rice cultivation was introduced, new settlement patterns emerged, and bronze came into common use. It is believed that between the mid-fourth and the mid-third century BCE, local bronze industries produced daggers, mirrors, arrowheads, fishhooks, and other types of artifacts, as indicated by archaeological findings of such objects as well as the molds for making them at sites throughout the peninsula.⁴ Around the third century BCE, chiefdoms of considerable size and political importance developed, and the Korean peninsula progressively came to the notice of an increasingly unified China, culminating with the establishment of four Chinese commanderies in the northern half of the peninsula in the first century BCE.

FIGURE 2:
Coarse-lined bronze mirror excavated from Yŏtidong, Chŏnju (North Chŏlla). Diameter 13.2 cm. CA. fourth century BCE. National Museum of Korea.



FIGURE 2

Theories of the nature of early Korean societies rely heavily on archaeological data retrieved from burials. Which burial methods were practiced during the late Bronze and the Early Iron Ages, and how these were distributed, are still topics under debate. Rhee Song-nai and Choi Mong-lyong have convincingly argued that sociopolitical status was expressed not by burial structures but by burial goods, maintaining that bronze daggers, bronze mirrors, and comma-shaped jewels were particularly important at this time.⁵ The archaeological evidence supports this. Bronze mirrors were placed in richly furnished tombs alongside ceramics, jades, weapons, and non-utilitarian bronze objects such as bells, suggesting their association with elite members of society.⁶

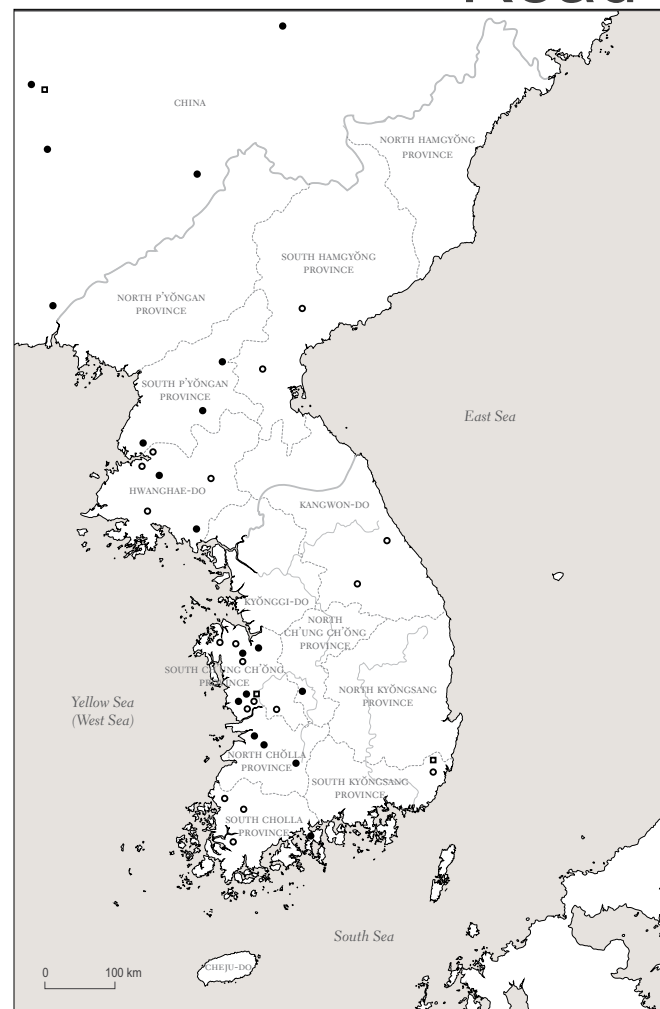
The shape and iconography of Korean Bronze and Early Iron Age mirrors are markedly different from those made on the Chinese mainland around this time. Cast in the form of disks with two or more loops situated off-center on their backs, they vary in diameter from 8 to 22 cm. Based on their iconography, they are often divided into two main groups: coarse-lined (K. *chomungyŏng* 粗文鏡) and fine-lined mirrors (K. *chŏngmungyŏng* 精文鏡). Coarse-lined mirrors are predominantly decorated with four, five, six, or eight hatched triangles, a motif that enjoyed widespread popularity (FIG. 2). As casting techniques advanced, so did the iconography on mirror backs. Fine-lined mirrors, believed to have



FIGURE 3



FIGURE 4



● Coarse-lined mirror ○ Fine-lined mirror □ Lined mirror

FIGURE 5

been made between the second and first centuries BCE (FIG. 3), were decorated in dense geometric patterns.⁷ In the decorative band closest to the rim, these commonly feature a scheme of narrow hatched triangles, which appears to be a modified rendition of earlier mirror patterns.

Alongside mirrors, other non-utilitarian bronze artifacts were used as burial goods for the elite. Bells of various kinds are the most common. Most scholars interpret them as ritual objects,⁸ and their concentric triangular patterns are reminiscent of the hatched triangles that appear on mirrors (FIG. 4). Comparable motifs also appear on other types of bronzes, such as protective plates (K. *pangp'aehyöngdonggi* 防牌形銅器) and trumpet-shaped objects (K. *nap'arhyöngdonggi* 喇叭形銅器). The continuous appearance of these designs indicates their significance in indigenous ritual practices on the peninsula around this time. Clearly, they were associated with non-utilitarian bronzes that functioned as tomb markers of elite status, as ritual artifacts, or, more likely, as a combination of both.

FIGURE 3:
Fine-lined bronze mirror
excavated from Chöng'amni,
Yangyanggun (Kangwön).
Diameter 14.3 cm. CA. second
century BCE. National Museum
of Korea.

FIGURE 4:
Bronze bell excavated from
Taegongni, Hwasun'gun (South
Chölla). Diameter CA. 12 cm. CA.
second century BCE. National
Museum of Korea.

FIGURE 5:
Findings of coarse- and fine-lined
mirrors on the Korean peninsula.
Map modified from Kungnip
Chung'ang Pangmulgwan
1992: 146.

MIRRORS OF THE HAN COMMANDERIES

THE CHINESE PRESENCE IN KOREA became increasingly dominant after 108 BCE, when the Western Han empire established the commanderies of Lelang, Zhenfan (K. Chimbön 眞番), and Lintun (K. Imdun 臨屯) in the northern part of the peninsula, followed in 107 BCE by Xuantu (K. Hyönto 玄菟) on the Yalu River (K. Amnokkang 鴨綠江). However, Zhenfan and Lintun were already disbanded during Emperor Zhao's 昭帝 reign (87–74 BCE). In the early third century CE, the Daifang (K. Taebang 帶方) commandery was founded in South Hwanghae province, but it was also short-lived, as it was conquered by Paekche in 314. Historical records and archaeological discoveries testify that the Lelang commandery (K. Nangnang 樂浪) was the most influential among all the commanderies. Comprising twenty-five counties and with its administrative headquarters located in present-day P'yöngyang 平壤, Lelang was the seat of Chinese power on the peninsula between the late second century BCE and the early fourth century CE.¹³ It was a wealthy colony, particularly during the first two centuries of its existence, and it thrived on tribute exchange and private trade with the Samhan polities to the south, the Japanese Wa 和 people, and the Chinese mainland.

Chinese administrators lived in prosperity, surrounded by the luxurious trappings of elite Han society. Archaeological finds from sites near P'yöngyang testify to their wealth. More than a thousand earth-mounded tombs were identified and excavated between the 1910s and 1940s by Japanese archaeologists working under the colonial Governor-General's Office. Their remains, probably of high-ranking bureaucrats, confirm their occupiers' commitment to Han burial customs and ritual practices. Burial goods range from gilded-bronze horse harness and chariot fittings to lacquer and bronze wares, coins, jade ceremonial objects, pottery, and inlaid belt buckles in gold and silver. Mostly imported from the Chinese mainland, these artifacts reflect Lelang's wealth and attest to its integration into the Han empire.¹⁴

A large number of high-quality bronze mirrors have been found in and around P'yöngyang. Mirrors from first-century BCE graves are typical Western Han examples, including the "sunlight" (*riguang* 日光) and "illumination" (*zhaoming* 昭明) mirrors, so-called on account of their inscriptions that include these characters.¹⁵ The two closely related types of inscriptions refer to the brightness of the mirror and to its illuminative qualities, respectively.

More than thirty coarse-lined and fine-lined mirrors have been found throughout the peninsula to-date (FIG. 5). Several have been excavated from sites in North Chölla and South Ch'ungch'öng province, whereas notably fewer were unearthed from the southeastern part of the peninsula in North and South Kyöngsang province. However, in this latter area, tombs with other kinds of ritual artifacts, particularly bells, predominate. This not only suggests the prevailing significance of bronze objects within localized burial practices, but also indicates the interregional use of the core iconography of hatched triangles. The widespread use of relatively similar ritual objects at sites scattered throughout the peninsula is suggestive of established beliefs and, possibly, shared ritual practices. Although Hyung-il Pai has argued that there is not enough evidence for a homogenous theocratic early Korean society, most scholars support the notion of cultural unity founded on a shared religious system during this time.⁹

We can only speculate about the exact nature of prehistoric Korean religious beliefs and ritual practices. It is widely believed that shamanism was practiced throughout the peninsula, and some scholars have suggested that rites centered on sun worship.¹⁰ Their arguments are based on parallels with the practice of shamanism in North Asia, where sun worship prevailed. Finds in the steppe region, especially a large number of bronze amulets and badges related to sun rituals, support this assumption.¹¹ The solar disks from the Stepanovo hoard in Siberia, dated to the fifth through third centuries BCE, carry concentric circles and small oval indentations that are believed to signify rays of light or the sun itself.¹² Comparable iconography appears on objects of an earlier date in the Korean peninsula. Kim Wön-yong has argued that the swirls and concentric circles carved onto a rock surface at Ch'önjölli, Ulchugun (South Kyöngsang province) 慶尙南道 蔚州郡 川前里, are indicative of sun worship. Such iconographic parallels indicate that the worship of light in some form or other was prevalent throughout the peninsula around this time. It determined the choice of motifs on ritual bronze objects, especially on mirrors, given their light-reflecting properties and round shape.

In the first century BCE, the diffusion of mirrors shifted geographically from the southwestern to the southeastern part of the peninsula, and their iconography also changed, suggesting that the significance and uses of mirrors were connected to social developments in the peninsula during the Early Iron Age. The following sections analyze these changes and developments in historical context.



FIGURE 6



FIGURE 7

The decorations on the mirrors are also similar. TLV mirrors (compare mirrors O-0883 and O-0856; see v. 1: PLS. 62–63) and mirrors with linked arcs, quatrefoils, and constellations (compare mirror O-0779; see v. 1: PL. 59) have also been found,¹⁶ corresponding to contemporary styles popular on the Chinese mainland. More mirrors have been retrieved from later tombs. One example from a third-century CE tomb carries a typical Eastern Han design, apparently evolved from the above-mentioned “sunlight” and “illumination” mirrors (FIG. 6). Resembling mirror O-0399a in the Cotsen Collection (see v. 1: PL. 65), its decoration consists of a large hemispherical boss surrounded by a quatrefoil, around which runs the four-character phrase *chang yi zisun* 長宜子孫, translated by Suzanne E. Cahill as “May your sons and grandsons continue for a long time” (v. 1: 160). Surrounding the quatrefoil are eight linked arcs, and between each set of two arcs are alternating characters and a semicircle motif with three uprights. The characters form another typical Han wish for longevity: “[May you] live as long as metal and stone” (*shou ru jinshi* 壽如金石).

Lelang tombs have also yielded mirrors with concentric circles and auspicious animals, and mirrors with four nipples, dragons, and birds. One of the most elaborate and finely cast mirrors of this later period was excavated from grave no. 3 at Chǒngbaengni 貞栢里, P’yŏngyang, dating from the second to third century CE. Its Eastern Han design features deities and animals in high relief surrounded by a ring of seals and semicircles (FIG. 7), similar to that on mirror O-0133 in the Cotsen Collection (see v. 1: PL. 74).¹⁷ Born out of the ubiquitous Han interest in the ways of the immortals, the main design and the seal inscriptions reflect the incorporation of Taoist references within mirror iconography. Many examples of this type have survived on the Chinese mainland. In the case of the Chǒngbaengni mirror, the Queen Mother of the West and the Royal Patriarch of the East are referred to in the seal inscriptions, and they are depicted seated on animal thrones, flanked by auspicious beasts. The Royal Patriarch can be recognized by his headgear with three prongs. The Queen Mother sits opposite him in profile view. Judging from the large numbers of mirrors found in Lelang tombs and by the high quality of their casting, it is evident that the influx of Chinese mirrors and Han mirror designs went hand in hand with the rise of an elite whose ritual practices and way of life were deeply rooted in Han traditions and showed little influence of local customs.¹⁸

FIGURE 6:
Bronze mirror excavated from Tomb 218 at Sŏkamni, P’yŏngyang. Diameter 22.8 cm. Third century CE. National Museum of Korea.

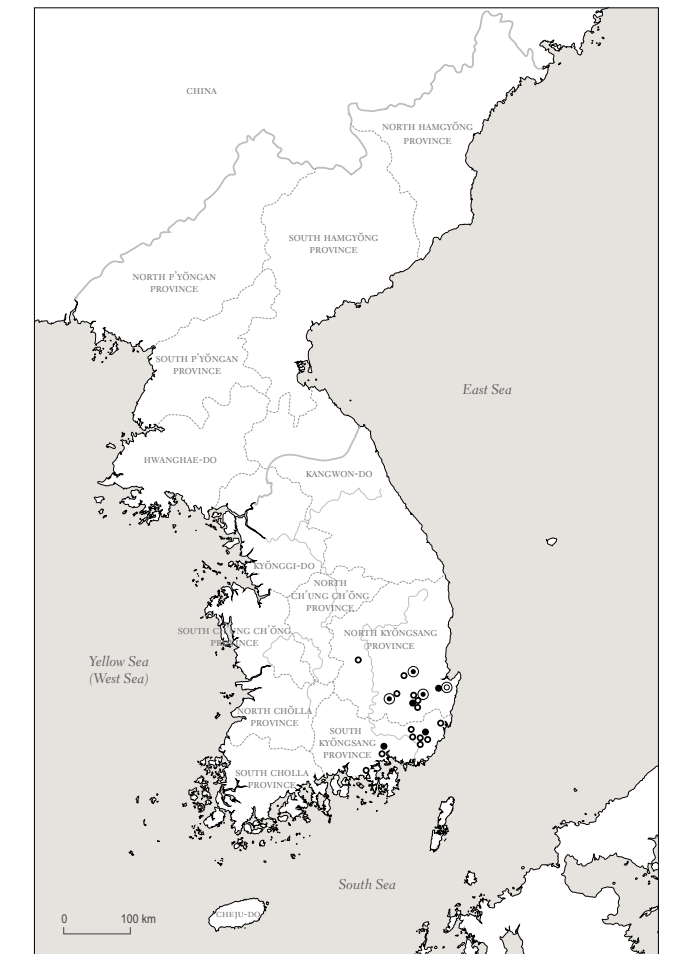
FIGURE 7:
Bronze mirror excavated at Chǒngbaengni, P’yŏngyang. Diameter 21.5 cm. Second to third century CE. National Museum of Korea.

MIRRORS IN THE SAMHAN REGION

THE PRESENCE OF THE CHINESE COMMANDERIES in the northern part of the peninsula had considerable impact on the conquered areas as well as on the Samhan polities in the south, as they came to be incorporated within the Han tributary system. Submission of neighboring peoples by tribute and trade was an inseparable part of Han ideology.¹⁹ In order to be included within this trading network, native chieftains had to pay tribute to the Chinese, since only those granted official Chinese titles were authorized to trade.²⁰ For the non-Chinese neighbors of Lelang, the motivation for engaging in tributary and trade relations was manifold: it provided them access to luxury goods, iron weapons, and tools not available locally, and it gave them prestigious and advantageous connections to the powerful and technologically advanced Han empire.²¹ These connections strengthened their position within their local society. For the Chinese, forging tributary relations helped Lelang establish better control over the peninsula and was also a convenient way of acquiring local produce, in particular iron, mined in the southeastern region.²²

Although no written sources refer to the exchange of bronze mirrors on the Korean peninsula, it may be assumed that they formed part of tributary exchanges between Lelang and the Samhan. Historical sources and archaeological finds attest to the well-established Han-dynasty tradition of presenting mirrors to neighboring rulers.²³ Mirrors uncovered in tombs were obviously linked to elite members of local society, and it seems that their ownership was reserved for small and exclusive groups. The only mirrors circulating on the peninsula between the late first century BCE and the fourth century CE were either Chinese or locally made imitations, a fact confirming their desirability among local powerholders. It seems that there was neither the need nor the desire to produce mirrors with local characteristics.

Among the Samhan polities, considerably fewer Chinese-manufactured artifacts have been found in Mahan than in Chinhan and Pyŏnhan, suggesting that Mahan engaged with the commanderies on a comparatively smaller scale. To date, the present-day Ch’ungch’ŏng and Chŏlla provinces have revealed only two Han mirrors, both dating to the Eastern Han period.²⁴ It was this region, later to become the territory of Mahan, that formed the heart of the distribution area of Korean-style bronze daggers, the main indicator of Late Bronze Age culture in the



○ Chinese mirror ● Imitation mirror ⊙ Multiple Chinese mirrors ⊗ Multiple imitation mirrors

FIGURE 8

peninsula, between the fourth and second centuries BCE; and it is here that the majority of coarse- and fine-lined mirrors, as well as other ritual bronze artifacts from that period, have been excavated. Although the reasons for the relative stagnation of the Mahan region are unclear, Lee Jaehyun has argued that it may have been due to a conflict between Mahan and the commandery.²⁵ Furthermore, iron appears not to have been mined in the Mahan territory, and historical sources make no mention of other goods being traded with this area. This suggests that, for the Chinese, there were few economic benefits to be gained from establishing links with Mahan rulers.

In contrast, the heaviest concentration of Han-type artifacts, including mirrors, stretches along transit routes through the Naktong and Kŭmho River valleys between present-day Sangju, Kyŏngju, and Kimhae. These were the centers of the Chinhan and Pyŏnhan polities. Tombs from this part of the peninsula have yielded approximately thirty Chinese-type mirrors (FIG. 8).²⁶ Some appear to be Chinese originals, either cast on the Chinese mainland or in Lelang, while others seem to be local copies.

FIGURE 8:
Findings of Han Chinese bronze mirrors and local imitation bronze mirrors in the regions of Chinhan and Pyŏnhan.

Mirrors are useful indicators of cultural change in this instance, too. Their use as burial artifacts can be argued to be directly connected to the establishment of tributary and trade links between Lelang and its neighbors and signifies changes in the structure of the local elite.

More than ten Western Han mirrors have been excavated from sites in North and South Kyöngsang province, formerly the territory of Chinhan. The discovery of a mirror with linked arcs, quatrefoils, and constellations (FIG. 9) in a first-century CE tomb at Tahori near Ch'angwön (South Kyöngsang province) 慶尙南道昌原茶戶里 marks the earliest-known use of a Chinese bronze mirror in southeastern Korea. It was placed in a bamboo basket on the floor of the burial pit among other goods. The mirror's similarity to one found in P'yöngyang suggests that it was either cast in Lelang or on the Chinese mainland. Burial goods included a variety of iron weapons, iron tools, a bronze belt-hook, and other valuable local and imported goods indicating the elite position of the interred. Judging from the many iron artifacts within the tomb, Yi Young-hoon has suggested that the occupant may have been the chief of a group of people who acted as agents for the iron trade with Lelang.²⁷

Contrary to the predominance of Western Han mirrors in the former Chinhan area, the region of Pyönhan is richer in later mirrors, in particular around Kimhae, where they continued to be placed in graves of high-ranking members of society. The reason behind this regional difference may involve the general decline in Han-type goods imported into Chinhan around the mid-second century CE, coinciding with the rise of large local elite groups. Lee Jae-hyun has argued that, in contrast to earlier elite groups, whose existence largely depended on their inclusion within wider elite networks, including those associated with Lelang, later elites of the North Kyöngsang region differentiated themselves through other strategies, such as special tomb layouts and different types of burial goods.²⁸ This appears to have had considerable impact on the social and ritual roles assigned to mirrors, as their importance as funerary gifts for the elite declined. In contrast, Pyönhan's location on the southeastern coast made it a thriving hub of interregional and international trade between Lelang, the Chinese mainland, the Japanese archipelago, and Cheju Island. Consequently, mirrors continued to be imported into the area over the course of the second century.

IMITATIONS OF HAN MIRRORS

HAN MIRRORS WERE TREASURED in Chinhan and Pyönhan. This becomes evident in their use as burial artifacts for the elite and in the production of local imitations. Characterized by their small size and awkwardly arranged abstract patterns, such imitations began to be made on the peninsula in the first century CE, as suggested by finds in tombs in North and South Kyöngsang provinces.²⁹ We do not yet completely understand the underlying causes that initiated the production and use of such pieces. However, there is little doubt that the function and role of imitation mirrors as tomb goods for high-ranking members of society was not only motivated by interactions with Lelang, but was also closely entwined with the formation and restructuring of local elite groups.

Dating to the first century CE, the Öündong cemetery near Taegu (North Kyöngsang province) 慶尙北道大邱漁隱洞 is thought to be the earliest with Chinese-style mirrors of undoubted local manufacture (FIG. 10).³⁰ The cemetery was excavated in 1918. It revealed a wealth of artifacts, some of which were made locally, while others, such as bronze belt-buckles, were imported from Lelang. Fifteen Han-style mirrors were also found. Three of them are Han pieces (FIG. 10, NOS. 1–3), whereas the remaining twelve are locally made imitations. The largest of the former group is decorated with the common Western Han motif of four raised knobs among auspicious creatures. The two smaller Chinese pieces are “illumination” mirrors. Linked arches surround the hemispherical knob, and in the middle band, an inscription reads: “By the light of the sun, the world is made bright” (*jian ri zhi guang Tianxia daming* 見日之光、天下大明).

The size, designs, and manufacture of the other mirrors found at the site suggest that they were cast by local, as opposed to Han Chinese, craftsmen. The largest within this group has the scalloped inner rim characteristic of many Western Han mirrors (compare, e.g., mirrors O-0313, O-0779, O-0179, and O-0883; see v. 1: PLS. 58–60, 62). The design itself appears to be a hybrid of several decorative elements typical of such objects: a large, raised central knob surrounded by smaller knobs, and an arrangement of concentric bands. The striations, though, are a local invention. Only one other mirror of similar design has been found on the peninsula. Excavated from a tomb of the first century CE located in P'yöngnidong near Taegu 大邱坪理洞, it was placed alongside a Han mirror, four smaller imitation mirrors, as well as other bronze artifacts.³¹



FIGURE 9



FIGURE 10

FIGURE 9: Bronze mirror excavated from Tahori, Ch'angwön (South Kyöngsang). Diameter 12.8 cm. First century CE. National Museum of Korea.

FIGURE 10: Bronze mirrors excavated from Öündong, Taegu (North Kyöngsang). Diameter (of lower left-hand mirror) ca. 14 cm. First century CE. National Museum of Korea.

The decorations on the eleven smaller Öündong mirrors evidently imitate Han mirror designs, too. The wiggly lines appear to merge the inscriptions cast on “illumination” mirrors with the figural shapes on other types of Han mirrors. Similarly, the hachured band in the outer rim resembles those seen on many Han pieces (instances in the Cotsen Collection are too numerous to list). The Öündong pieces are identical to the four small imitation mirrors unearthed from the P'yöngnidong tomb. The mirrors from Öündong and P'yöngnidong are significant because they testify to the production of imitation mirrors around the Taegu area, and they could have been supplied by the same workshop.

As preferences within elite groups in North Kyöngsang province changed in the second century CE, artifacts imported from Lelang, including mirrors, decreased in number. This had considerable impact on the production and use of imitation mirrors within the region, where, as mentioned before, no specimens have been excavated from sites postdating the first century CE. They continued to be used in Pyönhan into the second century, but by the third century, mirrors of Chinese make lost their appeal in this area, too, as other kinds of objects, in particular ceramics, iron, and lacquerware, assumed the role of status goods in tombs of the elite.

The inferior quality of imitation mirrors contrasts with the high level of skill involved in making ritual bronzes before the Han Chinese arrived at Lelang. Therefore, they should not be seen as a revival of this earlier local bronze-casting tradition. Instead, as mentioned above, their production was closely influenced by imported Han mirrors. Since they were often placed in tombs alongside such imports, it is unlikely that their manufacture was driven by a shortage of Han originals. Rather, it was the presence of Han mirrors that sparked the production of local copies. It is possible that this production met the need for more mirrors than Lelang could or would supply. Moreover the demand for quantity rather than quality may have been the reason why Samhan craftsmen never copied Chinese mirrors faithfully. Han designs were reproduced in rudimentary fashion, and the motifs were reduced to the extent of being unrecognizable, presumably because the mere “Chineseness” of the pattern, and the social implications conveyed thereby, were more significant than the actual iconography or the quality of its execution. The mirrors' primary use as burial goods is also likely to have affected the quality of their casting, since, within the context of the mortuary ritual, their implied meanings compensated for their inaccurate appearance. Finally,

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whereas the iconography of some Han mirrors reflected popular interpretations of Taoist mythology, this was never the case of Samhan imitations. There is no indication that Han world views were adopted by local populations, who instead appear to have continued to practice their own native rituals. Imbued with flexible shamanistic interpretations of life and death, the iconography of the imitation mirrors was not fixed by a set of semantic meanings but remained ambiguous.

CONCLUSION

THE COARSE-LINED AND FINE-LINED MIRRORS made in Korea during the Bronze and Early Iron Ages were ritual objects, valued for their precious material and their associations with light. The motifs decorating them also appear on other types of mortuary ritual artifacts. With the establishment of the Chinese commanderies, various kinds of Han artifacts spread throughout the peninsula, not only in the conquered areas, but also farther south into the Samhan polities. However, imported mirrors did not simply replace indigenous ones in a like-for-like manner. The breach in the production of indigenous mirrors and other types of ritual bronze artifacts and the ensuing dominance of Han mirrors must be seen as rooted in a complex set of developments that shaped the roles, uses, and ritual meanings of mirrors.

Han Chinese objects were incorporated into indigenous ritual practices in the same way that associations with Lelang came to form part of the social constitution of Chinhan and Pyŏnhan. Through their connection to the powerful and, in many respects, technologically advanced Chinese, Han mirrors connoted elite

culture, a role that had traditionally been ascribed to local ritual bronzes. This increased their popularity. The importance of Han mirrors was further enhanced by the value ascribed to bronze, a metal that during the first and second centuries CE remained precious, exclusive, and associated with foreign and intra-peninsular trade. While the exclusivity of bronze objects enhanced their ritualized status, their use in Chinhan and Pyŏnhan occurred when local elite groups were undergoing significant changes. The meanings of mirrors were therefore not only shaped by external connections, but also by local political realities as various ruling groups fought for supremacy in the region. Within this changing social framework, ownership of mirrors and other high-value goods denoted exclusive status, as those in possession of mirrors pitted themselves against those without them.

These factors influenced the casting of imitation mirrors, which, in their implied Han patterns, carried connotations similar to the Chinese originals and signified the wealth and social standing of the interred. Their primary use as burial objects made formal resemblance unnecessary. While the disappearance of mirrors and other ritual artifacts featuring patterns of hatched triangles suggests some shift in ritual practices, it is possible that references to light in mirror iconography were not severed but continued—for example, in their striated patterns, which may have signified light. Under Han Chinese hegemony, the manufacture of indigenous ritual bronzes changed significantly, yet the ritual and social meanings encoded in bronze mirrors, whether made in late Bronze and Early Iron Age Korea, on the Chinese mainland, in Lelang, or in Samhan, did, in most respects, remain the same.

NOTES

1 It has been argued that bronze mirrors were intermittently imported from Lelang into the Japanese archipelago since the first century BCE (Okamura 1999; Tsujita 2007). From around the first to the mid-third century CE, imitations of Lelang mirrors were also produced in the archipelago (Takakura 1972, 1985; Tsujita 2007). It has further been suggested that some were brought in from Samhan (Takakura 1985). Further research needs to be undertaken to understand the exchange of elite goods between Lelang, Samhan, and the Japanese archipelago, and it lies beyond the scopes of this paper.

2 For a discussion of these sources, see, among others, Rhee Song-nai and Choi Mong-lyong 1992: 86–89.

3 The periodization schemes proposed by different scholars are outlined by Kim Wŏn-yong 2001: 68–69; Barnes 2001: 82–85.

4 Rhee Song-nai and Choi Mong-lyong 1992: 77. Some of these molds are illustrated in Kungnip Chung’ang Pangmulgwan 1992: 120–123.

5 Rhee Song-nai and Choi Mong-lyong 1992: 81.

6 For a comprehensive illustrated overview of these tomb sites, see Kungnip Chung’ang Pangmulgwan 1992.

7 Umehara 1968; Uno 1977.

8 Rhee and Choi 1992: 84.

9 Pai 2000: 88–90.

10 For discussions of these arguments, see Pai 2000: 88–89.

11 For a discussion of solar signs in the Scytho-Siberian world, see Martynov 1991: 69–71; Antonini 1994.

12 Martynov 1991: 69–71; Gimbutas 1965: 589.

13 The rock carvings at Ch’ŏnjŏlli cover an area of 1 × 2.5 m. They have been dated from the mid-Neolithic period to the Bronze Age (Kim Wŏn-yong 1987: 172–175).

14 Twitchett and Loewe 1986: 448–449.

15 Barnes 1999: 210–211. Objects excavated from Lelang tombs are illustrated in Kungnip Chung’ang Pangmulgwan 2001.

16 The descriptive terms and groupings of mirror iconography differ considerably from publication to publication. Here I have largely followed those used by Cahill, v. 1. It may be noted that Chou Ju-hsi (2000: 35–37) groups sunlight and illumination mirrors in one category, and classifies them as mirrors with “concentric circles and linked arcs.”

17 A mirror from P’yŏngyang bears a comparable but simpler version of the motif cast on mirror O-0779 (Kungnip Chung’ang Pangmulgwan 2001: 87).

18 Note that the inscription of mirror O-0133 differs somewhat from the Chŏnbaengni mirror. For a discussion of the Cotsen mirror, its inscription, and its meaning, see Cahill, v. 1: 40–46.

19 As Ying-shih Yu (1967: 1) notes, trade and expansion “were inseparable in Han foreign relations.”

20 For a discussion of the interaction between Lelang and the Samhan polities, see Pai 2000: 174–236.

21 Yun Yong-gu 1999; Yi Hyun-hae 2001.

22 The mining of iron in Chinhan was noted by Fan Ye 范曄 in the *Hou Han shu* 後漢書, 85: 2819. For an English translation of this section, see Byington 2009: 151.

23 Barnes 1999: 198; Chou 2000: 8, 14.

24 The mirrors were recovered from sites at Puyŏ and Kongju (Lee Jae-hyun 2009: 75).

25 Lee Jae-hyun 2009: 77.

26 For a comprehensive list of mirrors found in Chinhan and Pyŏnhan, see Kang Ūn-yŏng 2001: 44–45.

27 Yi Young-hoon 2009: 172.

28 Lee Jae-hyun 2009: 74.

29 Yi Jae-hyŏn 2000: 50–60; Kang Ūn-yŏng 2001: 44–45.

30 Kungnip Chung’ang Pangmulgwan 1992: 58–59. For further discussion of this site, see Pai 2000: 227–229.

31 Kungnip Chung’ang Pangmulgwan 1992: 59–61.

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A Comparison of Designs on Bronze Mirrors and Silk Textiles from the Warring States through the Tang Periods (450 BCE–907 CE)

BRONZE TECHNOLOGY AND SERICULTURE are two major markers of Chinese civilization. Sericulture, going back as far as the fifth millennium BCE, is the earlier of the two. Bronze casting began toward the end of the Neolithic, around 2000 BCE; bronze mirrors are found among the earliest metal items excavated in China (see Li Jaang, this volume). Cast bronze mirrors and woven silk fabrics are among the most representative, numerous, and enduring forms of early Chinese material culture; they provide a useful window for the understanding of Chinese civilization as a whole.

This paper uses examples from the Lloyd Cotsen Study Collection of Chinese Bronze Mirrors and the Cotsen Textile Collection to investigate the similarities between bronze mirrors and silk textiles from the Warring States period (ca. 450–221 BCE) through the end of the Tang dynasty (618–907 CE). This introductory section suggests commonalities between the two media in the areas of meaning, production, and context. Next, the paper describes common design features and their development. Although the designs I trace here formed part of a larger repertoire shared by diverse crafts and was by no means exclusive to mirrors and textiles, a study that focuses on those two media can highlight similarities and differences that may then be applied to other categories of artifact. A brief section on the Silk Road connection follows. Finally, I turn to a comparative chronological survey of the textiles and mirrors in the two Cotsen collections to identify groups of objects according to common design elements and provide dense description and analysis of individual examples. This section shows that at some times there was very close correspondence between the two media, but at other times they diverged.

My research suggests mutual influence between the two, with textile design often but not always in the lead, and connects periods of heightened creativity with periods of increased trade and cultural contact between the Chinese States of the Central Plains, other polities to the south such as Chu, and other peoples along the Silk Road.¹

Upon first impression, bronze mirrors and silk textiles seem to be completely different types of objects. Bronze is hard, rigid, and durable, while silk is soft, flexible, and prone to decay. They are produced by different technologies: casting in clay or stone molds in the case of mirrors, and weaving on a loom in the case of silk. The surface each presents for the artisan to decorate differs in shape and dimensions; the mirror shape favors a singular, centripetal design, whereas weaving encourages longitudinal repetition of motifs. By the Warring States period, cultural choices had already standardized, within certain ranges, both mirror size and bolt width and length. Chinese bronze mirrors are round and relatively small, while Chinese woven textiles are rectangular, relatively wide, and quite long.

Yet bronze mirrors and silk cloth have much in common. As examples of material production, both are cultural templates: they reflect the beliefs, values, hopes, and fears of those who produce and use them at the same time as they instruct both the maker and the bearer or wearer on how to live accordingly.² At the visual level, both integrate some of the same conceptual and iconographic elements, which the artisans accommodated to the different demands of their respective media.

Mirrors and textiles also share similarities in mode of production. Both were often manufactured using modular production, by which artisans could combine a limited number of variables to produce an apparently infinite number of designs on the final products. Both mirrors and textiles could be made relatively rapidly and efficiently, and their production was managed with high standards of organization and quality control, using what can be considered the ancestor of the nineteenth-century industrial assembly line.³

Archaeological evidence shows that, starting in the Warring States Period, access to both mirrors and silk textiles extended down to lower ranks of the Chinese elites than had been the case with the bronze ritual vessels and prestige silks of earlier eras.⁴ These luxury goods were now publicly visible as well as relatively available and unregulated.

As a result of such social changes, more examples of each medium survive, and our evidence base is richer than for earlier eras. As far as textiles are concerned, another reason for our ample corpus of data stems from Imperial China's expansion, after about 108 BCE, into Central Asia, where the dry climatic conditions were more favorable to textile preservation than they were in the Chinese heartland. Mirrors as well as textiles were favored among the Chinese items traded along the far-flung system of trade routes crossing Central Asia and known today as the Silk Road.

The archaeological record of both the Chinese heartland and Central Asia, together with textual evidence, shows that bronze mirrors and silk cloth were manufactured, used, stored, and buried in close proximity to each other, increasing opportunities for mutual influence.⁵ Men as well as women used mirrors and silk in the intimate space of the household and carried or wore them outside on the street. Their functions in daily life were related to grooming, personal presentation, and the proper performance of hierarchical social and family roles. Both were also status symbols, items of conspicuous consumption that displayed the user's good taste and high social station. Finally, family members buried mirrors and silk textiles with the dead as part of the supplies needed in the next world.

Tomb assemblages of the Warring States and Han (206 BCE–220 CE) periods show an increased emphasis on personal articles used in daily life, including mirrors, clothing, and bolts or pieces of cloth. Like other grave goods, mirrors were sometimes wrapped in silk. Some excavated mirrors have been found in silk bags apparently tailored just for the purpose of storing them during the life

and afterlife of the owner. An example in the Cotsen Collection, mirror O-0775a (see v. 1: PLS. 66–67), with its pouch and other cosmetic paraphernalia, probably comes from a tomb somewhere in Central Asia.⁶ Several other mirrors in the Cotsen Collection bear textile pseudomorphs, evidence of close proximity in the burial context. Pseudomorphs are impressions of woven cloth left in the bronze that were produced by corrosion in close contact with now-lost fabric. One especially clear instance appears in mirror O-0778 (see v. 1: PL. 25). A double-tier mirror in the collection dating to the Warring States, O-0360 (see v. 1: PL. 8) has well-preserved textile pseudomorphs adhering to the inner surface of the back plate (see Scott, this volume). This suggests that all double-tier mirrors (such as O-0424, O-0800, O-0295, and O-0360; see v. 1: PLS. 4–8) may have originally had silk backing between the two layers. One mirror, discussed in greater detail below, has a single piece of silk textile adhered to its decorative surface that furnishes the entire design. And artisans may have occasionally used textiles directly to create decorative impressions in the mirror mold (see Scott, this volume).

The way bronze mirrors and silk textiles were produced also promoted exchange of designs. Mirrors and textiles shared, at least from the Han through the Tang dynasties, proximity of some production facilities. In the capital cities of Luoyang 洛陽 and Chang'an 長安 during the Han period, for example, craft factories or workshops were often located close to one another, allowing for mutual influence, through formal and informal contact, borrowing, and a shared customer base. The same government body—the Shangfang 尚方 office, located in the imperial palace—regulated them.

Not only were mirrors and silk cloth produced, used in daily life, and buried in similar ways, but they also looked the same. Both belonged to the larger category of crafts, sharing a common design vocabulary, produced for the daily use of Chinese elites. Despite the differences noted above, mirrors and silk cloth possess similarities in format (characteristics of the surface to be decorated) fabrication, use, social function, decoration, and meaning (including both iconography and inscriptions), and these similarities were maintained during most eras as these two distinct classes of items developed over time. These commonalities are defined and discussed more fully in the following section.

As the two Cotsen collections that form the basis of this research are of limited size, my analysis cannot claim to be complete or statistically significant. But both collections are highly

representative: they include all or most of the major known types of Chinese mirrors and textiles dating from the Warring States through the Tang. We can analyze them in comparison with materials in other collections.⁷ Based on comparisons between the two Cotsen collections, bringing in outside materials when relevant, the next section examines general design features shared between bronze mirrors and silk textiles and traces interrelated developments in both media.

COMMON DESIGN FEATURES AND THEIR DEVELOPMENT

THROUGHOUT THE LONG TIME SPAN UNDER DISCUSSION—from the Warring States period through the Tang dynasty—permeable boundaries among several different media allowed design influences to flow back and forth. It is unsurprising, therefore, that mirrors and textiles share features of format and subject matter with other art forms, showing readily apparent similarities, for example, to objects fashioned from jade, lacquer, and clay.⁸ Objects made of different materials or by different techniques were regularly found in close proximity to one another in workshops, daily life, and tomb furnishings, promoting an integrated decorative repertoire.

Shang-period (ca. 1600–1046 BCE) weavers had already exploited the potential of their looms to form designs along diagonal axes, creating lozenges and the interlocking T-shaped pattern. Starting in the Warring States period, artisans in the Changsha 長沙 region of the southern kingdom of Chu 楚 adapted textile designs for use on mirrors, echoing the characteristic angular elements of woven patterns (see Mackenzie, this volume). Their successors in the capital cities of Chang’an and Luoyang during the Han dynasty continued this practice.⁹ Such elements were then assimilated into the broader decorative repertoire.

Warring States woven silk textiles are characterized by rectilinearity and diagonal axes. Their designs emphasized abstract geometric and pictorial designs constructed of angular or stepped modules. For example, see the textile T-0327f in the Cotsen Collection (FIG. 1). Rectilinear and diagonal designs are not natural in other media, such as bronze casting, so woven textiles are likely to have directly inspired the diagonals in bronze designs. Mirror makers of the late Warring States era probably borrowed their lozenges and T-shapes (conventionally called *shan* 山 or

“mountain” elements) from woven patterns, as on mirror O-0420 (see v. 1: PL. 18). The relationship between textile and mirror design went beyond borrowing when, on some occasions, the artisan pressed the fabric directly into the clay mold to create a fine, textile-like pattern, as on mirror O-0460, mentioned above (see v.1: PL. 56).

Once weavers introduced curves into their designs, it becomes more difficult to prove that woven textiles were directly influencing other media. Embroidery, however, was curvilinear from the start. Its distinctive trait is thin, linear elements (because it is easier to embroider outlines than it is to stitch in large areas) and texture. The thin, curving outlines defining the figures in mirrors such as O-0096 and O-0398 (v. 1: PLS. 31, 33–34) suggest nothing so much as the chain-stitch designs found in contemporary embroidered textiles. The curving shapes and figures made possible by the addition of embroidered ornament to woven textiles may also have inspired mirror makers to devise the graceful phoenix and dragon arabesques that dominate late Warring States and early Han mirrors, such as mirrors O-0833 and O-0778 (see v. 1: PLS. 24, 26). Textiles with designs resembling these two mirrors have been excavated from Tomb 1 at Mashan, Jiangling (Hubei) 湖北江陵馬山, dated to the third century BCE.¹⁰

Bronze mirrors and silk textiles share important design characteristics and limitations. Each can serve as a picture plane or surface for decoration. Both can be viewed vertically, as we would look at a picture hanging on a wall, or horizontally from above, like a map spread out upon a table. Both favor repetition in design. And both feature symmetry, although mirrors are characterized by radial or point symmetry, while weaving employs axial symmetry. In common with ornamentation in many media produced at the same time, the makers of both bronze mirrors and silk textiles skillfully manipulated the contrast and interplay between light and dark, figure and ground, round and square, and curving and right-angled or straight lines, as they gave expression to a shared vocabulary of meaningful images. The similarities can be strikingly specific at times, as the final section of this article attests.

The iconography of mirror and textile decoration is never merely neutral decoration but reveals the beliefs, values, and aspirations of the people who produced and used them. While specific elements came into or went out of fashion over time, in general the ornamentation was intended to attract good fortune:

prosperity, high position, comfort, and lineage continuity, as well as cosmic, social, and familial harmony. Ornament also served an apotropaic function: it was intended by its makers and users to ward off spiritual and physical dangers.¹¹ In addition, ornamentation made statements about the identity and self-perception of the maker and user in terms of class and ethnicity.¹² Finally, it could express the taste and fashion sense of an individual or a social group. The decorative motifs are not exclusively religious or secular, but combine meanings from both realms of life. Beginning in the Eastern Han period (25–220 CE), when we can assign specific religious meanings to the decorations, they reflect correlative cosmology as well as beliefs and practices specific to contemporary Daoism. In terms of social ideals, they embody the growing social ideal of the cultivated gentleman or literatus (*wenren* 文人) among Chinese elites. Buddhist elements, in contrast, are almost completely absent throughout the entire period studied here.¹³

With the exception of the double-tier mirrors that already show quite recognizable birds, dragons, serpents, and mythical animals, the overall development of design from the late Warring States through the Tang dynasty moves from the abstract to the more representational.¹⁴ We can trace this process on both mirrors and textiles. During the Warring States period, with the possible exception mentioned above, designs in both are relatively abstract. Their meanings are not obvious. We see the introduction of fine background patterns that include spirals, stripes, sawtooth bands, and lozenges.¹⁵ Set against these background patterns are contrasting figures such as round disks, lozenges, quatrefoils, arabesques of birds or dragons, *taotie* 饕餮 masks, and leaf or petal of wheat-sheaf shapes. Toward the end of this period, anthropomorphic figures begin to appear. During the late Han dynasty and the period shortly afterward, we see an increase in figures representing humans or deities and animals. Most important among the animal figures are the beasts of the four directions: the blue-green dragon of the east, white tiger of the west, red bird of the south, and black tortoise and snake combination of the north.¹⁶ Horses, sometimes with wings (see Tseng, this volume), and mythological animals are also prominent.

Weavers during the late Northern Dynasties (386–581 CE) era began to incorporate into their textiles motifs that had traveled from the west along the Silk Road. These motifs formed part of a larger decorative repertoire of exotic elements that entered China through imported textiles as well as through other media such as

objects fashioned of silver and gold. The new designs featured, for example, roundels derived from Persian textiles, often containing floral patterns or heraldic animal figures.¹⁷ During this era, we see the first surviving depictions of foreigners on textiles.¹⁸ During the following Sui (581–618) and Tang periods, bronze craftsmen followed the weavers’ example, translating certain exotic new shapes and images into forms appropriate for the bronze mirror format.¹⁹ Tang metalworkers copied the roundel—its radial symmetry made it an ideal form for mirror decoration. They introduced scrollwork vines, with curling leaves and clusters of grapes. They represented foreigners. Animals continue to abound, some, such as the lion and the semurv, showing distinct foreign origins.

During the Han period, intertextuality, a distinctive feature of Chinese arts, in which written characters and decorative elements are combined on the surface of an object, becomes a prominent feature of mirror and textile decor.²⁰ The inscriptions in both media tend to be auspicious phrases. Although such inscriptions certainly appeared on other materials as well, the fact that both mirrors and textiles were personal items closely associated with the bodies of the living and the dead leads naturally to their becoming vehicles for auspicious words and argues for a close association between the two. The evidence provided by the Cotsen textiles suggests that characters may have appeared earlier on textile designs than on mirrors.²¹ Inscriptions figure in the designs of four textile fragments dated provisionally to the Western Han period in the Cotsen Collection: T-1482, T-1831, T-1214 (FIG. 7), and T-1215 (FIG. 8), while inscribed mirrors first appear in the following Eastern Han era. This is surprising, both because a long tradition of inscribing bronze ritual vessels stretched back centuries before the Eastern Han dynasty, and because it was much easier to carve a character into a clay mold than to weave one into a piece of brocade. The evidence simply does not allow us to conclude that textile designers led the way in this case.

Once characters enter the decorative repertory, they remain in continuous use as long as mirrors and textiles are produced. Among the longest and most complex inscriptions are those seen on mirrors and textiles from the Eastern Han period (see Brashier, this volume). The content of inscriptions changes and their usage in both media declines greatly after the third or fourth century CE. Mirrors of the Sui and Tang periods once again bear lengthy inscriptions, but textile inscriptions remain relatively brief.

The visual impact of the characters as elements of decoration is powerful, both complicating and expanding our understanding of the accompanying images. Characters occur singly and in longer inscriptions; they appear both interspersed throughout the decorative fields of textiles or mirrors and separated into separate zones. Sometimes they serve as captions that identify narratives and figures depicted in the designs. For example, a piece of silk brocade dated to the Northern Dynasties, inscribed with the characters *hu wang* 胡王, “foreign king,” features a roundel containing the doubled image of a figure with pronounced non-Han features and wearing Central Asian clothing, together with a camel, excavated from Tomb 14 at Astana.²² And the inscription on the Tang mirror O-0782 (see v. 1: PL. 114) identifies the narrative depicted thereon as a famous tale about Confucius meeting a hermit who sets him straight about what makes for a happy life. The literati viewer would instantly recognize the tale from the shorthand reference in the inscription, enhancing the aesthetic as well as literary pleasure. Although mirrors tend to have somewhat longer inscriptions than textiles, presumably because of the relative ease of carving versus weaving a character, most inscriptions in both media are short, repetitive, and formulaic. They commonly express a desire for good fortune in the form of material wealth, high position, happiness, lineage continuity, longevity, and order in the family, state, and cosmos. As well as attracting good luck to the owner, they are also intended (along with their designs) to protect him or her from dangerous forces, both material and spiritual. The calligraphic wishes reinforce the visual imagery.

Many of the inscription formulae on the mirrors and textiles are identical. Examples are *chang yi zisun* 長宜子孫, “May your sons and grandsons continue forever,” seen on mirror O-0399a (see v. 1: PL. 65) and textile T-1214 (FIG. 7), or *le wei yang* 樂未央, “May you have happiness without end,” which occurs on mirror O-0246 (see v. 1: PL. 66) and textiles T-1214 (FIG. 7) and T-0196 (FIG. 10).²⁴

Most of the inscriptions on textiles in the Cotsen Collection are brief, like those mentioned above, or fragmentary. But even the short phrases and fragments correspond to concerns and formulae of longer inscriptions in textiles found elsewhere. And there are two slightly longer inscriptions. T-1215 a–d (FIG. 8), dating perhaps to the Western Han period, proclaims: *an guo le tian wu jiang* 安國樂天毋疆, “The country is pacified; (may you) delight in heaven boundlessly,” while T-1482, dating perhaps to the same era, asserts: *guo da ping feng zai tian xia ji* 國大平風在天下吉,

“The country has reached a state of Great Peace; the phoenix is present in the sub-celestial realm: good fortune!” T-0171, dating to the Eastern Han, has the single character *ming* 明, “bright,” probably part of the phrase *deng gao ming* 登高明 “(May you) ascend to high position and brilliance.” T-2857, dating slightly later, bears the fragment *wu ji* 無極, probably short for *chang shou wu ji* 長壽無極, “(May you have) longevity without limit.”

Textiles bearing clear inscriptions comparable in content to those in the Cotsen Collection have been excavated at several locations. For example, Tomb 1 in Graveyard 1 at Niya, Minfeng, (Xinjiang) 新疆民丰尼雅 contained a brocade bag with the three-character inscription *jin chi feng* 金池鳳, “the phoenix from the Golden Pond.” Tomb 3 in the same cemetery contained at least two pieces of cloth with the same ten-character inscription, reading *shi wu ji, jin yi er qin chuan zi sun* 世毋極錦宜二親傳子孫, “Brocade unsurpassed in the world, suitable for your two parents and for handing down to your sons and grandsons.” Tomb 8 at the same cemetery held a textile bearing an eight-character inscription reading *wu xing chu dong fang li zhong guo* 五星出東方利中國, “The five planets come out in the eastern quadrant to benefit the middle kingdom.” Tomb 2 at Loulan, Ruoqiang (Xinjiang) 若羌樓蘭 produced a piece of cloth decorated with a four-character inscription reading *chang shou ming guang* 長壽明光, “(May you) have extended longevity and brilliance that radiates.” Tomb 20 at Yingpan, Yuli (Xinjiang) 尉犁營盤, contained a textile with a two-character inscription reading *deng gao* 登高, “(May you) ascend to high position.” All the preceding specimens date to the time corresponding to the Eastern Han period, though the tombs in which they were found may in some cases be slightly later. A somewhat later fragment of silk, dating to the Sui dynasty, was excavated from Tomb 48 at Astana, Turfan (Xinjiang) 吐魯番阿斯塔納 (also written 阿斯塔那), with a single repeated character that reads *gui* 貴, “(May you attain) noble position.” These inscriptions share concerns, aspirations, and often the identical wording with mirror inscriptions of the same time. Specifically, they share desire to protect parents, assure continuity of the patri-line, see well-omened constellations in the heavens, and achieve good fortune in the form of longevity, brilliance, high office, and noble standing.²⁵

The close resemblance, in both content and appearance, between contemporary mirror and textile inscriptions suggests that craftsmen made them under similar conditions of production,

perhaps in workshops around the corner from one another. The inscriptions in both media also contain the same nonstandard forms of characters, including words written backwards or missing radicals or lines, as well as truncations of inscription formulae due to constraints of space, again suggesting similarities in workshop practice. The individual craftsmen who actually implemented the designs may not have been fully literate; they could have simply copied a standard template.

THE SILK ROAD CONNECTION

A NETWORK OF TRADE ROUTES connecting the Central Plains of China across Central Asia to points west has been in existence for thousands of years. Archaeological and documentary evidence proves that contact between Chinese and non-Chinese peoples along the Hexi corridor goes back at least as far as the reign of Han Wudi 漢武帝 (121–87 BCE). That emperor sent out military expeditions against the Xiongnu 匈奴 and the rulers of Ferghana, ushering in a new age of Chinese–Central Asian relations. Travel, trade, and information exchange along the Silk Road continued from the Han to the Tang period, when the exchange of technology, especially in metalwork techniques and textile design, reached its zenith. Influences in the realm of metalwork came mainly from the metropolitan workshops of Sasanian Persia, intensifying after the last heir of the Sasanid royal family, Prince Peroz, fled as a fugitive to the Tang court of Emperor Taizong (r. 626–649) in the wake of an Arab victory that ended his family’s long reign. Textile influences came from both Sasanian sources and from the northern steppes.

Times of heightened activity along the Silk Road that fostered contact and exchange with border peoples (and even more distant groups) often just preceded or coincided with periods of inventiveness in design and the adaptation of new technologies in the production of both mirrors and textiles, suggesting that intercultural contact stimulated the creativity of artisans regardless of their medium.²⁶ Such motifs as the pearl-surrounded roundel mentioned above appear on the robes of Bodhisattvas in Tang murals at the Mogao cave temples at Dunhuang in Gansu Province 甘肅敦煌莫高窟 and in Northern Zhou (557–581) tomb murals, as well as in silk fashions worn by ladies at the Tang court.²⁷ Technical knowledge traveled as well. The hammering, granulation, beading, gilding, and repoussé seen on Tang mirror

O-0865 (see v. 1: PL. 108), and also on such specimens as mirrors O-0426, O-0792, O-0308, and O-0647 (see v. 1: PLS. 89–93), derive from the crafts of Persia. Specific examples are discussed in more detail in the following section.

COMPARATIVE CHRONOLOGICAL SURVEY OF MIRROR AND TEXTILE DESIGNS

THIS SECTION SURVEYS SPECIFIC MOTIFS shared by bronze mirrors and silk textiles in the two Cotsen collections. The survey of mirrors and textiles follows a rough chronology, according to when the designs first appeared. Each section begins with a brief enumeration of textiles and then mirrors from the two Cotsen collections that will be discussed together. Then I describe, analyze, and compare them to one another, highlighting similarities and potential influences.

Like the mirrors, the Cotsen Collection textiles were not discovered in controlled excavations and have no completely reliable provenance. I use comparable materials from controlled excavations to identify their dates and geographical origins. Despite uncertainties in dating, it appears that many designs in the two media appeared at almost the same time. Often designs on textiles seem to have led the way, and mirrors followed; more rarely the influence may have gone in the opposite direction.

Warring States

Warring States–period textiles in the Cotsen Collection are T-0327e–f (FIG. 1), T-2537, T-1311 (FIG. 2), and T-1117.²⁸ The mirrors from the Cotsen Collection to be discussed in connection with these textiles fall into five groups, according to the dominant designs placed against a fine background. Most Warring States mirrors, with the exception of the double-tier examples, feature fine spirals or lozenges as a contrasting background pattern that brings out the dominant design. The lozenges and other diagonal elements most closely resemble textile weaves. Mirrors with background patterns of fine spirals include O-0884,²⁹ O-0421, O-0420, NO-1504, NO-1506, O-0646, O-0279, O-0833, O-0778, O-0180, O-0129, O-0096, O-0127, and O-0398 (see v. 1: PLS. 12, 15, 17–18, 19, 20, 21, 23, 24, 25–26, 27, 28, 31, 32, 33–34). Mirrors with background patterns of lozenges or diagonals include O-0458, O-0457, O-0131, O-0720, and O-0460 (see v. 1: PLS. 22, 30, 35, 38, 56).



FIGURE 1

FIGURE 1:
Silk fragment, Warring States
period (T-0327f).



FIGURE 2

FIGURE 2:
Silk fragment, Warring States
period (T-1311).

The first of the five groups of Warring States mirrors in the Cotsen Collection, as categorized by dominant design motif, consists of mirrors with interlocking T's, including O-0128, O-0420, and NO-1504 (see v. 1: PLS. 16, 17–18, 19). The second group contains those depicting quatrefoils, and includes O-0407 and O-0720 (see v. 1: PLS. 37, 38). The quatrefoil shows great staying power as a design element, continuing into the following Han period (see O-0779, O-0856, and O-0399a; v. 1: PLS. 59, 63, 65). The third group, comprised of mirrors with leaf and petal or sheaf-of-grain motifs, includes NO-1506 and O-0646 (see v. 1: PLS. 20, 21). The leaf and petal or sheaf-of-grain motifs also continue into the following Han period (see O-0313; v. 1: PL. 58). In the fourth group I place mirrors with bird or dragon arabesques as the dominant decoration, often featuring lozenges as an additional foreground motif. This category includes O-0458, O-0279, O-0833, O-0778, O-0180, O-0129, O-0457, and O-0720 (see v. 1: PLS. 22, 23, 24, 26, 27, 28, 30, 38). The fifth and final group includes mirrors depicting perched or flying birds, including O-0457 and O-0131 (see v. 1: PLS. 30, 35).³⁰

Textile T-0327f (FIG. 1), a silk, weft-faced compound-twill textile fragment in the Cotsen Collection dated to the Warring States period, shows lozenges, confronted birds and dragons (or deer), flying birds, and small medallions. The individual motifs are arranged in geometric patterns with a grid formed by larger geometric shapes. Vertical stripes of contrasting color frame spaces filled with smaller, symmetrical design units. Asymmetrical see-saw patterns fill the background, against which are set lozenge or “ear cup” motifs. T-1311 (FIG. 2), a fragment of a warp-patterned compound plain weave, features lozenges, confronted dragons, addorsed (back-to-back) birds, and small medallions.

Warring States-period textiles similar to T-0327f (FIG. 1) have been found in the already-mentioned Chu Tomb 1 at Mashan.³¹ Compare also, for the lozenge shape, specimens excavated from Tomb 1 at Mawangdui, Changsha (Hunan) 湖南長沙馬王堆, dated to ca. 168 BCE.³² T-1311 (FIG. 2) also resembles a textile from Tomb 1 at Mashan.³³

The textile fragments T-0327 f (FIG. 1) and T-1311 (FIG. 2) show a remarkable resemblance to mirror O-0458 (see v. 1: PL. 22) with its fine-patterned textile-weave background, zigzag and prominent lozenge or “ear-cup” shapes, and interlaced phoenixes. Another close match is mirror O-0457 (see v. 1: PL. 30), with lozenges and birds set against a fine background of diagonal patterns that resemble a close-up view of woven fabric. These similarities

may result from the artisan pressing a stiffened fabric directly into the mold to create the background design, as in mirror O-0460 (see v. 1: PL. 56; and Scott, this volume).

Han Period

Because of the great number of Han textiles and mirrors in the Cotsen collections, as well as a chronological issue discussed below, I treat this period here under two separate topical headings.³⁴ While the items categorized under these two groups overlap in function and means of production, they are visually distinct. One type of design features repetitions of a single motif that protects the owner, while the second illustrates more complex narratives or set pieces involving anthropomorphic figures, animals, and cosmological symbols.

Protective Monster Masks

This first group comprises textiles T-1821 and T-2051 and mirrors O-0200 and O-0421 (see v. 1: PLS. 13–14, 15). This group is a chronological hybrid, with the mirrors dating to late Warring States, whereas the textiles are of Han date. The Cotsen Collection examples suggest that this design appeared on mirrors before textiles. This remains uncertain, given the small amount of silk preserved from before the time of Han Wudi, but no examples currently exist, to my knowledge, to challenge this sequence. That makes this group unique among those isolated for analysis.

T-1821 (FIG. 3) is a striking piece of warp-patterned compound-weave silk from the Western Han period (206 BCE–8 CE). Its design features repeated images of fierce monster faces that resemble the *taotie* masks on Shang and Zhou dynasty ritual bronzes.³⁵ Such masks appeared on other types of object as well, such as door-knockers and carved stone reliefs. The masks on the Cotsen textile are separated from prancing dragons by cloud arabesques that frame the scenes—an extremely common motif in late Warring States, Qin, and Han art that also appears on items discussed below. The cloud arabesques symbolize *qi* 氣, pneuma or breath. Warring States thinkers assumed that *qi* is the vital energy that inhabits, animates, and propels everything in the cosmos. Presumably, the masks and the dragons are intended to protect the owner, while the *qi* represents his essence connecting to that of the universe.

Archaeologically provenanced and securely dated textiles featuring the same cloud arabesques have been found at five locations: Tomb 2 at Yinwan, Donghai (Jiangsu) 江蘇東海尹灣,



FIGURE 3

FIGURE 3:
Silk textile fragment,
Western Han dynasty (T-1821).

dated to the second to first century BCE; Lop Nor (Xinjiang) 新疆羅布淖爾, dated to the first to third century CE; Niya, dated to the first to third century CE;³⁶ Tomb 2 outside Loulan, dated to the same approximate period;³⁷ and Mogao Cave 17, Dunhuang (Gansu) 甘肅敦煌莫高窟, dated to the fifth to sixth century CE.³⁸

A comparable pair of *taotie* masks with a similar protective function appears on the Warring States-period mirrors O-0200 and O-0421 (see v. 1: PLS. 13–14, 15). Here, rather than being repeated horizontally, the monster faces are placed back-to-back, their upper jaws almost biting the rim of the mirror. The creature on the textile, in contrast to the standard form of the *taotie* mask, has a lower as well as an upper jaw. This motif is sometimes identified as the head of the war god Chiyou 蚩尤; he is also seen in Eastern Han stone engravings.³⁹ Perhaps the Han rendering of Chiyou was influenced by the *taotie* design on Warring States bronzes; such reinterpretation and appropriation of images is common in Chinese art.

Protective Monster Masks: Animals,

Anthropomorphic Figures, and Charts of the Cosmos

Under this heading I place textiles T-1188 (FIG. 4), T-1189 (FIG. 5), T-1190, T-0145a–b (FIG. 6), T-1482, T-1831, T-1214 (FIG. 7), and T-1215 a–d (FIG. 8), all dating to the Western Han dynasty, together with T-1112, T-0237, T-2712, T-0171 (FIG. 9), T-0196 (FIG. 10), and T-1744, dating to the Eastern Han period.

Han mirrors showing animals and anthropomorphic figures that might be humans or deities include O-0278, O-0186,⁴⁰ O-0460, O-0246, O-0226, O-0349, O-0133, O-0843, O-0233, and O-0744 (see v. 1: PLS. 46–49, 51–54, 55–56, 68–69, 70, 72, 73–74, 75, 76–77, 78). Cosmological designs appear on O-0779, O-0883, and O-0856 (see v. 1: PLS. 59, 62, 63).

During the Han period, the surface of the mirror is either divided into concentric rings, as in the case of O-0278, O-0779, O-0856, and O-0246 (see v. 1: PLS. 46–49, 59, 63, 69), or forms a single decorative zone, as in the case of the others in this large set. Several show the cloud arabesques, especially in their outermost rim, that also figure in Han textiles. The cloud arabesques appear, for example, in O-0856, O-0246, O-0133, and O-0843 (see v. 1: PLS. 63, 69, 73–74, 75). Several also bear inscriptions, including O-0856, O-0399a, O-0775a, O-0246, O-0226, O-0877, O-0349, O-0133, O-0843, O-0233, and O-0744 (see v. 1: PLS. 63, 65, 66, 69, 70, 71, 72, 73–74, 75, 76–77, 78).

The dramatic image of a high-crowned figure, perhaps a Taoist immortal, wearing a striped or feathered cape, seated and holding what may be an elixir mushroom (*lingzhi* 靈芝) or a bow, appears on a silk textile fragment embellished with chain-stitch embroidery that dates to the Western Han period (T-1188; FIG. 4). A companion piece, T-1189, also dating to the Western Han and also featuring chain-stitch embroidery, depicts a large bearded man wearing robes and a lofty triple crown (FIG. 5). Above him float cloud scrolls and four disks representing stars or perhaps a specific constellation. T-0145a–b, two small panels, also datable to the Western Han and also fashioned of silk decorated with chain-stitch embroidery, show a stunning tiger and dragon against a cloud-scroll background (FIG. 6). These pieces reveal the curvilinear design possibilities added to silk textiles by embroidery. (The bronze mirror craftsman, in comparison, faced a lesser challenge in creating curving lines; all he had to do was carve the desired shape into the mold.) All four textiles clearly show immortals and directional animals, and they seem to allude to Taoist beliefs, such as the importance of celestial constellations and the circulation of vital breath, that formed part of the broader decorative vocabulary of the period and also dominated contemporary mirror designs and inscriptions.

Four inscribed textile fragments in the Cotsen Collection that feature cloud arabesques, mythical animals, and, in at least two cases, winged immortals may date to the Western Han. T-1214 (FIG. 7) and T-1215a–d (FIG. 8) stand out among them for their well-preserved colors and extraordinarily lively designs. T-1214 (FIG. 7) shows a tiny feathered and skirted transcendent striding along the clouds, arms outstretched, facing and perhaps preparing to mount a dragon.⁴¹ The inscription in part reads *zi sun chang, le wei yang* 子孫昌樂未央, “May your sons and grandsons prosper; may you have pleasure without end.” T-1215b (FIG. 8) shows a winged immortal sitting on what may be a cloud or a mountain peak, holding a curving plant that might be an elixir mushroom. A crane, favored mount of the Taoist transcendent, stands next to him. A single character, perhaps *fu* 服, “to ingest” or *hun* 昏, “confused,” clearly a fragment of a longer phrase, lies by his feet.

The cloud arabesques on T-1215c frame leaping, winged mythical animals and the four characters *da chang si qiang* 大昌四羌. Comparing this fragment to Han mirror inscriptions, we reject the unlikely translation “Greatly profit the four *qiang*

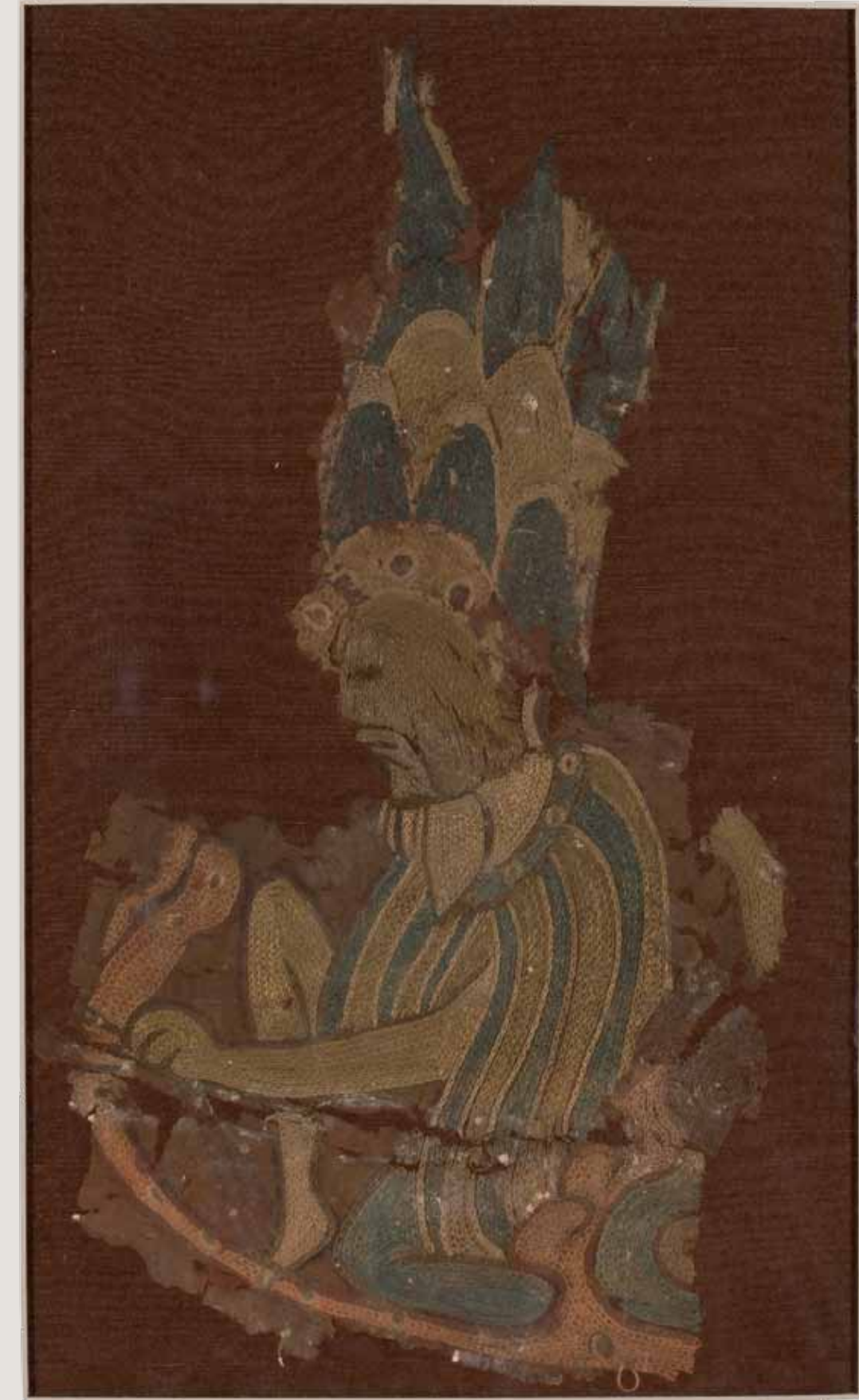


FIGURE 4:
Silk textile fragment with
chain-stitch embroidery,
Western Han dynasty (T-1188).

FIGURE 4



FIGURE 5

FIGURE 5:
Silk textile fragment with
chain-stitch embroidery,
Western Han dynasty (T-1189).



FIGURE 6

FIGURE 6:
Silk textile panels decorated
with chain-stitch embroidery,
Western Han dynasty (T-0145a-b).



FIGURE 7

FIGURE 7:
Silk garment fragment,
Western Han dynasty (T-1214).



FIGURE 8

FIGURE 8:
Garment fragments, Western
Han dynasty (T-1215 a-d).

peoples” that would mean giving comfort to enemy tribes of the northwest that the Han Chinese fought constantly. Instead, we interpret the four characters as the end of one phrase fragment followed by the beginning of another. Supplying the elisions, this gives us: “(The country) is greatly prospering; the four *qiang* peoples (have been soundly defeated).” The characters in T-1215a that delight in national security and heavenly peace, dispersed among winged creatures and more scrolling clouds, have already been translated above.

Textile T-0171 (FIG. 9), an Eastern Han silk textile fragment of a warp-faced compound weave, shows repeated images of deer, birds, and a mounted horse within a *qi* or cloud-scroll frame, together with vertical repetitions of the Chinese character *ming* 明, “bright,” a word that appears in numerous mirror inscriptions. Another Eastern Han silk fragment of a warp-patterned compound weave, T-0196 (FIG. 10), depicts confronted birds above a quatrefoil outlined by *qi* arabesques and bears the ubiquitous inscription mentioned above: *le weiyang* [樂]未央, “(May you have happiness) without end.” Taoists use the phrase “happiness (or pleasure) without end” to invoke the bliss of the transcendents, ideal and perfected beings who no longer suffer or die.

Several mirrors in the Cotsen Collection share design elements, iconography, and inscriptions with these textile fragments. The entire decorative surface of the extraordinary mirror O-0186 is filled with human figures, forming narrative scenes (see v. 1: PLS. 51–54; see Hanmo Zhang, this volume). The craftsman, in what seems to be the only surviving example of this technique, used chain-stitch embroidery and paint on silk to draw his figures, and then adhered the silk to the surface of the bronze mirror. Here we have silk and bronze in the closest proximity imaginable.

Mirror O-0246 (see v. 1: PLS. 68–69), an inscribed icon mirror dating to the Eastern Han, is one of the treasures of the collection. It shows disks representing celestial bodies located in each of the four directions, along with Taoist deities wearing crowns and capes—probably Xi Wangmu 西王母, the Queen Mother of the West, and Dong Wanggong 东王公, the King Worthy of the East—separated on one side by a carriage pulled by horses, and on the other by ten horses. The outer ring is filled with cloud arabesques. A ring inside the one with the swirling clouds contains an inscription containing the words “pleasure without end,” the same characters woven into T-0196 (FIG. 10), T-1214 (FIG. 7), and T-0246. The full inscription on the mirror expresses wishes for order in the state, timely harvests,

longevity for one’s parents, heavenly strength, and descendants, all of which were central concerns of the prayers inscribed on contemporary mirrors bearing Taoist iconography. Mirror inscriptions, often longer than those on textiles, allow us to flesh out the fuller implications of the textile inscriptions, which, due to technical difficulties, are on average much shorter.

Mirror O-0233 (see v. 1: PLS. 76–77), an inscribed mirror of the Eastern Han or later, shows hollowed-out disks interspersed with mythical animals and anthropomorphic figures seated on mountain thrones. These Taoist deities wear crowns and capes and sprout wings. The outer ring, as in the mirror described above, features cloud scrolls. The inscription refers to five legendary monarchs adopted as celestial deities by Han and later Taoists, and asks them for protection, longevity, and blessings for the family of the owner.

The tiger and dragon appear frequently in both textile and mirror decoration as potent cosmological symbols, associated with the west and east, respectively. The pair may be split, and combined with other figures, as in a mirror that shows the tiger together with the Queen Mother of the West, the King Father of the East, and a carriage drawn by a team of horses (see Tseng, this volume).⁴² They serve as opposite ends of the throne of the Queen Mother of the West, seen more clearly in Han clay tiles or stone carvings, but recognizable in O-0349 (see v. 1: PL. 72), representing her complete perfection that embraces and governs both *yin* and *yang*.⁴³ They are often featured as members of the animals of the four directions (in the inscription on mirror O-0349, and depicted on O-0832, O-0774, and O-0193; see v. 1: PLS. 72, 80, 81, 87).⁴⁴ One notable design, seen on mirror O-0877 (see v. 1: PL. 71), shows the pair confronting and interlocked, representing the cosmic forces of *yin* and *yang* in the act of creating the universe. This example has a brief inscription where others show human male genitalia.⁴⁵ Later bronze mirrors depict them as parts of the conventional set of twelve animals of the Chinese zodiac (on mirrors O-0774 [in the outside ring], O-0363, and O-0232; see v. 1: PLS. 81, 82–83, 84, all dating to the Sui–Tang period.). The paired dragon and tiger appear in many other media of the Han period, such as clay tomb tiles, painted tomb murals, stone carvings, and lacquer paintings.

While many of the textile fragments in the Cotsen Collection allude in their designs or inscriptions to cosmological ideas, none can be said to be a cosmological chart pure and simple.



FIGURE 9

FIGURE 9:
Silk textile fragment,
Eastern Han dynasty (T-0171).



FIGURE 10

FIGURE 10:
Silk textile fragment,
Eastern Han (T-0196).

Allusions include the celestial disks and *qi* or cloud arabesques of the Cotsen Collection textiles described above. In the case of the mirrors, many suggest the form and meaning of the cosmos while depicting narratives or set pieces; others clearly depict cosmic charts. The interplay between round and square shapes so prominent in the design of many Han mirrors can be interpreted as showing the relation between the round heavens and square earth. And the raised round disks on many mirrors probably represent stars or other celestial bodies. See mirrors O-0278, O-0201, O-0313, O-0179, O-0883, O-0856, O-0246, and O-0226 (v. 1: PLS. 46–49, 57, 58, 60, 62, 63, 69, 70).

One cosmic design, well attested elsewhere but represented by only a single mirror in the Cotsen Collection, O-0779 (v. 1: PL. 59), is dominated by constellations. As we have seen, a constellation or perhaps individual stars figure as a portion of the design in T-1189 (FIG. 5).

Another composition that represents the structure of the universe, long considered one of the most typical and desired patterns of Han mirrors, is the pattern known in English as “the TLV,” after design elements resembling those letters. Mirrors showing the TLV pattern include O-0883 and O-0856 (see v. 1: PLS. 62, 63). Mirror O-0883 combines the TLV with grass or wheat-sheaf motifs and linked arcs.

Mirror O-0856 (see v. 1: PL. 63), a finely cast specimen, features a more complex composition with several cosmological references. The overall design represents the round vault of heaven arching over the square earth. A quatrefoil around the central boss, perhaps with directional significance comparable to a compass rose, anchors the center of the mirror, surrounded by a square frame. Outside the square are eight stellar disks with both directional and celestial meanings. Some animals of the four directions, such as the dark warrior of the north, along with others, appear in outline in the central zone, the next one outward. Their curvilinear shapes contrast with the right-angled design units, resembling textile patterns, of the cosmological TLV elements that surround them. An inscription forming a ring around the main zone mentions the blessed life of the Taoist immortals who, like those depicted in T-1188 (FIG. 4), T-1189 (FIG. 5), T-1214 (FIG. 7), and T-1215 (FIG. 8) described above, are “unfamiliar with old age” (*buzhi lao* 不知老). Surrounding the whole is the expected outer band with curving cloud or *qi* arabesques.

Northern Dynasties (386–581)

Textiles in the Cotsen Collection that belong to this group are T-1841 (FIG. 11), T-2052, T-2539 (FIG. 12), and T-0952 (FIG. 13), all dating to the Northern Wei (386–534 CE), and T-1743a–b (FIG. 14 shows 1743b) from the Northern Qi (550–577 CE).⁴⁶ Few mirrors from this era, in the Cotsen Collection or elsewhere, resemble these textiles; comparable designs on mirrors appear during the following Sui–Tang period. Textiles woven under the Northern Dynasties share only a few general features with roughly contemporary bronze mirrors. For example, both may depict anthropomorphic figures, presumably deities, together with animals, as seen on T-1743b (FIG. 14) and mirrors O-0349, O-0133, O-0843, O-0233, and O-0744 (see v. 1: PLS. 72, 73–74, 75, 76–77, 78). Moreover, the arrangement of these figures in vertical registers in T-1743b can be compared with that on mirror O-0349 (see v. 1: PL. 72).

T-1841, a piece of warp-faced, compound-weave silk from the Northern Wei dynasty, shows addorsed birds holding plants in their beaks, their heads turned back to face one another, an image of the Tree of Life, prevalent in contemporaneous Indian and Persian art, and the Chinese character *wang* 王, “king” (FIG. 11).⁴⁷ This character appears in many textile designs and mirror inscriptions. For instance, mirror O-0744 in the Cotsen Collection (see v. 1: PL. 78) bears an inscription that mentions the Celestial King (Tianwang 天王), a high Taoist deity.

Textile T-2539, a Northern Wei–period warp-faced compound twill, shows striking figures of rams with large curling horns, decorated with pearl-sewn sashes (FIG. 12).⁴⁸ Similarly, textile T-0952, a silk samite piece said to have been found in modern Qinghai province, attributed to Sasanian Persia, and radiocarbon-dated to 1602 BP ± 55 (338–596 CE), shows gorgeous pairs of addorsed winged cattle and confronted winged horses in registers, ornamented with sashes (FIG. 13).

Two pieces of warp-patterned, compound-weave silk from the Northern Qi dynasty, T-1743a–b (FIG. 14: 1743b) show scenes of anthropomorphic figures and animals divided into registers. We can decipher men dressed in foreign clothing such as the figures wearing tight tops, pants, and pointed caps in the fourth vertical line of the design. Also depicted are mythological figures, one pair identified by comparison with Han and later stone carvings and murals as the brother-sister/husband-wife creator couple Fuxi 伏羲 and Nüwa 女媧. Using the same comparative



FIGURE 11

FIGURE 11:
Silk textile fragments, Northern
Wei dynasty (T-1841a-b).



FIGURE 12

FIGURE 12:
Silk textile fragments, Northern
Wei dynasty (T-2539a-d)



FIGURE 13

FIGURE 13:
Silk textile fragment,
Northern Wei dynasty (T-0952).



FIGURE 14

FIGURE 14:
Silk textile fragment,
Northern Qi dynasty (T-1743b).



FIGURE 15



FIGURE 16

FIGURE 15:
Silk textile fragment,
Tang dynasty (T-2050).

FIGURE 16:
Silk textile fragment,
Tang dynasty (T-2729a).

technique, we can recognize another figure as the legendary Archer Yi 后羿 taking a Parthian shot at a mulberry tree.⁴⁹ Archer Yi presumably aims his arrow at nine of the ten suns (not depicted on the textile) that, according to Chinese mythology, ascended the mulberry tree at the eastern end of the earth at the same time, putting the earth and all life forms in fiery peril.⁵⁰

While rough commonalities exist between these two textile fragments and contemporary mirrors such as O-0349 (see v. 1: PL. 72) that also show mythical figures in registers, we simply cannot argue for close similarities between mirrors and textiles during the Period of Division. One must wait for the following Tang dynasty to see bronze mirrors with depictions of foreigners, roundels, and heraldic animals. The fact that certain motifs appeared on textiles well before they showed up on mirrors demonstrates the primacy of textile design and its influence on mirrors. Given the common artistic vocabulary shared across many craft industries during the period under discussion, however, we should keep in mind that products in another medium or media may have influenced both. While so many textiles may have been excavated along the Silk Roads simply because climatic conditions favored their survival, the large number of such textiles and their similarities to later Chinese mirror designs suggests the importance of contact between the Chinese and other groups of people along the Silk Road for inspiring innovation.

Sui and Tang

Tang-dynasty textiles in the Cotsen Collection include T-2050 (FIG. 15), T-2729a–c (FIG. 16 shows T-2729a), and T-2971 (FIG. 17).⁵¹ Another closely related piece, T-1739, dates to the eleventh century CE, during the Liao dynasty (926–1125).

I divide comparable mirrors into the following four groups. One group shows animals (confronted, addorsed, or solitary), including mirrors O-0363, O-0857, O-0193, O-0231, O-0792, O-0308, O-0234, O-0752, and O-0255 (see v. 1: 83, 85, 87, 88, 90, 91, 95, 116, 117). A second group, represented by a single example in the Cotsen Collection, mirror O-0649 (see v. 1: PLS. 105–106), shows foreigners. A third group reads as floral roundels, such as O-0865 and O-0879 (see v. 1: PLS. 108, 109). The fourth and final group depicts vines, leaves, grape clusters, and often animals. These mirrors include O-0231, O-0426, O-0792, O-0308, O-0647, O-0234, O-0742, O-0753, O-0874, and O-0134 (see v. 1: PLS. 88, 89, 90, 91, 92–93, 94–95, 96, 97, 99, 100).

During the Tang dynasty, textile and mirror designs once again fall into close alignment.⁵² One of the most striking features of Tang textiles is the prominence of roundels, sometimes surrounded by pearls, containing designs that include flowers and heraldic animals. This design element comes into China along the Silk Road from Sasanian Persia. It appears in other media as well, such as painting, ceramics, woodwork, and other genres of metalwork.⁵³ The Cotsen Collection contains a fine piece of silk samite, T-2050, showing the repeated motif of a deer with large antlers and tasseled neck decorations, one to each large, pearl-surrounded roundel (FIG. 15).⁵⁴ Across the roundels, the deer are confronted, and smaller pearl-surrounded roundels join the larger ones. Between the roundels, we see what may be a vase of flowers or the Tree of Life.⁵⁵ Another beautiful example of silk samite in the Cotsen Collection, T-2729a, shows joined hexagons enclosing pearl-surrounded roundels that contain pairs of confronted lions or phoenixes under vases, along with floral elements (FIG. 16).⁵⁶ T-2971, a piece of silk polychrome brocade, depicts large, intricately detailed floral roundels (FIG. 17).⁵⁷

The round bronze mirror, of course, can itself be read as a roundel. The petal-rimmed or lobed shapes of many Tang mirrors especially encourage such a reading. The Cotsen Collection has a lobed mirror, O-0649 (v. 1: PLS. 105–106), inlaid with mother-of-pearl, amber, and turquoise, which features a foreign man performing a twirling dance on a mat in a garden setting in front of a small pavilion.⁵⁸ Three musicians to his left play traditional Chinese instruments, and three figures of Chinese officials seated or standing to his right watch more or less intently. The robe of each figure is decorated with an individual, repeated design.

Two other mirrors in the Cotsen Collection, O-0312 and O-0418 (v. 1: PLS. 103, 104), one lobed and inlaid with mother-of-pearl, the other round and inlaid with turquoise and amber in addition to mother-of-pearl, bear floral patterns resembling those seen in textile floral roundels as well as roundels in other media (see Horlyck, this volume, “Mirrors Inlaid with Mother-of-Pearl in the Cotsen Collection”).⁵⁹

Under the influence of works of metalcraft from Persia and other points to the west, Chinese bronze mirror craftsmen of the Tang dynasty experimented with new techniques as well as designs. Mirror O-0865 (see v. 1: PL. 108), for instance, is embellished with gilded-copper granulation and inlaid with glass, turquoise, and pearls in a floral roundel formation. This mirror



FIGURE 17

FIGURE 17:
Silk textile fragment,
Tang dynasty (T-2971).

shows the transfer of foreign metallurgical techniques as well as foreign pictorial motifs. Another floral medallion mirror, O-0879 (see v. 1: PL. 109), features a rare cut-out design in silver of interlaced birds and vines embedded into a strongly contrasting, lacquered black background (see Scott, this volume).⁶⁰

Elements such as single heraldic animals, confronted or addorsed animals, floral designs, and foreigners found within textile roundels are also seen on the Tang bronze mirrors. On mirror O-0752 (see v. 1: PL. 116), the lobed design field is filled by a gorgeous strutting phoenix reminiscent in pose of the pairs of phoenixes in the silk samite piece T-2927a (FIG. 16), described above.⁶¹ On another lobed mirror, O-0255 (see v. 1: PL. 117), a fierce dragon disports himself, filling the entire central space like the dragons in textile roundels.⁶² Several Tang mirrors in the Cotsen Collection feature confronted or addorsed animals in the central decorative zone. For example, confronted canine-feline hybrids face off around the center of mirror O-0363 (see v. 1: PL. 83).

Many Tang mirrors, such as mirror O-0234 (see v. 1: PL. 95), are decorated with mythical beasts and grapevines, one of the most prominent of the designs imported from the west.⁶³ For Chinese collectors, this is the most characteristic and treasured of Tang mirror types. Yet even the combination of beasts with grapes and grapevines seems to have appeared first on textiles dating to the Northern Dynasties. For instance, an embroidered silk textile fragment that depicts grapes, grapevines, and beasts, was excavated from Tomb 177 at Astana, dated to the Eastern Jin dynasty (317–420 CE).⁶⁴

CONCLUSIONS

THE COTSEN TEXTILE COLLECTION and the Lloyd Cotsen Study Collection of Chinese Bronze Mirrors document several remarkable commonalities and influences between the design and production of bronze mirrors and silk textiles. There were periods of close correspondence between the two media, such as the Warring States and the Han and Tang dynasties. Many decorative motifs, such as recognizable images of phoenixes and dragons, seem to arise around the same time in both media. Other crafts such as lacquer painting, stone mural carving, and jade carving also influenced the introduction of new elements into both mirrors and textiles. Indeed, they take part in the interplay of borrowing and adaptation between various artistic media that is one of the underlying grand themes of Chinese art history. Nevertheless, the evidence of the two Cotsen collections, compared with other related materials, suggests an especially close relationship, with silk textiles often leading the way in introducing new decorative schemes into Chinese bronze mirrors. Mirror artisans were influenced first by the diagonal shapes as well as specific designs associated with weaving, followed rather promptly by curvilinear elements made possible by embroidery, and then followed again centuries later by motifs such as foreigners, roundels, heraldic beasts, and grapevines that had arrived via the Silk Road. Clearly, contact between the Chinese and other groups of peoples on their southern and northwestern borders stimulated design and technological innovation during this long period.

I want to conclude by emphasizing the preliminary nature of my findings, and to offer them in the hopes of opening up further and more broadly based intermedia comparative work. I also hope that, as the mirrors and textiles in the Cotsen collections are made accessible to the wider Sinological community thanks to the generosity of Lloyd Cotsen, new studies will further bring out their value as a rich source of Chinese material culture.

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NOTES

1 Some of the material in this introductory section draws upon my essay in v. 1 of the present work in order to clarify my argument about the close parallels between mirrors and silk textiles.

2 On material objects as cultural templates, see Knapp 1999; Bray 1997; Rawson 1999; Powers 2006.

3 On modular production and its effects on Chinese history, and indeed on the world history of industry, see Ledderose 2000.

4 On tomb assemblages of the Zhou dynasty (ca. 1046–256 BCE), their contents, and their changes over time, see Falkenhausen 2006.

5 Anneliese Bulling (1960) first pointed out the possibility that textiles influenced designs on bronze mirrors. Recent archaeological discoveries and subsequent scholarship (Mackenzie 1999) have produced an abundance of evidence to support her theory. On conditions of production during the Han dynasty, see Barbieri-Low 2007.

6 A similar mirror bag made of wool decorated with silk and mirror was excavated from Tomb 5 in Cemetery 1 at Niya, Minfeng (Xinjiang) 新疆民豐尼雅, dated to the second to third century CE (Mair [ed.] 2010: pls. 86, 87).

7 On conditions and governance of production during the Han period, see Barbieri-Low 2007: chap. 3.

8 For the present study, I have compared the mirrors in v. 1 with items recorded in, among others, the following compilations: Anhui Sheng Wenwu Kaogu Yanjiusuo and Liu’an Shi Wenwuju 2008; Chou 2000; Five Thousand Years of Chinese Art Editorial Committee 1993; Guo Yuhai 1996; Guoli Gugong Bowuyuan 1971; Guoli Lishi Bowuguan 2001; He Lin 2008; Higuchi 1979b; Huang Qishan 2004; Kong Xiangxing and Liu Yiman 1984; 1992; Nakano 1994; Shandong Sheng Wenwu Kaogu Yanjiusuo 2009; Shanghai Bowuguan 2005; Wang Shilun 2006; and Zhang Daolai and Wei Chuanlai (ed.) 2006.

9 Lacquer art is beyond the scope of this paper, but its influence on bronze and textile design would be a fruitful subject for future research (Mackenzie 1999; Thote 2008). The briefest perusal of Chen Zhenyu 1996 shows close relationships among the three media.

10 On bronze craftsmen adapting textile patterns for use on mirrors, see Mackenzie 1999. On Warring States Chu, a southern kingdom with powerful cultural influences on the Central Plains during the Warring States through the Han periods that are sometimes considered comparable to the influences of the cultures of Central Asia during the Han through Tang eras, see Lawton 1991; Cook and Major 1999.

11 Zhao Feng 1999: pls. 1.09, 1.10.

12 For a fuller iteration of this argument, see Cahill in v. 1: 43, 49–50.

13 On the relation between ornament, meaning, and identity, see Powers 2006; Cahill in v. 1: 13.

14 On correlative cosmology and the arts, see Loewe 1979; Rawson 2000. On the early development of the Taoist religion, see Bokenkamp 1997; Hendrischke 2007. On cosmological, Taoist, and literati elements in mirror decoration, see Cahill 1986; 1994; 2005; Little (ed.) 2000; see also Cahill in v. 1: 31, 36, 38–39, 41, 58–61. On the cult of the literati in literature and the arts, see Mather 1976; Spiro 1990.

15 Double-tier mirrors with legible if mythical animals include O-0424, O-0800, O-0295, O-0360, and O-0648 (see v. 1: PLS. 4–10).

16 All of these developments and motifs are discussed in greater detail below. For an enumeration of examples, see the final section of this chapter.

17 No Han mirror in the Cotsen Collection contains a complete set of the beasts of the four directions. Examples from the late Northern and Southern Dynasties through the Tang periods are enumerated below. For Han mirrors with animals of the four directions, see, for example, Nakano 1994: 117, 139, 141, 145, 147, 149.

18 The Cotsen Textile Collection contains no pre-Tang roundels. For Tang textile roundels, see T-2050 (FIG. 15), T- 2729a (FIG. 16), and T-1971 (FIG. 17).

19 A depiction of foreigners on a Northern Qi (550–577) textile appears on T-1743 (FIG. 14).

20 Some mirrors of the Northern and Southern Dynasties already incorporated motifs of Eurasian derivation, such as the Western Zodiac, into their designs. My argument centers on designs shared between bronzes and textiles.

21 On mirror inscriptions, see Karlgren 1934; Umehara 1943b; Cahill 1986.

22 The only reported instance of a textile firmly dated to the Western Han period with characters woven into their designs comes from Tomb 1 at Mawangdui, Changsha (Human), where a textile bearing the two-character inscription *qianjin* 千金 (“A thousand pieces of gold”) was excavated (Zhongguo Kexueyuan Kaogu Yanjiusuo 1973, v. 1: 51–52; v. 2: PLS. 104–106). T-1215a–d and T-1482 have been radiocarbon-dated to the Western Han. More testing must be done to increase the evidence base for this discussion.

23 Ma Chengyuan et al. 1998: pl. 44.

24 All the transcriptions and translations of the characters on the textiles in the Cotsen Collection are, at this stage, provisional.

25 For illustrations of the first example, see “*Tianshan gudao dongxi feng*”

Bianjiwei *yuanhui* 2002: 140–141. For the others, see Ma Chengyuan et al. 1998: pls. 32, 39, 34, 41, 43, 52. For a comprehensive treatment of inscriptions embroidered on early Chinese silk textiles, see Falkenhausen 2000.

26 On influences from the Silk Road on Tang culture, see Xiang Da 1957; Schafer 1963. On the influence of the south on Tang culture, see Schafer 1967.

27 Such roundels occur, for example, on a dress worn by the elegant lady to the right in a silk painting of the ninth or tenth century in the Liaoning Provincial Museum entitled “Court Ladies and Flowers,” and attributed to Zhou Fang 周昉 (eighth century) (illustrated in Cahill 1999: pl. 74); in a painted screen excavated from Tomb 230 at Astana, dated to ca. 702 CE (see Ma Chengyuan et al. 1998: pl. 88); and on the belt of a wooden figurine of a Tang lady excavated from Tomb 206 at Astana (Ma Chengyuan et al. 1998: pl. 100).

28 For background on the material culture of the Warring States period, see Li Xueqin 1985; Falkenhausen 2006.

29 This mirror is the only example in the Cotsen Collection featuring a design that consists entirely of the fine spirals with no contrasting dominant design.

30 Some of the mirrors included in this enumeration have been shown to be forgeries (see Scott, this volume); they are, however, identical in style to known genuine pieces. Indeed, in some cases, the molds for a forged piece were obtained by impression from a genuine mirror. I therefore consider some questionable mirrors in the present discussion.

31 Zhao Feng 1999: pls. 1.02, 1.07.

32 Zhao Feng 1999: pls. 1.03, 1.05.

33 Zhao Feng 1999: pl. 1.03.

34 For background on the Han dynasty, see Twitchett and Loewe (ed.) 1986; Lewis 2007.

35 On the meaning of the *taotie*, see Chang 1986; Kesner 1991.

36 Zhao Feng 1999: pls. 2.01, 2.03, 2.04

37 Ma Chengyuan et al. 1998: pl. 42

38 Zhao Feng 1999: pl. 2.07.

39 For an example, see Liu et al. 2005: 415, fig. 2. For related information, see Thompson 2001; Yuan Ke 1957; Birrell 1993; 2006.

40 The dating of the first two mirrors listed here remains problematic. They could date to the late Warring States or early Han period (see Hanmo Zhang, this volume, and Scott, this volume).

41 The striding immortal appears in other contemporary media, notably lacquer painting.

42 Nakano 1994: 151.

43 The dragon-tiger throne is more clearly visible in stone carvings and clay tomb tiles of the Han dynasty. See, for example, the famous image of the Queen Mother of the West in a rubbing from a clay tomb tile from Sichuan of the first to second century CE, in Cahill 1993: fig. 6.

44 The last three examples date respectively to the Northern and Southern Dynasties–Sui period and to the Sui–Tang period. For Han examples, see Nakano 1994: 117, 139, 141, 145, 147, 149.

45 On the dragon and tiger mating to create the universe, see Wang Chenyi 2002.

46 For background to the Northern and Southern Dynasties, see Lewis 2009a.

47 This piece may be compared to a piece of silk brocade mentioned above, dated to the Northern Dynasties and inscribed with the characters *hu wang* 胡王, “foreign king,” that features a roundel containing the doubled image

of a foreign figure together with a camel, excavated from Tomb 14 at Astana (Ma Chengyuan et al. 1998: pl. 44). The Tree of Life motif appears in another sixth-century CE textile from Astana (Zhao Feng 1999: pl. 3.01).

48 Pairs of confronted rams with similar large curling horns appear in a silk face-cover dated to the Northern Dynasties and excavated from Tomb 170, at Astana (Ma Chengyuan et al. 1998: pl. 42). A pair of confronted rams inside a pearl-bordered roundel graces a silk fragment dated to the sixth century, excavated at Reshui, Dulan (Qinghai) 青海都蘭熱水 (Zhao Feng 1999: pl. 3.05).

49 Textiles with images of foreigners dated to the late sixth century CE have been excavated at Reshui (Zhao Feng 1999: pl. 3.03) and Astana (Zhao Feng 1999: pl. 3.04; Ma Chengyuan et al. 1998: pl. 44).

50 For myths concerning these figures, see Yuan Ke 1957; Birrell 1993, 2006. Fuxi and Nüwa continue to appear on textiles found at Silk Road sites during the Tang dynasty, e.g., in numerous large painted banners excavated at Astana (two appear in Ma Chengyuan et al. 1998: pls. 90–91: one, on silk, from Tomb 40; the other, on hemp, from Tomb 121).

51 For background on the Tang dynasty, see Twitchett and Fairbank (ed.) 1979; Lewis 2009b.

52 For textiles and metalwork of the Tang era, we have a rich treasure trove of comparative material in the Shōsōin Treasure House in Nara, Japan (Shōsōin Office 1965). This material can be securely dated to the period before 756 CE, when the treasury collection was closed. It can be fruitfully compared to the finds from Silk Road sites in Xinjiang, such as Astana. The Tang capital cities, of course, lay between these two places.

53 Roundels may be seen, for example, on the lid of a painted wooden box in the Shōsōin (Shōsōin Office 1965: pl. 7) and on a small wooden jar excavated from Tomb 230 at Astana, dated to the Tang dynasty (Ma Chengyuan et al. 1998: pl. 123).

54 This item may be compared to a silk textile decorated with prancing deer with antlers and tassels inside a pearl roundel, unearthed from Tomb 332 at Astana (Ma Chengyuan et al. 1998: pl. 46).

55 The Shōsōin has a textile adomed with confronted deer under a tree, produced by dyeing the fabric (Shōsōin Office 1965: pl. 75).

56 A textile with a comparable design of four identical confronted horses carrying riders aiming Parthian shots at attacking felines inside a pearl-bordered roundel is in the Shōsōin (Shōsōin Office 1965: pl. 100). A large, printed rendition of a mounted hunter executing the Parthian shot, this one without a roundel, appears on a silk fragment dated to the Tang and excavated from Tomb 191 at Astana (Ma Chengyuan et al. 1998: pl. 50).

57 The Shōsōin has both wool and silk textiles with floral medallions (Shōsōin Office 1965; pls. 77, 97– 98). A Tang silk textile with a repeated pattern of pearl-surrounded floral roundels was excavated from Tomb 332 at Astana (Ma Chengyuan et al. 1998: pl. 45).

58 On foreigners in Tang ceramics, see Mahler 1959. A painting on the plectrum guard of a lute in the Shōsōin illustrates a dancing foreigner moving in a way similar to the figure on the Cotsen mirror and also accompanied by musicians, in this case all poised on the back of an elephant (Shōsōin Office 1965: pl. 5). Foreign dancers executing a twirling dance are seen in many of the Tang murals in the Mogao cave temples at Dunhuang, especially in scenes depicting the Western Paradise of Amitābha Buddha. Foreign dancers and foreign dances were also a frequent theme of Tang poetry (Schafer 1963: 50–59).

59 A maplewood lute inlaid with mother-of-pearl and amber in a comparable pattern is in the Shōsōin (Shōsōin Office 1965: pl. 5). The Shōsōin also has another type of lute with floral medallions inlaid with mother-of-pearl and amber (Shōsōin Office 1965: pl. 8); a spectacular lobed

mirror inlaid with mother-of-pearl, lapis lazuli, amber, and some other blue-green stone to create a floral roundel, complete with round pearl boundaries setting off the central zone (Shōsōin Office 1965: pl. 59); and a wooden octagonal box covered with tortoise shell and inlaid with mother-of-pearl and amber that shows a pearl-bordered floral roundel in its central zone (Shōsōin Office 1965: pl. 66).

60 The Shōsōin has a similar lobed mirror with cut-out gold and silver attached, depicting a floral roundel surrounded by phoenixes, cranes, and plant motifs (Shōsōin Office 1965: pl. 58).

61 A spectacular silk textile in the Shōsōin is decorated with the repeated motif of a roundel with floral tendrils enclosing a heraldic phoenix that strikes a pose similar to that on the Cotsen mirror (Shōsōin Office 1965: pl. 101).

62 Compare the paired dragons in a textile roundel in the Shōsōin (Shōsōin Office 1965: pl. 103). Compare also the confronted dragons inside a pearl-surrounded roundel seen on a Tang dynasty silk face-cover excavated from Tomb 221 at Astana (Ma Chengyuan et al. 1998: pl. 53).

63 On this subject, see Thompson 1968; Schafer 1963: 41–145.

64 Ma Chengyuan et al. 1998: pl. 59.

Charlotte Horlyck

Mirrors Inlaid with Mother-of-Pearl in the Cotsen Collection

IN EAST ASIA, THE SEVENTH AND EIGHTH CENTURIES were a time of great affluence and splendor. The Tang empire (618–907 CE) formed the core of the region, and its much-celebrated cultural achievements and commercial successes were framed by an international backdrop of diplomatic, artistic, and mercantile exchanges. During the first century and a half of the Tang, a succession of strong rulers ensured economic prosperity, and Chang'an (present-day Xi'an), the capital of Tang, grew into one of the largest cities in the world. It became host to thousands of foreign merchants, diplomats, and monks, among many others, the majority of whom arrived overland by the Silk Routes. Such contacts exerted considerable influence on all spheres of society, in particular on arts and culture. This golden age was by no means limited to the Chinese mainland but signaled a time of widespread prosperity and cultural highpoints throughout East Asia. The rise of the Tang coincided with the unification in 668 CE of the Korean peninsula by Silla rulers, under whose patronage art production greatly developed and matured. Japan also evolved during this time, largely due to the formation of a centralized polity under Yamato rulers. The Yamato court revolved around arts, poetry, and music, giving rise to a highly aestheticized elite culture that shaped aristocratic life for many centuries.

This chapter discusses the manufacture of inlaid Tang bronze mirrors and places it within the cosmopolitan spirit of eighth-century East Asia, emphasizing the role of mirrors in Tang diplomatic and trade relations. The focus is on three mirrors inlaid with mother-of-pearl in the Cotsen Collection (O-0312, O-0418, O-0649; see v. 1: PLS. 103–106). Their motifs and materials relate

to a wider tradition that includes mirrors found in mainland China as well as in Japan and Korea. In highlighting the similarities and differences among these pieces, I undertake to search for their shared origin and to determine their date of manufacture.

As the preceding chapters amply document, mirrors had been produced in East Asia for millennia before the Tang period. Nevertheless, the Tang saw significant new departures in the manufacture of mirrors, reflected in their changing social roles, increased numbers, and elaborate iconography. Prior to the rise of the Tang, the designs seen on most mirrors were linked to cosmological and religious concepts, but a rising interest in secular imagery led to a complete transformation of mirror iconography in the seventh and eighth centuries. The fascination with, and desire for, luxury objects motivated many international exchanges at this time. Well-made mirrors had long been considered fit for use as diplomatic gifts and high-status trade items, and they continued to be so employed under the Tang. Compared with the older decorative patterns with their Chinese culture-bound didactic and spiritual associations, the new motifs, easily readable as evocations of high social status and marital felicity, may well have held even greater appeal to non-Tang consumers.¹ Within the Tang empire as well, texts and archaeological contexts indicate that bronze mirrors formed part of the large body of luxurious artifacts used in the everyday lives of the elite.² The secularization of mirror decoration called for new and inventive decorative schemes, and artisans began to employ novel ways of manipulating the mirrors' standard format and materials. Tang China stood at the center of trading networks that extended along the

Silk Routes from Persia and India in the West across to Korea and Japan in the East, leading to the increased availability of many kinds of exotic goods. The influx of non-Chinese motifs and materials, and their incorporation into pre-established artistic traditions, gave rise to the manufacture of several new types of mirrors, including some that incorporated precious materials. These types include silver- and gold-backed mirrors decorated with repoussé designs worked onto a sheet of metal that was fixed onto the mirror back (compare, e.g., mirrors O-0308, O-0426, O-0647 and O-0792; see v. 1: PLS. 89–93). However, it is mirrors covered with lacquer and inlaid with precious materials that encapsulate most eloquently the changing perceptions of mirrors and the resulting effects on mirror manufacture and mirror use.

THE INLAID MIRRORS IN THE COTSEN COLLECTION

MIRRORS INLAID WITH MOTHER-OF-PEARL are extremely rare, and they seem to have attracted little research attention. The three pieces preserved in the Cotsen Collection contribute significantly to our understanding of their manufacture. The largest of the three (O-0649; see v. 1: PLS. 105–106) carries a pictorial scene inlaid with mother-of-pearl and amber set against a background speckled with turquoise stones. In a garden backed by a small pavilion, a group of noblemen are being entertained by musicians and a male dancer. His unusual trumpet-shaped hat and bearded face point toward a non-Chinese identity,³ situating the motif within a long-standing Chinese tradition of portraying foreign entertainers in works of art. The second mirror (O-0312; see v. 1: PL. 103) has a floral design inlaid with mother-of-pearl. In contrast to later periods, when smaller cuts of shell were typically used, here the motif is created with only a few pieces.⁴ In an effort to add further detail, each piece of shell has been delicately incised. The empty spaces in the center of the two blossoms are likely to have been inlaid with amber, which was frequently used in conjunction with mother-of-pearl, as exemplified on the other two Cotsen mirrors. The third mirror (O-0418; see v. 1: PL. 104) features an intricate floral pattern of mother-of-pearl and amber. Encircling the knob are seven circular petals, each incised to create the illusion of volume and movement. Arranged around them are five blossoms inlaid with amber and surrounded by delicately cut and incised petals. The background is speckled with turquoise. Originally, the turquoise stones would have been partially covered by lacquer,

making them flush with the main design, but loss of the lacquer has exposed them, resulting in a rough and uneven surface.

TANG INLAID MIRRORS

HISTORICAL RECORDS LEAVE LITTLE DOUBT that inlaid mirrors were exclusive objects reserved for the upper echelons of society within the borders of Tang China and beyond. With their precious and glittering cutouts placed against a dark background, inlaid lacquer objects in general, and mirrors with inlaid lacquer ornamentation in particular, were quintessential luxury articles. Several accounts refer to inlaid lacquer wares being commissioned by Tang emperors, in particular Xuanzong 玄宗 (r. 712–756), since they were seen to be unusual and fanciful objects.⁵ Yet, their period of manufacture seems to have been relatively brief, and this may account for the small number of extant inlaid mirrors: their production costs were so extravagant that Emperor Suzong 肅宗 (r. 756–762) ordered official workshops to stop making them when the country had been laid to ruins as a result of the An Lushan 安祿山 rebellion of the mid-eighth century. A first sumptuary decree against the excesses of luxury was issued in 757 CE but appears to have been largely unobserved, leading Emperor Daizong 代宗 (r. 762–779) to issue a second decree in 772 CE, which appears to have been more effective and seems to have brought an end to the manufacture of inlaid mirrors.⁶ Previously, when An Lushan (703–757 CE) was in favor at the court, Emperor Suzong's predecessor Xuanzong 玄宗 (r. 712–756) had given him several inlaid artifacts, including a lidded box decorated with gold and precious stones.⁷ It seems that Xuanzong also presented inlaid objects to foreign emissaries to the Tang court. As discussed below, several inlaid mirrors were in the collection of Shōmu Tennō 聖武天皇 (r. 724–749) of Nara Japan (710–794 CE);⁸ they must have come into his possession through diplomatic gift exchange.

The production of inlaid mirrors was closely influenced by Tang cosmopolitanism. It was also connected to the revival of lacquer manufacture under the Tang, in particular to innovations that led to the production of carved and inlaid lacquerware objects. Such objects answered the elite demand for secular luxury articles made of precious and semiprecious metals. Both lacquer manufacture and metalworking had ancient roots



FIGURE 2



FIGURE 1



FIGURE 3

FIGURE 1: Bronze mirror inlaid with silver and gold foil in the Freer Gallery of Art and Arthur M. Sackler Gallery (F1944.8). Height 15.9 cm; width 15.9 cm. Tang dynasty.

FIGURE 2: Bronze mirror inlaid with mother-of-pearl in the National Museum of China. Excavated in 1955 from a grave at Luoyang (Henan). Diameter 23.9 cm. Tang dynasty.

FIGURE 3: Bronze mirror inlaid with mother-of-pearl excavated in 1955 from a grave at Xi'an (Shaanxi). Diameter 10.3 cm. Tang dynasty. From Shaanxi Sheng Wenwu Guanliweiyuanhui 1959: 136.

in China, but they were transformed by Tang artisans, who found inspiration in the exotic materials and designs that became available and were popular at this time. This is reflected in mirror designs of this period. The most common type of inlaid mirrors was decorated with cutouts of thin sheets of gold and silver articulated by finely chased lines; a splendid example of this is Cotsen mirror O-0879 (see v. 1: PL. 109), which shows an intricate pattern of floral vines with flying birds, cut out from a single sheet of silver. Such designs are typical for the period, and they carry auspicious connotations linked to the secular use of the objects. An even finer example is preserved at the Freer Gallery of Art in Washington (FIG. 1). Decorated with four standing phoenixes shaped in silver foil, the surrounding floral scenery is set in gold, while butterflies and birds in both gold and silver add a sense of movement to the otherwise static iconography. Such mirrors present huge problems of conservation because the lacquer was never well secured to the metal base; it often cracked with time, and in burial the inlaid foil pieces frequently came loose.

Mirrors inlaid with mother-of-pearl are even rarer than those decorated with metal foil: fewer than twenty mirrors are held in collections in East Asia, Europe, and America. Their scarcity can be attributed to their fragility as well as to the high value of the foreign materials that made up their decoration. Mother-of-pearl was imported from Southeast Asia, whereas amber was acquired from several different sources, including Iran, Burma, and the South China Sea.⁹ Most mirrors with such inlay carry symmetrically arranged patterns of flowers and birds. Much rarer are those with complete scenes, comparable to the previously discussed mirror O-0649. Two examples were excavated in China in 1955, one from an eighth-century tomb at Luoyang in Henan province 河南洛陽, the other from Tomb 419 at Guojiatan in the eastern suburbs of Xi'an (Shaanxi) 陕西西安郭家滩, which is dated 798 CE (FIGS. 2, 3). Like mirror O-0649, they are decorated with outdoor scenes. The Luoyang specimen, which is the largest, features two gentlemen in a garden setting surrounded by birds, including parrots and a crane. Behind them is a large flowering tree. Holding a cup in one hand, the man on the right is listening intently to the musician on the left playing a four-stringed lute known as a *ruanxian* 阮咸.¹⁰ The smaller mirror from Guojiatan is less well preserved, but it also appears to carry a decoration of men being entertained in a garden setting while surrounded by animals, flowers and trees.¹¹ Both mirrors may originally have been further

embellished with amber and turquoise in a style similar to that of mirror O-0649, which, with its well-preserved inlay, is an exceptional example of this type of inlaid mirrors.

Mirrors with pictorial motifs are representative of the new decorative vocabulary that appeared on mirrors in the mid- to late Tang period. While some examples reflect Taoist and Confucian interests, such as mirror O-0782 (see v. 1: PL. 114), which depicts the meeting of Confucius and Rong Qiqi 榮啟期, others are secular in nature. Scenes of ladies and gentlemen strolling in a garden amid flowers and birds were not uncommon as decorative motifs on paintings and other art objects. That they were popular among the elite is reflected in finds from a number of Tang royal tombs located near Xi'an. A version of this motif, for example, was engraved on a stone sarcophagus placed in the early eighth-century tomb of Princess Yongtai 永泰 (d. 701 CE).¹² Inlaid mirrors with secular scenes can therefore be said to fit firmly within eighth-century Tang pictorial traditions, and they confirm the ways in which mirror makers drew from an increasingly wide pool of new artistic themes.

Other secular references on inlaid mirrors are seen in the iconography of mirrors O-0312 and O-0418. They convey the appeal of floral and bird patterns, which began to appear on bronze mirrors in the late seventh century. As elite consumption patterns changed with increasing material prosperity under the Tang regime, mirrors came to be decorated with motifs typically used on other kinds of luxury articles produced at the time, in particular silver and gold artifacts.¹³ The desirability of the new high-quality mirrors was further enhanced by their auspicious iconography, which included phoenixes, ducks, peonies, and lotus flowers. It is not coincidental that the majority of inlaid mirrors carry such patterns, as their precious materials would have served to increase the propitious power of the designs. This power, in turn, added to the attraction of the mirrors.

Extremely few inlaid examples of this kind are of known provenance. One of them is a large eight-lobed mirror with a design of four pairs of birds among floral scrolls inlaid with mother-of-pearl unearthed in 1988 from a Tang grave in the eastern suburbs of Xi'an. It was found alongside a rich array of other grave goods, including several pottery figurines in typical eighth-century style, suggesting a similar date for the mirror.¹⁴ The lacquered coating of the mirror has largely disappeared, leaving the inlaid pieces in high relief. More recently, a slightly larger and better-preserved



FIGURE 4



FIGURE 5



FIGURE 6



FIGURE 6A

FIGURE 4:
Bronze mirror inlaid with mother-of-pearl and precious stones in the Hakutsuru Fine Art Museum. Diameter 24.6 cm. Tang dynasty.

FIGURE 5:
Bronze mirror inlaid with mother-of-pearl and amber in the British Museum (1936, 1118.265). Diameter 8.9 cm. Tang dynasty. © The Trustees of the British Museum.

FIGURE 6:
Bronze mirror inlaid with mother-of-pearl, amber, and precious stones, in the Shōsōin North Section (no. 42-13). Diameter 27.4 cm. Tang dynasty.

FIGURE 6A:
Detail of Shōsōin mirror.

mirror was excavated from another Tang grave in Xi'an; it features a nearly identical motif cut in mother-of-pearl, and the lacquered background is speckled with blue, green, and brown stones.¹⁵ A similar motif is found on an eight-lobed mirror of unknown provenance now in the Hakutsuru Fine Art Museum in Kobe, Japan (FIG. 4).¹⁶ The close resemblance of the designs suggests that these three specimens were made in the same workshop and that they should all be dated to the eighth century.

Comparable unprovenanced mirrors are held in a few museums and private collections. A small eight-lobed mirror was acquired by the British collector George Eumorfopoulos in 1926 and was sold to the British Museum ten years later (FIG. 5).¹⁷ The lacquered background has largely disappeared, leaving the design in high relief. On either side of the knob sit two plump birds with outstretched wings. Surrounding them are petals and large blossoms, some of which are inlaid with amber. Typically for the period, each piece of shell is relatively large, thick, and incised with decorative details.

THE INLAID MIRRORS IN THE SHŌSŌIN

INLAID MIRRORS ARE ALSO FOUND IN JAPAN AND KOREA, attesting to the wide span of influence of Tang mirror production. As mentioned, Tang mirrors were imported to Japan during the Nara period. Eight specimens have been stored within the Shōsōin repository in Nara, constituting the largest assemblage of inlaid mirrors with floral motifs anywhere in the world today. Housed in the North Section, they are listed in the *Kokka chinpō chō* 國家珍寶帳 (Record of rare treasures of the nation), which is dated to the twenty-first day of the sixth month in the eighth year of the Tempyō-Shōhō 天平勝寶 reign period (756 CE), indicating that they must have been made before that date. The nearly seven hundred artifacts recorded in the handscroll are believed to be mainly personal objects used by Shōmu Tennō during his lifetime.¹⁸ No information is available on the origins of the mirrors, leading to speculations as to whether they are imports or made locally. Earlier writings by Japanese scholars have been noncommittal on this point, but recent research has tended to place them within eighth-century Tang traditions.¹⁹ In view of the stylistically comparable examples excavated from Tang tombs discussed above, it is indeed highly likely that the Shōsōin pieces

were made in Tang China; they probably entered the Japanese Imperial collection as gifts presented to the Tennō by emissaries returning from the Tang court.²⁰

Bigger and considerably heavier than any other inlaid mother-of-pearl mirror now preserved, the eight Shōsōin mirrors are products of craftsmanship at its highest level, probably exercised within official workshops, as would be expected for artifacts destined for a foreign court. Their materials and core compositions have much in common with the three pieces in the Cotsen Collection.²¹ An eight-lobed mirror (FIG. 6) bears a close resemblance to mirror O-0418. The different components of its motif are symmetrically arranged in decorative bands, separated from one another by a row of leaf-shaped disks. As on mirror O-0418, the flowers and some of the leaves are decorated with amber. Four pairs of long-tailed birds can be seen near the outer rim, while in the central band are four pairs of plump-looking birds, possibly turtledoves. The background is profusely covered with turquoise and other precious stones. Unique to the Shōsōin mirrors is the black color applied to the lines incised into the mother-of-pearl (FIG. 6A). This served to accentuate the incisions and has resulted in a superior-looking design. That mirrors inlaid with mother-of-pearl were regarded as special artifacts is reflected in the motif of one of the largest and most elaborately inlaid mirrors stored in the North Section (no. 70-5). An intricate pattern set in mother-of-pearl and amber is composed of flowers, paired doves, two Chinese lions, and two one-horned rhinoceroses. Rarely seen on Tang mirrors, these animals, together with the precious inlaid materials, serve to enhance the mirror's exotic and propitious nature. Given the superb quality of both design and technique, the Shōsōin mirrors set the standard for all other inlaid mirrors. If they represent the output of official workshops, mirrors such as the three specimens in the Cotsen Collection may have been produced in private workshops.

THE INLAID MIRRORS ON THE KOREAN PENINSULA

THE INFLUENCE OF IMPORTED TANG MIRRORS on local mirror makers is particularly evident in Korea, where their artistic schemes proved lastingly popular. During Unified Silla (668–935 CE) mirrors served as ritual artifacts, but they also took on a secular role, as evidenced by archaeological findings and written sources.²²



FIGURE 7

One eighth-century mother-of-pearl-inlaid bronze mirror has been found in the southwestern part of the Korean peninsula, allegedly in South Kyōngsang province 慶尙南道; its exact provenance is unknown (FIG. 7).²³ Its place of manufacture has been the subject of much scholarly discussion. Ch'oe Chae-sōk has argued that it is of local manufacture, based on information that a government office for lacquered crafts was established during Unified Silla and that precious materials of various kinds were imported and traded by Silla merchants. He has further suggested that all the Shōsōin mother-of-pearl mirrors are of Korean manufacture, citing several entries in the *Shoku Nihongi* 続日本紀 (Chronicles of Japan), which make mention of bronze mirrors being imported from the Korean peninsula to Japan.²⁴ It should be noted, however, that they all refer to much earlier encounters between the two regions, bringing into question Ch'oe's argument.²⁵ Dietrich Seckel and Helmut Brinker also explore the possibility of a Shōsōin mirror being made and imported from the Korean peninsula. A cloisonné-backed silver mirror housed in the South Section of the repository bears some resemblance in technique and style to a small number of Unified Silla artifacts, including an enameled plaque discovered at a ruined temple site

at Chōngamni near P'yōngyang. Yet, the authors stress that such evidence does not make for a convincing argument in favor of a Korean provenance of the Shōsōin mirror.²⁶ With its elaborately inlaid floral design set in lacquer against a speckled background of small turquoise stones, there is no denying that the Kyōngsang mirror carries a strong resemblance to those in the Japanese repository. Above and below the knob are large flowers amid petals and smaller florets, and the remainder of the surface is decorated with birds and leaping lions. The pieces of shell are incised and further set with amber. However, in view of stylistically and technically comparable mother-of-pearl mirrors excavated on the Chinese mainland, and due to the absence of other similar finds from the Korean peninsula, it is unlikely that the Kyōngsang mirror is of Korean manufacture. It appears to be one of the many objects imported to the peninsula from the mainland, and it should therefore be dated to eighth-century Tang China.

Tang mirrors inlaid with gold and silver foil also entered the peninsula. An unprovenanced mirror found on Korean soil and now held in the National Museum of Korea is one such piece (FIG. 8). The inspiration local artisans drew from them is reflected in the design on another unprovenanced mirror in the National Museum of Korea (FIG. 9). Its large, alternating gold and silver rosettes are surrounded by several small figures, inlaid in silver, of a leaping fox and five birds, some with floral sprays in their beaks. The detailed and delicate execution of the figures contrasts sharply with the unfussy rosettes, and the design appears to be a hybrid of local and Tang stylistic formulations. The mirror has no Chinese precedents, nor are there any similar examples in the Shōsōin. Recent scientific analysis of the component ratio in the metal shows that it is similar to that of other bronze mirrors from Unified Silla sites in the Korean peninsula. Furthermore, the components of the lacquer are comparable to Unified Silla lacquered wares excavated from the royal pond of Anapchi 雁鴨池 in the Silla capital of Kyōngju 慶州 (North Kyōngsang province 慶尙北道).²⁷ This evidence strongly suggests that, in contrast to the two aforementioned mirrors, this piece was made locally, and it exemplifies the increasing confidence of Korean craftsmen in their reworking of Chinese techniques and designs.

FIGURE 7:
Bronze mirror inlaid with mother-of-pearl, amber, and turquoise in the Leeum, Samsung Museum of Art. Allegedly from South Kyōngsang province. Diameter 18.6 cm. Tang dynasty.



FIGURE 8

FIGURE 8:
Bronze mirror inlaid with gold and silver foil, in the National Museum of Korea. Diameter 18.2 cm. Tang dynasty.



FIGURE 9

FIGURE 9:
Bronze mirror inlaid with gold
and silver foil in the National
Museum of Korea. Diameter
15.3 cm. Unified Silla period.

NOTES

1 See Cahill in v. 1: 51–52.

2 Schulten 2000: 130.

3 See Cahill, v. 1: 56–57.

4 Rawson 1992: 175.

5 See Sima Guang 司馬光, *Zizhi tongjian* 資治通鑑 (SKQS ed.), 216: 17a. The *Qingyi lu* 清異錄 (Records of the Extraordinary) tells the story of Emperor Gaozu who gave his wife Feng 馮 an inlaid mirror from the imperial collection as a sign that he would soon make her Empress. The date of this story is unclear, but it does suggest that mirrors were seen to be the most special among all inlaid artifacts. Tao Zongyi 陶宗儀, *Qingyi lu*, (SKQS ed.), 120b: 22a–b.

6 The *Xin Tangshu* 新唐書 (New history of Tang) records that in the second year of the Zhide 至德 reign (757 CE), inlaid precious stones, *pingtuo* 平脫, gilding, and embroidery were banned (*Xin Tangshu*, 6: 159). In 772 CE, another law was issued banning the use of *pingtuo* and inlaid objects when conducting sacrifices (Song Minqiu 宋敏求, *Tang daoshao ling ji* 唐大詔令集 (SKQS ed.), 80: 16a). See also Guoli Gugong Bowuyuan 1986: 39; Watt and Ford 1991: 20–21.

7 Schafer 1963: 252; Watt and Ford 1991: 21.

8 The term “Tennō” was used in the seventh and eighth centuries to refer to the head of the lineage that ruled Japan at this time (Piggot 1997).

9 Schafer 1963: 245, 247–248.

10 The Luoyang mirror was excavated from a tomb that contained the remains of a man interred in 759 CE, and of his wife, who was buried later in 779 (Henan Sheng Wenhua ju Wenwu Gongzuodui Di'erdui 1956: 41–44; Leidy 2006: 12–13).

11 Shaanxi Sheng Wenwu Guanliweiyuanhui 1959: 136.

12 Schulten 2000: 121.

13 For a discussion of links between the iconography on mirrors and motifs on silver and gold artifacts, see Schulten 2000: 123–131.

14 Wang Jiugang and Xi'an Shi Wenwu Yuanlin Guanliju 1992: 66–70. The mirror measures 22.5 cm in diameter. Some pieces of the mother-of-pearl design have been lost.

15 Naruse 2009: 57–58. The mirror measures 24.3 cm in diameter.

16 Naruse 2009: 57–58.

17 Umehara Sueji (1931: 95–96) states that it is similar to three mirrors held in private collections in Japan, but provides neither details of those mirrors nor their exact whereabouts.

18 Abe 1988: 138–139.

19 Naruse 2009: 20.

20 Hayashi 1975: 60; Naruse 2009: 20.

21 Details of the inlaid mirrors in the North Section are illustrated in Naruse 2009: 1–46. For further discussion of bronze mirrors in the Shōsōin collection, see also Nakano 1978: 1–41.

22 Horlyck 2006: 82–95.

23 Kungnip Minsok Pangmulgwan 1989: 56, 221.

24 Ch'oe Chae-sök 1996: 338–359.

25 Aston 1956: 168, 185, 250. The events that Ch'oe refers to are set in the first century BCE, and the first and third centuries CE.

26 Seckel and Brinker 1970: 332–334.

27 An Kyōng-suk et al. 2008: 137–138.

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The Hanxiang Mirror and Religious Politics in Tang and Song China

IN OCTOBER 1005, WU JI 吳及, an obscure figure during the reign of Emperor Zhenzong 真宗 (r. 997–1022) of the Song dynasty (960–1279), presented to the emperor an antique mirror, accompanied by a memorial entitled “Memorial for presenting the imaged mirror cast by Heavenly Master Sima” (*Jin Sima tianshi zhu Hanxiang jian biao* 進司馬天師鑄含象鑑表).¹ The memorial is preserved in the Taoist canon. Its title highlights the potency and alleged genealogy of the heirloom. In his highly formulaic opening statement, the author declares himself undeserving to own such an extraordinary treasure. He states:

臣聞川嶽逢時，猶能顯瑞，草木應運，尚或呈祥，況臣生遇昌期，長居比屋，苟有奇物，合進明庭。臣先收得唐司馬天師為明皇所鑄含象鑑一面，家傳累世，掌祕多年。

I heard that the mountains, rivers, and forests would yield auspicious omens during times of prosperity. I, for one, am fortunate to live in such a time. As an undeserving person of modest means, I should present any rare objects that came to my way to Your Majesty. My ancestors collected a Hanxiang mirror, which was made by Heavenly master Sima [Chengzhen] for Emperor Xuanzong of Tang. It has been an heirloom for generations and guarded with secrecy over many years.

Wu Ji goes on to describe the mirror’s design as a cosmological chart with the spiritual potency to deter evil spirits.

其鑑外圓法天，內方則地配坎離於日月，布雲氣於山川，右則定位於天淵，左則表威於雷電，八卦咸列，四溟克周。包其道於乾坤，震其功於邪魅，故名含象以應至尊。

The round shape of the mirror models after the heavens, while the square inside represents the earth. [The design] matches the Kan and Li trigrams with the sun and moon, with cloud and mist covering the mountains and rivers. On the right it fixes the position in the Heavenly River, and on the left it expresses awe by thunder and lightning; around them, the Eight Trigrams and the Four Seas are concentrically arranged. Thus it embraces their principle (Dao) within Heaven and Earth and focuses their efficacy against the evil forces. Therefore it is called the Hanxiang mirror, and it deserves utmost veneration.

To lend authority to his statement, Wu Ji refers to documentation and illustrations in the Taoist canon. When one checks these sources, one finds that Wu Ji’s text was in fact adapted from an earlier essay on the mirror, attributed to its designer Sima Chengzhen 司馬承禎 (647–735). I will have more to say on that text later.

The memorial alleges that Wu Ji’s mirror was a relic from the court of Emperor Xuanzong 玄宗 (r. 712–756), nearly three centuries old at the time of writing. While the highly symbolic Hanxiang mirror had always deserved the emperor’s attention, its antiquity would only increase its mystical aura by the early eleventh

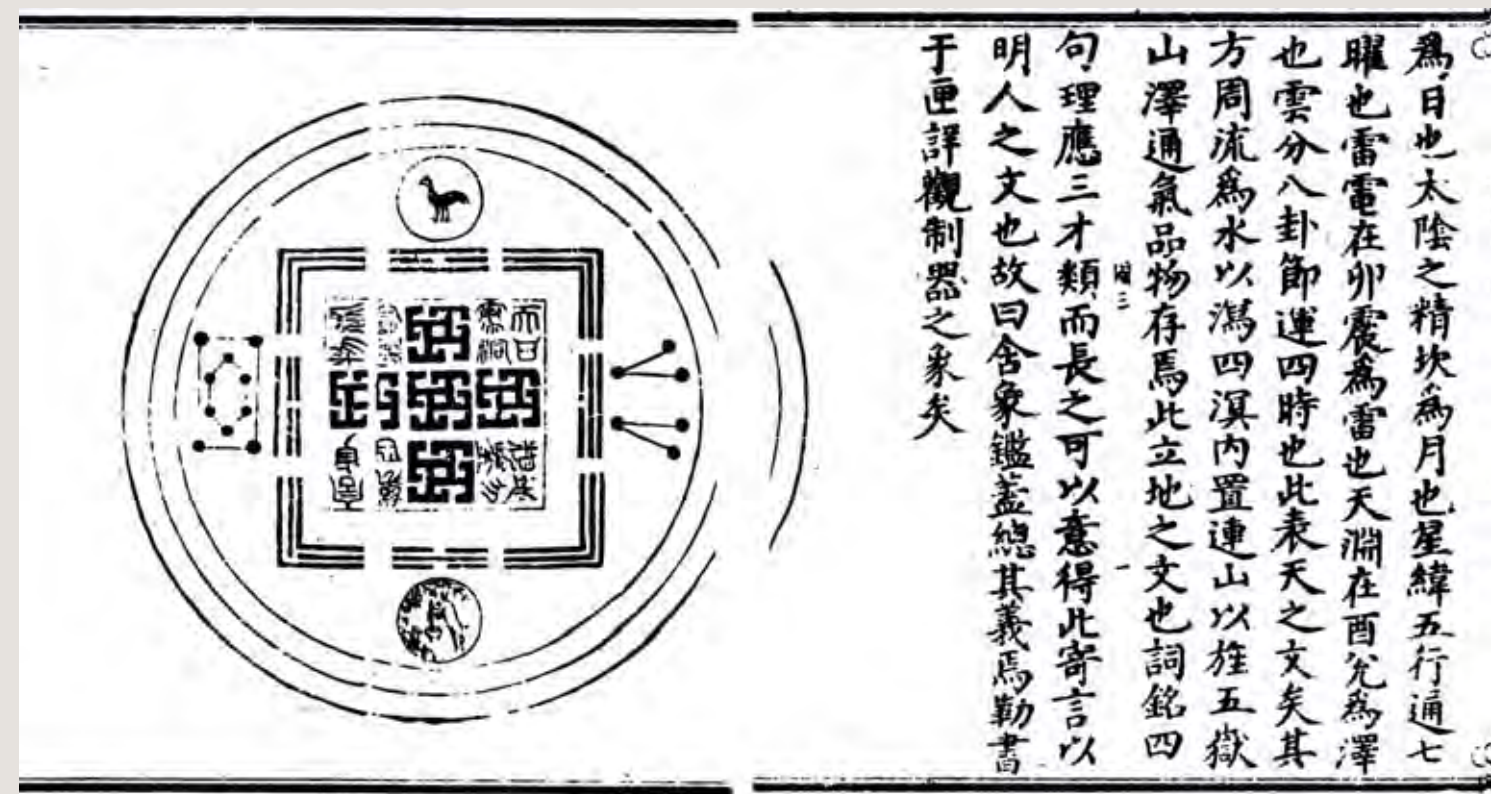
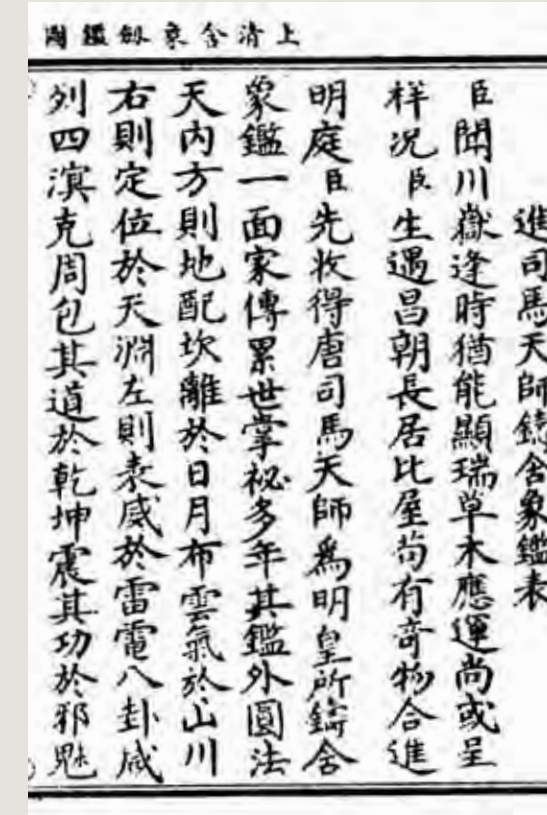
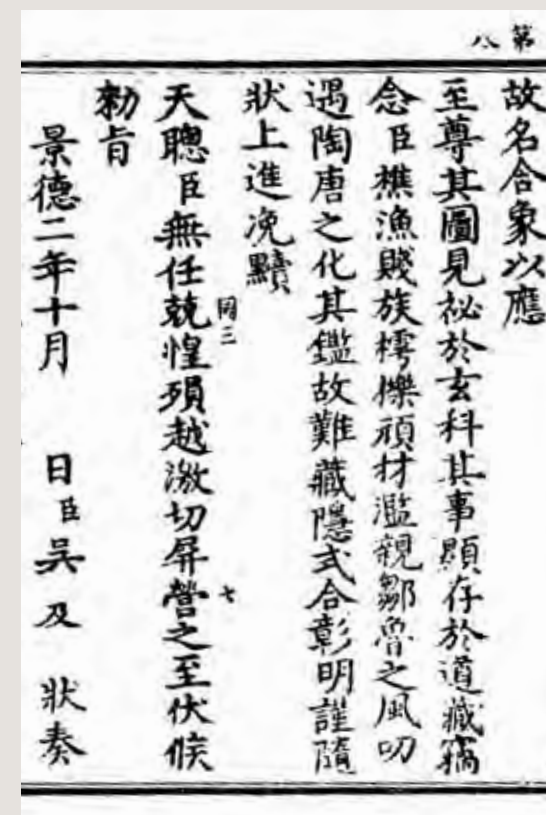


FIGURE 1: (A, B, C). Illustration of the Hanxiang mirror and associated memorial by Wu Ji in the Taoist canon. After *Daozang*, Yiwén edition (1963), v. 196.

FIGURE 1

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century. Actually, however, the features described characterize a fairly well-known type among Tang mirrors. An illustration associated with the description of Wu Ji’s heirloom in the Taoist canon (FIG. 1) displays striking similarities with mirror O-0425 (see v. 1: PL. 110) in the Cotsen Collection. Both feature an identical inscription (transcribed and translated in v. 1: 226) placed within a cosmic diagram that comprises the Five Marchmounts, the Eight Trigrams, the sun, the moon, and two constellations as described by Wu Ji, six stars of Leidian 雷電 (thunder and lightning), and the ten stars of Tianyuan 天淵 (celestial spring) symbolizing the vast celestial ocean in which the earth floats.

The only difference is that the mirror illustrated in the Taoist canon leaves out the water waves and clouds mentioned in Wu Ji’s memorial, indicating some loss of details in transmission. Mirror O-0425 does render these features, thus according even more closely with Wu Ji’s description. It seems likely that the illustration in the Taoist canon copies an actual object similar to mirror O-0425, although, of course, we cannot be certain that the illustration does indeed render the original associated with Sima Chengzhen or the mirror once owned by Wu Ji. Archaeologists have found this type of mirror in two burials in the Luoyang region of central China, which was the major Tang political center and the core region of its circulation; and more unprovenanced pieces are scattered among major art collections worldwide.

In this essay, I take this mirror, and the related image in the Taoist canon, as a point of departure in exploring the intriguing history of representation and persuasion behind them. Wu Ji’s opening statement places the event in the classical genre of auspicious omens, which were deemed to manifest themselves as nature’s response to peace and prosperity under the realm of a just ruler. But why did he make such a claim at this particular time? What defines the politically favorable timing (living in times of prosperity) that compelled the appreciative marchmounts and forests to yield their auspicious omens? What is the incentive for a person of modest background to seize the right opportunity and part with his treasured heirloom? Besides its alleged association with renowned historical figures, what made this mirror a particularly desirable relic for imperial presentation? Can we reveal political tensions and ideological motivations specific to Wu Ji’s time? In order to do so, it is useful to compare the role and meaning of the mirror in Wu Ji’s time to its significance and usage in its original Tang-period context. Embarking on an intriguing journey

toward the anthropology of gift and discourse, I explore the circumstances of the two presentations of the Hanxiang mirror and examine how human agency, religion, history, and politics converged in the social life of this remarkable object.

THE FIRST PRESENTATION AT THE TANG COURT IN THE EARLY EIGHTH CENTURY

IN 729, XUANZONG DECLARED HIS BIRTHDAY on the fifth day of the eighth moon an annual event of national celebration, which became known as *Qianqiujie* 千秋節, the “Thousand Autumns Festival.” Among extravagant festivities, imperial family members, officials, and aristocrats would bring the emperor fine bronze mirrors.² At the same time, awards were granted, gifts exchanged, and eulogies composed. Such presentations constituted elaborate rituals and dynamic realms of social action, which allowed actors to advance their subtle ideological or political agendas. Mirrors of diverse designs claiming to be associated with such festive occasions were produced, imitated, and circulated extensively, which included several well-known types of Tang mirrors, such as the Moon Mirror with Birds and Dragon (O-0743 in the Cotsen Collection; see v. 1: 56, PL. 118).³ Such elaborate exchanges were the stage for the first appearance of our mirror.

Taoist priests were actively involved in these events. Sima Chengzhen, the alleged author of the Hanxiang mirror design, was among the most influential religious figures at the Tang court.⁴ He enjoyed imperial favors during the reigns of Empress Wu Zetian 武則天 (r. 690–705), Emperor Ruizong 睿宗 (r. 684–690 and 710–712), and Emperor Xuanzong. A true renaissance man, Sima contributed to the Golden Age of the Tang through achievements in the arts of music, calligraphy, poetry, and architecture. Among other things, he composed the renowned musical piece *Xuanzhen daoqu* 玄真道曲 (Melody of Mysterious Perfection) for Emperor Xuanzong. He was accomplished in seal-script and clerical-script calligraphy, and he created his own style of calligraphy in which he wrote numerous pieces for imperial commission.⁵ The great poet Li Bo 李白 (701–762) was among the young talents that he inspired, and a surviving poem by Sima in the Tang corpus displays a remarkable poetic quality.⁶ According to documents preserved in the Taoist canon, Sima’s expertise in metallurgy allowed him to design and create potent religious objects for imperial presentation, including swords and bronze

mirrors. The Hanxiang mirror, which is the subject of this paper, is merely one of these.⁷ The royal patron had rewarded his talent with lavish gifts of silk, musical instruments, and imperial calligraphy on numerous occasions.⁸ Upon the master’s death, the emperor personally composed and inscribed the eulogy for the Taoist master, bestowing extraordinarily high praises upon him.⁹

Sima’s religious views are expressed in numerous diagrams, through which he aimed to create a proper spatial order that could be activated through Taoist body techniques. He strongly advocated arranging the living space of Taoist adepts to make it fit for spiritual and physical well-being. As an architectural manifestation of these philosophical concepts, he designed the Yangtai 陽台 sanctuary at Mount Wangwu 王屋山 in present-day Jiyuan, Henan province 河南濟源, and decorated the sanctuary with a monumental mural depicting the mountain’s religious landscape.¹⁰ But Sima’s vision extended far beyond the Yangtai sanctuary and its environs: he had grand schemes for reconfiguring and systematizing the entire Tang empire as a Taoist sacred landscape. As I show below, the mirror was created as a visual representation of this idea—a pedagogical device propagating his vision of the proper cosmological order.

Sima Chengzhen’s memorial concerning the Hanxiang mirror and its cosmic diagram was included as a scripture in the Taoist canon.¹¹ The Shangqing patriarch and Heavenly Master apparently presented the diagrams together with a set of the corresponding objects. Addressed to Emperor Xuanzong, the gift may have been presented at the occasion of the moon festival celebrations when mirrors were brought to the emperor for his birthday. In the memorial, Sima speaks profoundly about the cosmological connotations of the mirror’s design and its spiritual potency.

The power of the mirror came by virtue of the cosmic symbols arranged according to the Technique of the Four Disks (*sigui zhi fa* 四規之法), which enabled it to reveal the real forms of all that was reflected in the symbols. The key phrases of Sima Chengzhen’s memorial are identical with the texts inscribed on known mirrors of the Hanxiang-mirror type. They boast that the mirror has the ability to contain and reflect the world: 天地含象, 日月貞明, 寫規萬物, 洞鑿百靈 “Heaven and earth contain images, the sun and moon perform divinations and shine, (the mirror) outlines and circumscribes the ten thousand things, it penetrates and mirrors the one hundred numina”¹² The inscription on a bronze mirror of a related

type, now in the Cleveland Museum (ex Carter Collection), which combines the design elements of the court mirrors with a phoenix motif and the stylized marchmount and water design from the Hanxiang mirror (FIG. 2), offers even more extensive correspondence to Sima’s memorial.¹³ It reads:

上圓下方	<i>Round above and square below,</i>
象於天地	<i>Imaging heaven and earth,</i>
中列八卦	<i>In the center arrayed the eight trigrams,</i>
備著陰陽	<i>Completely displaying yin and yang,</i>
辰星鎮定	<i>Chronograms and stars are settled and fixed,</i>
日月貞明	<i>Sun and moon auspicious and bright.</i>
周流為水	<i>Around the perimeter flow waters,</i>
以名四瀆	<i>To make the four great waterways.</i>
內置連山	<i>Inside are arranged linked mountains,</i>
以旌五嶽	<i>To make the royal marchmounts.¹⁴</i>

As described in detail by Suzanne Cahill in her discussion of mirror O-0425 (see v. 1: 60), the design of the Hanxiang mirror comprises the essential components of the known universe centered on the Five Marchmounts and associated water bodies.

In contrast to the timid tone of Wu Ji’s memorial, Sima Chengzhen’s statement displays extraordinary confidence. A man of great literary talent, Sima was at ease with his artistic creativity, so much so that the whole memorial reads like a straightforward philosophical discourse, without any deference to the imperial status of its intended reader. The two men seem to have communicated on terms of equality rarely seen between emperors and their subjects in Chinese history; testimonies to this include a farewell poem Xuanzong wrote for Sima Chengzhen, which is imbued with deep admiration.¹⁵

Even more pertinently, the emperor, fascinated by Sima Chengzhen’s gift of the Hanxiang mirror, is said to have composed another poem praising it:¹⁶

寶照含天地	<i>The treasured mirror contains heaven and earth,</i>
神劍合陰陽	<i>The divine sword embraces yin and yang.</i>
日月麗光景	<i>The sun and the moon illuminate light and landscape,</i>
星斗裁文章	<i>The Big Dipper judges the quality of literature.</i>
寫鑿表容質	<i>Reflecting in the mirror one sees his image,</i>
佩服為身防	<i>Wearing on the body one receives the protection.</i>



FIGURE 2

FIGURE 2: Mirror combining the Five Marchmounts and Phoenix designs. Cleveland Museum of Art, Gift of Drs. Thomas and Martha Carter in Honor of Sherman E. Lee, 1995.351.

從茲一賞玩 *From now on the treasured mirror should
be appreciated this way,*
永德保齡長 *Forever benefit from its virtue and enjoy a life
of longevity.*

The style and quality of this piece is consistent with other extant poems by Xuanzong.¹⁷ The first line on the religious significance of the sword and mirror is closely associated with the subject of Sima’s memorial. Together, the inscriptions on actual objects from the period and the correspondences between Sima and Xuanzong offer multifaceted insight into the historical nuances of gift exchange in the Tang court.

Compared with the fluid and evocative design on mirrors of the Five Marchmount type (e.g., mirrors O-0305 and O-0135; see v. 1: PLS. 112, 113), which was probably inspired by a landscape painting or a mural,¹⁸ the design of the Hanxiang mirror is rather formal and diagrammatic. Aesthetic elaboration is sacrificed to a didactic concern with conveying Sima Chengzhen’s message about the cosmological order through symbolic representation. Such simplicity minimizes the risk of miscommunication. Moreover, replacing elaborate representational iconography with abstract symbols can sometimes increase the religious potency of a decorated object. As Cahill has pointed out (see v. 1: 59), the interlocking T-shapes of the marchmount symbols represent the true and spiritually efficacious form of the five mountains.

The popularity of the Hanxiang mirror design is attested by the large quantity of mirrors of this type surviving today, as well as by the existence of related designs such as that of the mirror depicted in FIG. 2, which fuses essential parts of the Hanxiang scheme with other elements seen on contemporaneous mirrors made for elite consumption. As Xuanzong was a devout patron of religious Daoism, his enthusiastic response to the Hanxiang mirror is not unexpected. Objects and ideas of Taoist origin frequently came up at Xuanzong’s court. Catering to the imperial taste, courtiers attempted to please the emperor by presenting auspicious omens and offering ideas about immortality.¹⁹ Many officials in Xuanzong’s court were themselves renowned specialists in alchemy, divination, and astrology.²⁰ But contemporary critics frequently argued that Xuanzong’s indulgence in religious Daoism was undermining the integrity of the imperial order. The official Zhang Jiuling 張九齡 (678–740), for instance, presented an essay entitled “Records of the Thousand-Autumns Bronze

Mirror” (*Qianqiu jinjian lu* 千秋金鑒錄) at the imperial birthday celebration in 736, in which he construed the mirror into a metaphor for the emperor to reflect on the lessons of history.²¹

While Sima Chengzhen’s mirror presentation seems to be in line with the general practice in Xuanzong’s court, the Taoist master’s agenda went well beyond offering the emperor a gift of pleasure. The reciprocal obligation for the exchange was the imperial patronage of a new world-view—Sima Chengzhen was taking the presentation of a specially designed object as an opportunity to advance his religious views to the imperial audience.

The timing of the presentation coincided with an important shift in the religious landscape in the Middle Period of the Chinese society. Following the advice of his Taoist priests, Xuanzong implemented a series of ritual reforms that significantly elevated the influence and status of Taoist deities. The cult of the Nine Palaces, for instance, was added to the state ritual under his reign, each representing a figurative residence of deities in a supernatural realm. Every so-called palace was inhabited by a celestial god, the Noble Gods of the Nine Palaces (*Jiugong guishen* 九宮貴神), which were worshiped with the highest respect. As Victor C. Xiong has observed, “the emperor addressed himself as a vassal in front of the Nine Palace gods.”²² Such reconfiguration of ritual hierarchy created an unprecedented opportunity for negotiating the ritual space between the supernatural and human realms.

A shift in the religious order inevitably has its ramifications on the spatial configuration in which people organize their experience. Right from the beginning of the Chinese empire in the late third century BCE, imperial pilgrimages to the marchmounts, particularly Mount Tai in the east, were closely tied with imperial legitimacy.²³ Any alteration of the status of the marchmounts amounted to a redefinition of the imperial landscape.²⁴ When Xuanzong invited Sima Chengzhen again to the capital in 727, he inquired about the supernatural overlords of the Five Marchmounts. In his response, Sima bluntly denied the legitimacy of these important components of the state cult, reducing these gods into minor folk deities of wilderness areas and frowning upon the blood sacrifices reserved for their worship.²⁵ In actuality, he argued, each marchmount had its own supernatural domain that was inhabited and supervised by a designated Taoist deity, a Perfected One of Supreme Purity (*Shangqing zhenren* 上清真人).²⁶ Therefore, he advocated that the court establish Taoist sanctuaries for the *true* deity at each marchmount, each invested

with the ceremonial protocols, dress code, and an entourage consisting of minor deities. Xuanzong adopted this proposal. The new sanctuaries constructed at the Five Marchmounts were all built according to Sima Chengzhen’s designs and specifications, which in turn were based on his reading of the Taoist canon.²⁷ In them, the mountain deities were venerated with elaborate Taoist ceremonies; the ritual for these had ultimately evolved from the imperial Suburban Ritual (*jiao* 郊) of the Han dynasty.²⁸

Sima Chengzhen’s scheme for the reconfiguration of the religious landscape of Tang China superimposed a Taoist deity over the traditional mountain gods venerated in the state ritual and imperial pilgrimage. His restructuring efforts, however, did not stop at this point. In his “Plan of the Celestial and Terrestrial Palaces and Residences” (*Tiandi gongfu tu* 天地宮府圖), he constructed a Taoist pantheon that placed the Five Marchmounts among the thirty-six lesser grotto heavens, ranked below the ten major grotto heavens. In this hierarchical order, the Five Marchmounts were supervised by the supreme deities of Mount Qingcheng in Sichuan and Mount Lu in Jiangxi—namely, *Qingchengshan zhangren* 青城山丈人 (Master of the Mount Qingcheng) and *Lushan jiutian shizhe* 廬山九天使者 (Envoy of the Nine Heavens at Lushan)—thus shifting the gravity of religious authority to these two Taoist sacred mountains.²⁹ Both Qingcheng and Lu mountains are in locations peripheral to the traditional cultural geography of the Chinese heartland as defined by the Five Marchmounts. This is another important aspect of Sima Chengzhen’s spatial reorientation of the imperial religious landscape.

Sima Chengzhen’s activities took place in the context of successive religious reforms from the early Tang. His effort to establish the Taoist orthodoxy over competing claims to imperial patronage was analogous to the attempt by the imperial court to insert state control over religious establishments. Sima’s construction of Taoist sanctuaries on each marchmount and his promotion of Mounts Qingcheng and Lu over the Five Marchmounts were nothing less than a well-orchestrated attempt to place the state and imperial power under the religious authority of the Taoist “church.”³⁰

Such a major reconfiguration of the religious landscape, if successful, would have had a profound impact on Tang politics. Yet, even though Sima’s talent in combination with the extraordinary privileges bestowed upon him by his imperial patrons

allowed him to achieve part of his goal, his grand scheme did not outlive his time. After Sima’s death, Xuanzong’s political ambitions went awry toward the later part of his reign. The empire fell victim to internal rebellion by the military governor An Lushan 安祿山 (703–757) in 755 CE, taking with it many designs and aspirations of the imperial patron.³¹

The restoration of Tang imperial power saw the government regaining control over the religious cults and their sites. Mountain gods officially sanctioned by later rulers prevailed over the Taoist deities established by Sima. When Du Guangting 杜光庭 (850–933) wrote his “Record of Grotto-heavens, Blessed Places, Ducts, Peaks, and Great Mountains” (*Dongtian fudi yuedu mingshanji* 洞天福地岳渎名山記) during the tenth century, the Five Marchmounts were once again attributed a position superior to that of the Taoist grotto heavens.³⁴

As a master designer of religious paraphernalia, Sima Chengzhen would have been well aware of the Taoist tradition of representing cosmological charts on bronze mirrors. Although such designs were generally going out of fashion by the Tang period, Sima Chengzhen revitalized this tradition in his effort to advance his argument about how the world should be ordered according to the Taoist scriptures. As stated in his memorial to Xuanzong, the Hanxiang mirror was both a fine object to be marveled at and a potent talisman with the power to “outline (create) all the world’s phenomena and reveal all deities and spirits” (see Cahill in v. 1: 60). The gifting of such a multifaceted object presented an opportunity for persuasion. As Franciscus Verellen put it, “Comprehensive and authoritative inventories of the realm’s religious geography were of both symbolic and practical value to sovereigns. Tang imperial ritual required reliable guides to the cosmology of sacred sites, especially grotto-heavens, and to their localization in this world.”³⁵ The pedagogical nature of the Hanxiang mirror provides visual guidance for such sacred geography. In its iconographic representation, the prominence of the Five Marchmounts and the religious powers vested in them were appropriated or harnessed by the Taoist establishment. Presenting the mirror allowed the master to convey this grand scheme visually—all the while catering to the viewing pleasure of His Majesty.

THE SECOND PRESENTATION AT THE NORTHERN SONG COURT IN 1005 CE

IN TIME, the memory of the creation and presentation of mirrors during the Tang period produced a type of rhetoric for both presenter and recipient, which came to form part of the protocols of imperial presentation. It was this body of knowledge that was passed down to figures like the author of the mirror memorial, allowing him to figure out what to present, when to present, and, above all, how to present. By detailing the mirror’s special design attributes, provenance, ritual potency, and rarity, Wu Ji sensitized Emperor Zhenzong to an underlying agenda. The connection with mountains, rivers, and endorsement of the nature, though in a way rather different from Sima’s perspective, nevertheless evolved around the central theme of power and landscape, allowing the historical object to articulate into the new historical episode.

First, we turn to the information about the presenter. The text of Wu Ji’s mirror memorial ends with these humble words:

竊念臣樵漁賤族，樗櫟頑材，濫親鄒魯之風，叨遇陶唐之化，其鑑故難藏隱，式合彰明，謹隨狀上進，晚贖天聰。

I am such an unworthy person, like a poor peasant with the mind of the blockheads, only fortunate enough to be cultured by the teachings of the Confucian classics from the Zou and Lu region and the sages of remote antiquity. I cannot conceal this extraordinary mirror, which deserves to illuminate in broad daylight. I present it with the memorial for Your Majesty so that your heavenly wisdom will not be compromised.

It was signed by a certain Wu Ji in the tenth month during the second year of the Jingde 景德 reign (1004–1007) of Emperor Zhenzong. The format and content of the memorial preserved in the Taoist canon suggests careful rendering of an authentic document addressed to the court. I can detect no signs suggesting deliberate misrepresentation.

When we look for Wu Ji in the textual sources, we find an individual of that name in the *Songshi* 宋史, the Official History of the Song Dynasty; his dates are 1014–1062. Assuming that this was the only Song person of that name, Pauline Koffler argues that

“either the attribution of this memorial [the mirror memorial preserved in the Taoist canon] or the date 1005 is erroneous.”³⁶ But throughout history, in China or elsewhere, it is common for two or more persons, either living in the same period or not, to have identical names. I find this is likely the case here. A comparison of the memorial in the Taoist canon and the memorials included in Wu Ji’s *Songshi* biography suggests that the two authors were probably unrelated.³⁷ First of all, the *Songshi* portrays Wu Ji as a scholar from an affluent family in southern China, an upright official respected for his remonstrations and for his dedication to civil administration and justice. The tone of Wu Ji’s memorials preserved in the *Songshi* is incompatible with the timid flattery in the mirror memorial.

Reading between the lines of that document, we find that the author presents himself as a person without government office who has had very limited experience writing in this genre; this would be consistent with an overall argument that the text represents communication across an extraordinary social boundary. By contrast, the Wu Ji mentioned in the *Songshi*, who earned his *jìnshì* 進士 (presented scholar) degree, the highest in the imperial examination system, at the age of seventeen, would surely have excelled in the art of memorial composition. In short, the author of the memorial in the Taoist canon and the official mentioned in the *Songshi* are separated by a wide gap in social standing, literary style, and political philosophy.

While eminent Song Confucians and statesmen were known to have engaged in acts of prognostication, such as writing prefaces and commentaries to Taoist works or composing Taoist liturgical memorials for emperors, the profile of official Wu Ji suggests that he would at least do a better job than the presenter of the mirror if he chose to do so. The unsympathetic attitude of Emperor Renzong 仁宗 (r. 1022–1063) toward the concept of heavenly omens, however, provides little incentive for such action from a remonstrations official. The circumstantial evidence suggest that we are likely dealing with another, otherwise unattested person named Wu Ji living in Zhenzhong’s period. Neither the attribution of this memorial nor the date 1005 can be proven erroneous on the basis of the *Songshi* account of another historical figure by the same name living during a later time. Below I argue that the presentation, as well as the rhetoric associated with it, is consistent with the social milieu during the time of Zhenzong, to whom the mirror memorial is said to have been presented in 1005.

Other than what the memorial itself tells us, we know nothing about this Wu Ji as an individual, and we are in no position to speculate on his motivation for presenting his heirloom mirror to the emperor. We can, however, try to understand how the mirror could have been perceived by the historical actors in light of the political and cultural milieu of Zhenzong's time. The year 1004 had been one of the most turbulent in Song history. First, the capital and surrounding regions were stricken by a series of earthquakes. Then the Khitan army invaded the Song empire. After fierce battles near the capital and intense negotiations, a peace treaty was reached at the end of the year. Zhenzong, at least for the time being, was pleased and declared an empire-wide amnesty. In September 1005, the officials petitioned to confer extravagant divine titles to the emperor for steering the empire away from imminent destruction.³⁸ The time was ripe for opportunists like the owner of our mirror to present His Majesty with tokens of symbolic significance to mark what was perceived as an auspicious moment in history.³⁹

The context of presentation determines what type of gift is desirable. Sima Chengzhen had stressed that “the idea (associated with the design) conforms to the communion of the Three Spheres (Heaven, Earth, and Humanity)” (*liyng sancai 理应三才*). The mirror design thus gives the holder an imperial perspective for reflecting on the relationship between these three. A Taoist text entitled *Shenxian liandan dianzhu sanyuan baozhao fa* 神仙煉丹點鑄三元寶照法 (Methods of the Divine Immortals for Refining the Elixir and Casting by Projection the Precious Mirrors of the Three Originals), compiled no later than 902, describes the methods of mirror production and ways to harness the magical powers associated with mirrors to confront calamities in these three spheres. To the “Heaven Mirror” is attributed the power to curb the crisis-inducing appearance of comets and harmful weathers; the “Earth Mirror” takes care of earthquakes, landslides, floods, locusts, and other natural disasters; while the “Human Mirror” deters traitorous officials and rebellious elements, brings the barbarians to audience at court, and delivers peace to the whole empire.⁴⁰

These arguments are consistent with Sima Chengzhen's description for his Hanxiang mirror, which embodies the cosmological force from all three realms in a single object and was capable, according to the presenter Wu Ji, of deterring evil spirits. The preface to *Shenxian liandan dianzhu sanyuan baozhao fa*, in which a legendary recluse defines the proper timing for putting it

to use, reveals the association of such a supernaturally endowed mirror with political expression:

此非子之身之事,乃太平天子之所為也,若遇道德敦素合天地心四海晏如民有謳謠之詠可依法鑄之。⁴¹

This [mirror] is not about your business alone. Rather, it is a matter appropriate to a sovereign of peace. The mirror should be cast when you come across a ruler with good virtue, who is in harmony with the will of the heaven and earth, capable of bringing peace and prosperity to all the subjects in the domain, and praised by people in folksongs.

Like Xuanzong, who highlighted the proper way of approaching the magical mirror in his poetic response to the gift, Wu Ji's memorial provides his royal recipient instructions for understanding the potency of his gift. The mirror not only “embraces their principle (Dao) within Heaven and Earth and focuses their efficacy against the evil forces,” but also conveys the message about the virtue of emperorship associated with the mirror. It is about omens that could bring about an auspicious time.

As the Song empire in 1005 was recovering from the combined blows of natural and political calamities, the imperial court indeed needed supernatural help for bringing “Barbarians from all directions and peace to the imperial realm” 四夷來賓, 環宇廓清也. Implicitly, Wu Ji's flattering statement about living in an auspicious time gratified the emperor in his hope that the treaty would prove a great diplomatic success, endorsed by universal approval and supernatural powers. The emphasis on the mirror's property of deterring evil forces provided the emperor with the additional power needed to eradicate any remaining hazard. Although we have no record of the imperial response (unlike the case of Xuanzong in the Tang), the Song historical sources do tell us what Emperor Zhenzong did in the following years; there are some striking resemblances to what happened in Xuanzong's time.

Xuanzong and Zhenzong were both patrons of religious Daoism and enthusiastically involved in receiving auspicious omens and political prognostication; moreover, like Xuanzong, Zhenzong was faced with severe political challenges. Before Xuanzong's time, the Tang imperial throne had been usurped by Empress Wu; in his early career, Xuanzong was faced with the

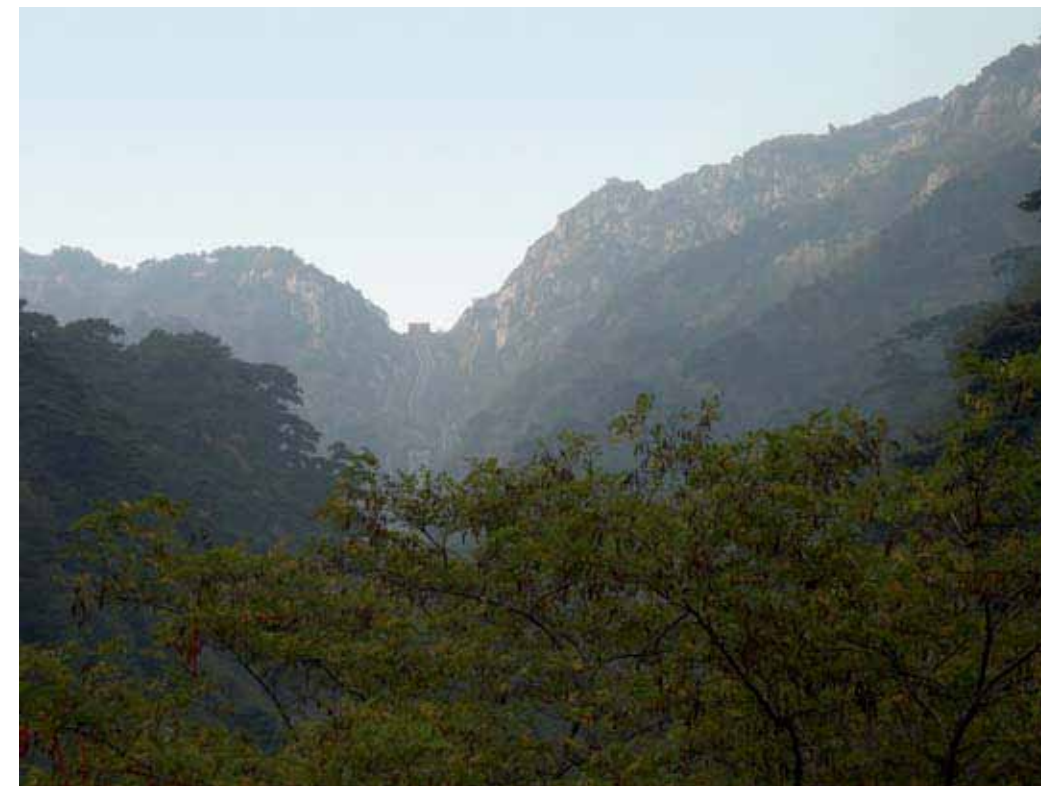


FIGURE 3

FIGURE 3:
Mount Tai, in Tai'an (Shandong),
the Eastern Marchmount.
Photo by the author.

task of restoring the Tang dynastic order and legitimacy. During the last decade of his life, Xuanzong had to cope with the turmoil of the An Lushan rebellion. In contrast, Zhenzong's challenge primarily came from the Song empire's northern competitor, the Khitan empire.⁴² The 1004 treaty with the Khitan forced the Song to acknowledge the Khitan ruler as the diplomatic equal to the Son of Heaven; this was perceived as deeply humiliating by critics in Song society.⁴³ Hence the legitimacy of the treaty remained a subject of contention. Zhenzong looked up to Xuanzong for inspiration on crisis management.⁴⁴ The most important effort was to emulate Xuanzong's example of performing the *feng* 封 and *shan* 禪 rituals at Mount Tai 泰山 in Shandong in a symbolic attempt to assert the imperial order.

As a prerequisite for an imperial pilgrimage to Mount Tai for the *feng* and *shan* ceremonies, Zhenzong needed evidence of supernatural approval. It was with this goal in mind that, starting in 1008, Wang Qinruo 王欽若 (962–1025), Commissioner of Military Affairs, orchestrated a series of auspicious omens

verifying the legitimacy of the Song imperial house. The *Songshi* details Zhenzong's active participation in this conspiracy, aiming to obtain supernatural sanction for the Song's symbolic and cultural supremacy over the Khitan.⁴⁵

Under previous dynasties, such sanction had been obtained through reporting various types of omens emerging from places around the domain. Zhenzong and his high-ranking accomplices notoriously conspired in bringing about famous episodes of “Celestial Letters,” which miraculously descended from the sky.⁴⁶ These letters were allegedly bestowed upon the empire from Huangdi, who was a major Taoist thearch claimed to be the mythical ancestor for Song royal lineage by Zhenzong. The incorporation of Taoist figures into the royal lineages clearly echoed Xuanzong's promotion of Laozi, the Taoist philosopher, as the Tang royal ancestor.

People outside the capital soon got the hint that such contributions were desired again, and news of auspicious omens soon flooded in from across the empire. Three large delegations arrived



FIGURE 4



FIGURE 5

to petition Zhenzong to perform the *feng* and *shan* ceremonies at Mount Tai. The first delegation consisted of over a thousand local residents from the prefecture in which Mount Tai was located; the second comprised nearly a thousand candidates for the civil examinations; and the third, led by the prime minister, involved twenty-four thousand representatives of military personnel, civilian officials, foreigners, religious groups, and respected seniors.⁴⁷

These extravagant activities were decried as ridiculous by later historians, but they arguably produced a groundswell of support for the imperial pilgrimage in the whole society.⁴⁸ As a result, Zhenzong got what he wanted and went ahead with the *feng* and *shan* ceremonies at Mount Tai in late 1008, becoming the last emperor among a total of six in Chinese history to carry them out (FIG. 3).⁴⁹ The last imperial pilgrim before him had been Tang Xuanzong in 725, providing the most recent model of how the rituals should be conducted. Even the heavenly-text conspiracy is reminiscent of the divine slip received from the sky at the time of Xuanzong's *feng* ceremony.⁵⁰ Like Xuanzong (FIG. 4), Zhenzong left behind a monumental inscription on Mount Tai (FIG. 5). An impressive royal ancestral temple was constructed at Qufu, the alleged birthplace of the thearch Huangdi, at the foot of Mount Tai.

The mirror presenter Wu Ji did not possess the immense intellectual and religious stature Sima Chengzhen commanded in Xuanzong's time. He was therefore not equipped to provide the emperor with a road map or a cosmological model to put into action. His Hanxiang mirror's status as a relic, emphasized in his memorial, puts Wu Ji at some remove from the artistic agency associated

with Sima Chengzhen. It is nevertheless interesting to note that Wu's presentation of the mirror predated Wang Qinruo's conspiracy. Evidently, Wu Ji was acting within a general social milieu that was already shaped by the same kinds of beliefs that were ultimately exploited by Wang and his imperial patron in their attempt to obtain broad popular support for their religious machinations.

The symbolism of the mirror itself, in combination with Wu Ji's statement emphasizing the auspiciousness of the time, suggests that Wu Ji's choice for his presentation was deliberately calculated. Before an imperial pilgrimage to Mount Tai, officials and commoners acted in accordance with expected patterns to convince the emperor that the timing was ripe. This was the case leading up to Xuanzong's visit, which resulted in a surge of petitions and literary compositions praising his remarkable accomplishments.⁵¹ Motivated by the potential of imperial reward, acute observers of imperial politics searched for the right excuses to present the case—delivery of an antique bronze, perhaps, or a rare animal, or a new spring of sweet water. Like many thousands working on similar efforts during the following decade in Zhenzong's reign, Wu Ji's memorial became a small stream contributing to the flood in which the whole empire was to be swept up three years later.

Wu Ji's explicit reference to the first episode of the Hanxiang mirror's presentation at the imperial court reenacted the specific rhetoric associated with that mirror, providing a template for certain kinds of political action. But in Wu Ji's presentation, the knowledge about the circumstances of the mirror's creation had become fragmented. Nonetheless, the religious potency associated

with its original creation was readdressed and directed toward a new purpose. The presentation of the mirror became one of many efforts to model Zhenzong's regime upon the great legacy of the Xuanzong as a means to cope with the crisis in sovereignty and legitimacy. The original reason for the mirror's creation in Tang religious politics dropped from view. Instead, Sima Chengzhen's cosmological order came to be embraced as part of Xuanzong's legacy in Zhenzong's court.

Though enthusiastically embraced by numerous sycophantic courtiers, Zhenzong's emulation of Xuanzong did encounter some resistance. The Secretary of the Longtu Hall (*Longtuge daizhi* 龙图阁待制) Sun Shi 孙奭 (962–1033), for one, was strongly critical of Zhenzong's indulgence in religious Daoism and felt compelled to warn him of the dangerous consequences of looking up to Xuanzong as a role model.⁵² Reminiscent of Zhang Jiuling's use of the bronze mirror as a metaphor in exhorting Xuanzong to reflect on the past, Sun Shi referred to Xuanzong as a metaphorical mirror for Zhenzong to gaze at as he reflected upon the past and the future. Intriguingly, this duality brings us back to Sima Chengzhen's design statement: 捧玩之寶，莫先茲器，既可以自見，也可以鑒物。⁵³ “Nothing surpasses this object as a treasure to be handled with admiration. It can be used for self-reflection and for examining other things.”

Sun Shi's unflattering reference to the tragic fate of the *femme fatale* Yang Yuhuan 楊玉環 (a.k.a. Yang Guifei 楊貴妃, 719–756) in the 755 CE rebellion of An Lushan was so detrimental that Zhenzong had to compile an essay disassociating himself from the Tang emperor.

It is informative to contrast Wu Ji's opening statement about the active engagement of the supernatural world with politics, society, and nature in the human world to Sun Shi's comment about the role of Heaven. When Zhenzong asked Sun about the “Letters from Heaven,” the latter answered with a quote from the Analects: 臣愚，所聞天何言哉，豈有書也。“I am stupid; I only learnt: ‘Have you ever heard Heaven speak?’ How then could it write!”

In Sun Shi's view, Wu Ji, in presenting Xuanzong's mirror to Zhenzong as an auspicious omen, was a person without integrity, like those officials at the Tang court who did not have the moral courage to confront Xuanzong for his poor judgment.⁵⁴ As it turned out, no amount of religious magic could save the Song. Little more than a century after Zhenzong's reign, the capital fell to another invasion from the north, amidst another climax of state patronage of religious Daoism.⁵⁵

CONCLUSION:
THE THIRD PRESENTATION IN THE SOCIAL LIFE
OF THE MIRROR

INTERNATIONAL POLITICS, HISTORICAL FIGURES, AND COSMOLOGY rarely converge around a single object in a historical narrative, and such a convergence is even less likely to occur twice. The Hanxiang mirror presents a rare instance of an object that was used repeatedly by individuals with an agenda to get a point across to their rulers, often disguised under delicate choices of images and words. If we look beyond the mirror as a generic object of religious protection and examine the inner workings of each transaction close-up, we can identify multiple historical forces that charge these objects with a specific meaning and embed them in the political dynamics of their times.

Catering to Xuanzong's fondness for mirrors, Sima Chengzhen designed and presented the mirror to convey, verify, and elaborate a cosmological order that advanced his Taoist agenda. The presentation falls into Sima's grand schemes of persuading Xuanzong to elevate the Taoist pantheon above the state ritual institutions centered on the Five Marchmounts. It is intriguing to see that the designs on the mirror emphasized this cosmological order in static, uncontested form, when the order itself was undergoing negotiation and reconfiguration. The mirror was not merely an object of pleasure, but it also served as an ideological model representing Sima Chengzhen's vision of the religious and cosmological order—his notion of the world as it should be.

When religious Daoism regained currency in the Song court, objects produced under the previous episode of imperial patronage under the Tang once again displayed their potency in political discourse. The reenactment of a historical rhetoric with an object from the Tang court allowed Xuanzong's political legacy to work through the political mediations of the early eleventh century. It was a prelude to Zhenzong's grand attempt to cope with the legitimacy crisis of the Song dynasty by religious means.

The fascinating biography of the Hanxiang mirror provides insight into how an object traveled in and out of the historical narrative and why it was chosen at specific historical moments for political and religious representation. The political maneuvers of identifiable historical players impart a dynamic social life to the seemingly static symbols displayed on this object. A nuanced study not only provides material testimony of subtle negotiations,

FIGURE 4: Cliffside inscriptions (in golden color) by Tang Xuanzong at the summit of Mount Tai, engraved after his performance of the *feng* and *shan* ceremonies in 725. Photo by the author.

FIGURE 5: Title of the inscription (in golden color) by Song Zhenzong at the summit of Mount Tai, engraved after his performance of the *feng* and *shan* ceremonies in 1008 CE. The body of the text was defaced by local tourist development activities during the early 1560s to make space for visitors to commission new inscriptions. Photo by the author.

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but also reveals ways that material culture helps in bringing these negotiations about.

The study of the Hanxiang mirror opens up a thought-provoking window into the anthropology of gift-giving and political discourse in historical China. As gifts give rise to reciprocal exchange, the combination of an extraordinary gift and an extraordinary type of exchange invites the question raised by Mauss: “What power resides in the object given that causes its recipient to pay it back?”⁵⁷

Gifts engage the honor of both giver and receiver. The reflective property, the aura of historical figures associated with its past presentations, and the historical metaphors that come with the object present an opportunity to reflect on the reciprocal nature of each transaction, exploring the interrelationship between past and present, object and ideas, property and integrity.

The legacy and juxtaposition of two episodes of imperial presentation during the Tang and Song dynasties bring us to the message of the third presentation. Thanks to Lloyd Cotsen’s extraordinary generosity, I have the privilege of witnessing a Hanxiang

mirror once again becoming a meaningful gift, this time as a present to its native society. History seems to have rhymed through the object. Forty years ago, when the cultural heritage of this mirror was endangered in its country of origin, such an arrangement would have been inconceivable. Today, economic and cultural prosperity is evident, and we hear the terms *shengshi* 盛世 and *changqi* 昌期, the Prosperous Age, used with increasing frequency. While the destruction of cultural property continues due to relentless development and commercialization, the great archaeological discoveries of our time are being presented as signs of prosperity. For people of Wu Ji’s ilk, the notion of auspicious omens looms on the horizon, and the presentation of impressive gifts from afar would fit nicely into that category. For people of Sun Shi’s type, who do not believe Heaven can read and write, Mr. Cotsen’s mirrors can serve as a gift of wisdom and an invitation to reflect on the meaning of *shengshi* and on the history of past cultures, and on the critical challenge of preserving the historical heritage of which these mirrors were a part.

NOTES

- “Shangqing Hanxiang jianjian tu” 上清含象劍鑑圖 (Shangqing diagrams of swords and mirrors embodying cosmic symbols). *Daozang* (Yiwen edition), v. 196, section 3: 1–9; *Zhonghua Daozang*, v. 2: 537. This type of mirror is referred to as the Hanxiang mirror (image-containing mirror or mirrors that embodied cosmic signs) in historical texts.

- “Shangqing Hanxiang jianjian tu,” *Daozang* (Yiwen edition), v. 196, section 3: 8.

- Fukunaga 1973; Wang Yucheng 2001; Zhang Xunliao and Bai Bin 2005: 1751–1833.

- Wang Yucheng 2000, 2001; E. Y. Wang 2005b.

- E. Y. Wang 2005b.

- Kroll 1978; Köhn 1987.

- Jiu Tang shu, v. 192: 5128.

- See “Da Song Zhiwen” 唐宋之間 (Response to Song Zhiwen), in Chen Yixin 2001, v. 5: 751.

- “Shangqing Hanxiang jianjian tu” Daozang (Yiwen edition), v. 196, section 3: 1–9; *Zhonghua Daozang*, v. 2: 537; Fukunaga 1973; Wang Yucheng 2001; Zhang Xunliao and Bai Bin 2005: 1751–1833.

- Jiu Tang shu, v. 192: 5128.

- Jiu Tang shu, v. 192: 5128.

- Lei Wen 2009: 199–200.

- “Shangqing Hanxiang jianjian tu” 上清含象劍鑑圖. *Daozang* (Yiwen edition), v. 196: section 3: 1–9.

- Translation by Suzanne E. Cahill in v. 1: 60.

- Guo Yuhai 1996: 117; Zhang Xunliao and Bai Bin 2005: 1790, pl. 17; Cahill 2005: 38.

- Translation by Cahill 2005: 38. See E. Y. Wang 2005b: 38, fig. 15.

- “Wangwushan song daoshi Sima chengzhen huan Tiantai” 王屋山送道士司馬承禎還天台 (Seeing Taoist Sima Chengshen off to Tiantai, at Mt. Wangwu); in Chen Yixin 2001, v. 1: 35.

- “Da Sima Chengzhen jin zhu Hanxiang jing jian tu pi” 答司馬承禎進鑄含象鏡劍圖批 (Response to illustration of the Hanxiang mirror and swords presented by Sima Chengzhen), also known in its simplified form “Tang Minghuang yupi bing shi” 唐明皇御批并詩 (Tang Emperor Minghuang’s royal comments and poem) appended to “Shangqing Hanxiang jianjian tu,” *Daozang*, v. 196, section 3: 7–8.

- Chen Yixin 2001, v. 1: 35.

- A Five Marchmounts mirror with the additional inscription “(Made at the center of the (Yangzi) River on the fifth day (of the fifth moon)” (*wuyue jiangxin* 五日江心) indicates to Zhang Xunliao and Bai Bin (2005: 1771–1776) that this type of mirror was probably used in the imperial presentation as well, as the time and location of manufacture alleged here were traditionally associated with royal presentation.

- Zizhi tongjian*, v. 216: 6900.

- Wechsler 1985; Dudbridge 1995; Barrett 1996; Kaneko 2001.

- E. Y. Wang 2005b: 46.

- Xiong 1996: 302.

- Chavannes 1910; Kroll 1983; Lewis 1999; Kleeman 1994a; Harrist 2008; Robson 2009.

- Xiong 1996: 273.

- Jiu Tang shu*, v. 192: 5128. For a Taoist critique of blood sacrifice, see Kleeman 1994b: 200–202.

- Lei Wen 2009: 184.

- Jiu Tang shu*, v. 192: 5128.

- Lagerwey 1995.

- Lei Wen 2009: 186–187, 204, 211; Reiter 1988.

- Lei Wen 2009: 212; Verellen 1995.

- Lewis 2009b.

- Lei Wen 2009: 211–212.

- Verellen 1995: 278.

- Koffler 2004: 618.

- Songshi*, v. 302: 10022–10025.

- Songshi*, v. 8: 136.

- Cahill 1980; Tao 1988; Kuhn 2009.

- Gui Gengzi 歸耕子, Preface to “Shenxian liandan dianzhu sanyuan baozhao fa” 神仙煉丹點鑄三元寶照法 *Daozang* (Yiwen edition), v. 578, section 2: 1–7; Wang Yucheng 2000: 28.

- Gui Gengzi 歸耕子, Preface to “Shenxian liandan dianzhu sanyuan baozhao fa” 神仙煉丹點鑄三元寶照法 *Daozang* (Yiwen edition), v. 578, section 2: 1–7.

- Tao 1988; Rossabi 1983.

- Cahill 1980; Tao 1988; Yamauchi 2000.

- Songshi*, v. 37: 12804–12805.

- Songshi*, v. 8: 172.

- Cahill 1980; Tao 1988; Yamauchi 2000.

- Songshi*, v. 8: 136.

- Songshi*, v. 8: 136.

- Dott 2004; Harrist 2008.

- Harrist 2008: 253.

- Jiu Tang shu*, v. 23: 899–900.

- Songshi*, v. 37: 12804–12805.

- “Shangqing Hanxiang jianjian tu,” *Daozang* (Yiwen edition), v. 196, section 3: 1.

- “Shangqing Hanxiang jianjian tu,” *Daozang* (Yiwen edition), v. 196, section 3: 1. For the quote from Analects, see Lun Yu 論語 in *Shisanjing zhushu* 十三經註疏 (*Zhonghua shuju* 1980 facsimile), 17. 2526a.

- “Shangqing Hanxiang jianjian tu,” *Daozang* (Yiwen edition), v. 196, section 3: 1.

- Takashi 2003.

- Mauss 1990: 3.

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A Liao-Dynasty Buddhist Votive Mirror in the Cotsen Collection

WHEN FIRST PUBLISHED in the catalogue volume of the present work, mirror O-0323 in the Cotsen Collection (see v. 1: PLS. 120–124) was assigned to the Tang dynasty (618–907 CE). Further research, however, has yielded firm evidence that, instead, it was made under the Liao dynasty (907–1125 CE). Unusually, this mirror at some stage of its use-life had been transformed into a Buddhist religious object. The present study aims to bring out its significance as material testimony of the syncretic religious practice, especially the Esoteric-Huayan synthesis, popular in North China during that period.¹

Mirror O-0323 is one of the largest in the Cotsen Collection; of circular shape, it measures 33 cm in diameter and weighs 2.9 kg. The reverse side, as is customary, features elegant cast-relief decoration. At the center, surrounding the knob, are three layers of lotus petals with a five-character inscription. The space between the lotus petals and a dotted circle is filled with four identical narrative roundels that measure about 6 cm in diameter, alternating with four flaming pearls on top of flowing clouds (see v. 1: PL. 122). Unlike the vast majority of Chinese mirrors—and unlike any other mirror in the Cotsen Collection—this mirror additionally bears decoration on its obverse, reflective face: a group of Buddhist images engraved in fine lines (line drawing, FIG 9; see also v. 1: PLS. 120–121, 123–124). Different from the decor of the reverse side, which came into being when the mirror was originally cast, the engraving on the obverse may well have been added at a later time.² Since this mirror was bought on the antiquities market in recent years, its archaeological context is unknown, and our dating of it to the eleventh century—which is

further argued for below—is the result of stylistic comparison with provenienced bronze mirrors showing similar design and decorative elements. While most of those specimens have been found in tombs, where they functioned either as personal ornaments or as part of the ritual construction of the cosmos,³ the engraved decoration on the obverse of mirror O-0323 suggests that it may have come from a votive deposit or decoration of a Buddhist pagoda.

THE DATE OF MIRROR O-0323

THE FIRST DATABLE ELEMENT of this mirror is the five-character inscription placed on the five petals that constitute the second tier of lotus decor surrounding the central knob (FIG. 1). The inscription, running counterclockwise, reads: *liang xin tong chang cun* 兩心同長存,⁴ which may be roughly translated as “two hearts/minds/souls of the same last forever,” or “two hearts/minds/souls together last forever.” A lotus-shaped bronze mirror with the exact same design, featuring the same inscription in the same calligraphic style and in characters of identical size, was discovered from a reliquary deposit in the North Pagoda in Chaoyang (Liaoning) 遼寧朝陽北塔 in 1988 (FIG. 2).⁵ It is one of nine tiny bronze mirrors found inside a stone reliquary-deposit box (*shixia* 石匣), about 1.4 m long, 1.17 m wide, and 1.26 m high, which was located near the top of the pagoda, at the height of the twelfth of its altogether thirteen levels of tiled roofs. The pagoda was struck by lightning at some point in its history, and most of the contents of the stone box were burned, except for metal, glass, ceramic, and other



FIGURE 1



FIGURE 2



FIGURE 3

FIGURE 1:
A close-up of the knob, the lotus petals, and the five-character inscription on Cotsen mirror O-0323.

FIGURE 2:
Bronze mirror inscribed with the phrase *liang xin tong chang cun* from a reliquary deposit, dated 1043, in the North Pagoda, Chaoyang, Liaoning province. From Wang Changchen et al. 2007: pl. 57, no 2.

FIGURE 3:
A close-up of one of the four medallions on the back of Cotsen mirror O-0323.

non-inflammable objects. The nine mirrors range from 2.6 to 7.5 cm in diameter; this lotus-shaped mirror is the largest. At the time of discovery, there were still silver threads in some of the knobs. These mirrors were among the votive objects deposited in the stone box when the pagoda was constructed. An inscription on the stone box dates the deposit to the twelfth year of the Chongxi 重熙 reign (1032–1055) of the Liao dynasty—that is, 1043 CE. Thus the lotus-shaped mirror should be dated prior to this year, when the reliquary box was sealed. In shape and dimensions, it corresponds exactly to the central portion of mirror O-0323, without the surrounding decorated flat area (this central portion of mirror O-0323 measures 7.4 cm in diameter, as compared with the 7.5-cm diameter of the Chaoyang mirror). Based on these similarities, mirror O-0323 could likewise be dated to about the middle of the eleventh century CE.

The second datable element on mirror O-0323 is the four identical decorative medallions (FIG. 3; see also v. 1: PL. 122). The designs are in low relief, and it seems that the same design was repeatedly stamped on to the surface of the mirror mold, thus producing four identical impressions. Inside each medallion, on the right is a tall coniferous tree, which looks like an evergreen pine tree or cypress, bearing four large clusters of cones or leaves on each side. Underneath the tree are two human figures: one tall and the other shorter. The tall figure wears a robe and holds a staff, while the shorter one wears short trousers. Whereas the tall figure faces left, away from the tree, the shorter figure is turned toward the tree



FIGURE 4



FIGURE 5



FIGURE 6



FIGURE 7

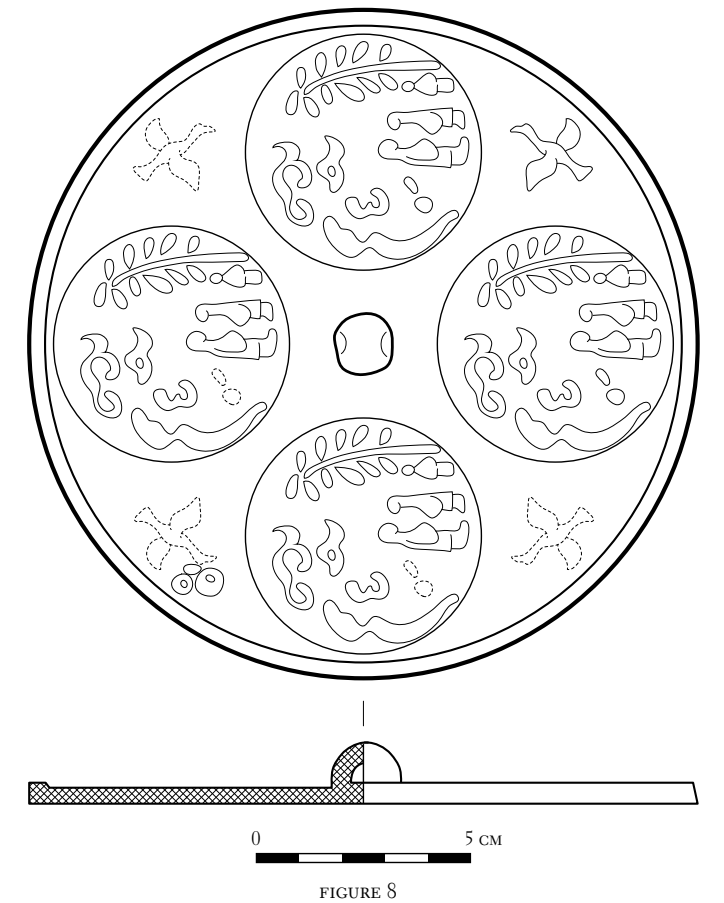


FIGURE 8

FIGURE 4:
“Longevity mirror with turtles
and cranes” (*guihe qishou jing*).
Hebei sheng wenwu yanjiusuo
1996, no. 225.

FIGURE 5:
Liao mirror from Aohanqi
(Inner Mongolia). Diameter 38.5
cm. From Liu Shujuan 1997:
fig. 66, p. 80.

FIGURE 6:
Liao mirror from Weichang
(Hebei). Diameter 27.3 cm. From
Liu Shujuan 1997: fig. 67, p. 81;
also in Hebei sheng wenwu
yanjiusuo 1996: no. 223.

FIGURE 7:
Liao mirror collected at
Zhangjiakou (Hebei). Diameter
8.5 cm. From Liu Shujuan 1997:
fig. 68, p. 81; also in Hebei sheng
wenwu yanjiusuo 1996: no. 224.

and seems to be working on the tree. In front of the taller figure is a turtle, exuding long strands of flowing vapors or smoke; it occupies the center of the lower part of the medallion. Above the vapors or smoke, two long-legged birds, probably a pair of cranes, are flying in a circle. Beneath them on the lower left side of the medallion are two large mushroom-shaped solid heaps amid dotted curves that divide the space. Above the birds, in the distance, there are three aligned triangular shapes, signifying remote mountains. On top of the mountains there are two linked inverted heart-shaped forms, often used as symbols of auspicious clouds in Chinese art. To their right, on top of the tree, are two dotted lines in an inverted V-shaped formation, suggesting migrating wild geese. The four medallions are encircled by dotted lines.

The exact same design appears on a small Liao-dynasty bronze mirror collected in 1961 in Xinglong county (Hebei) 河北興隆 (FIG. 4). Chinese scholars have named mirrors with this type of design “longevity mirror with turtles and cranes” (*guihe qishou jing* 龜鶴齊壽鏡), because their decoration contains the standard symbols of eternal long life in Chinese folklore, such as the turtle, the crane, the evergreen pine tree, and the “fungus of immortality”⁶ (*lingzhi* 靈芝). All these may be loosely labeled Taoist art motifs. Consequently, the tall and shorter figures are probably a Taoist master and his acolyte, seeking longevity or immortality in a natural setting of high mountains.

The medallions on mirror O-0323 are so close to the design of the Xinglong mirror that I would not be surprised if they came from the same workshop. In fact, it is quite possible that the same model-stamp was used for both; for if we deduct the width of the rim from its diameter of 7 cm, the size of the design field of the Xinglong mirror is the same as that of the medallions on mirror O-0323.

It seems to have been a practice of Liao mirror casters, when manufacturing large mirrors, to multiply the designs used in smaller mirrors in order to fill the space. As we have seen, mirror O-0323 has four identical medallions, while the Xinglong mirror has only one. A similar relationship can be observed on the following three Liao mirrors: one excavated from Aohanqi (Inner Mongolia) 內蒙古敖漢旗 (38.5 cm in diameter; FIG. 5), one from Weichang (Hebei) 河北圍場 (27.3 cm; FIG. 6),⁷ and one collected at Zhangjiakou (Hebei) 河北張家口 (8.5 cm; FIG. 7).⁸ On each of them we see instances of an identical basic medallion, about 6 cm in diameter, which shows a man playing his zither inside a pavilion. Admittedly, the last, smallest mirror differs from

FIGURE 8:
A mirror from Tomb 3, with
medallion designs similar to those
on mirror O-0323. Excavated
from the tomb of Zhang Shibei
and his wife, dated to 1093 and
1144, respectively. From *Xuanhua
Liaomu*, Hebei Sheng Wenwu
Yanjiusuo 2001: fig. 121, p. 154;
pl. 83.2.

the other two in some minor details, making it unlikely that they were made with the same model-stamp; still, the overall decorative motifs are very similar.

In addition to the Xinglong mirror discussed above, another scientifically excavated mirror has a design similar to that of mirror O-0323, helping us further determine the latter’s date. This mirror was found in the joint burial of Zhang Shibei 張世本 and his wife, née Jiao 焦氏, Tomb 3 at the Zhang family cemetery at Xiabalicun, Zhangjiakou (Hebei) 河北張家口下八里村. The Zhang family were members of the local Han-Chinese elite who lived under Khitan rule after this region, formerly the northern border zone of the Song empire, was ceded to the Liao in 938 CE. Among other grave goods, the burial chamber of Tomb 3 yielded two mirrors. The specimen of interest to this study (FIG. 8) measures 16.4 cm in diameter; it is heavily corroded. The reverse side is filled with four medallions, estimated to be about 6 cm in diameter, plus four flying birds at the four corners between the medallions. The tomb’s epitaph indicates that Zhang Shibei died in 1088 and was buried in 1093; his wife died in 1144.⁹ Based on the arrangements of the grave goods, the excavators suggest that the majority of the grave goods were interred during the first burial in 1093. Thus the Xuanhua mirror could date to the second half of the eleventh century CE.



FIGURE 9

FIGURE 9: Line drawing of the Buddhist images on the reflective side of mirror O-0323.

From the above discussion, one may safely conclude that mirror O-0323 is a Liao-dynasty mirror dating to the eleventh century CE.

THE BUDDHIST ICONOGRAPHY OF MIRROR O-0323

THE MOST IMPORTANT FEATURE of mirror O-0323, however, is the elaborate Buddhist images engraved on the reflective surface (FIG. 9). Because the lines are very thin, some details, especially the adornments and the hand gestures of the Buddhist figures, are hard to discern; hence my discussion of their iconography is necessarily tentative. The significance and uniqueness of these images, however, is beyond any doubt.

The central portion of the mirror surface is dominated by Vairocana (Ch. Darirulai 大日如來 or Piluzhenafu 毘盧遮那佛), the Cosmic Buddha of Great Illumination. Sitting in a meditative pose under an inverted lotus-petals canopy, Vairocana has a characteristic hand gesture (*mudrā*), in which his right fist encloses the index finger of the left hand; this is known as the wisdom fist (Vajramudrā or jñānamudrā; Ch. *zhiquan yin* 智拳印).¹⁰ This *mudrā* is often used when Vairocana Buddha is in the center of a mandala (maṇḍala). Although Vairocana occurs in several Buddhist sūtras, his most popular appearance in East Asian Buddhism is in the *Avatamsakasūtra* (Flower Garland Sūtra; Ch. *Huayanjing* 華嚴經), the central text of the Huayan tradition, which rose to prominence in China during the Tang dynasty.¹¹ The *Avatamsakasūtra* describes that the historical Buddha Śākyamuni (Ch. Shijiamouni 釋迦牟尼), right after his enlightenment, attains the transcendent body (*dharmakāya*; Ch. *fashen* 法身) of Vairocana and proceeds to preach to his entourage including Samantabhadra (Ch. Puxian 普賢) and Mañjuśrī (Ch. Wenshu 文殊).¹² Unlike most other Buddha images, in which the Buddha often wears simple clothes without ornaments, this cosmic form of Buddha is elaborately adorned. As a case in point, the Buddha Vairocana depicted on mirror O-0323 wears a sumptuous high crown and a bejeweled necklace (FIG. 9; see also v. 1: PL. 120). Unfortunately, due to poor preservation, some details of the crown and the necklace are not very clear. Following the contour of Vairocana's huge earlobe, the ribbons of the crown fall smoothly, forming a series of flowery knots on both shoulders. A long surplice covers his loose, elegant undergarment, and the drapery forms "snaky folds" over the calves, which, as Laurence Sickman has pointed out, are a characteristic

of Liao and Jin (1115–1234 CE) sculptures.¹³ The Buddha sits calmly on a lotus pedestal with the soles of the feet facing upward.

To the left and right of Vairocana are two large bodhisattvas, most likely Samantabhadra and Mañjuśrī although the extremely faint engraving, especially of the *mudrās* and attributes, makes this identification uncertain. The gesture of the right hand of both bodhisattvas seems to be an eccentric variation on *vitarka*, the *mudrā* of argumentation or explanation of the Buddhist doctrine (*dharma*). This *mudrā* is common to several figures of Huayan Buddhism, including some of the other bodhisattvas on this mirror. The left hand of the bodhisattva to the left of Vairocana seems to hold a scepter or possibly a scroll of scripture. Surrounding the two large bodhisattvas in the upper portion are two groups of three guardian kings each, two holding swords, one an ax, and the others unclear; and in the lower portion are two groups of three bodhisattvas. These six bodhisattvas, along with two additional bodhisattvas in front of Vairocana's lotus pedestal, form the standard set of Eight Bodhisattvas that often appeared on the mandala-like arrangements in Liao Esoteric Buddhist art.¹⁴ All these Buddhist figures have a big aureole behind their body and a small aureole behind their heads. Seated on lotus pedestals, they all have an elaborate headgear (or floral crown), wear free-flowing robes, and have flowery knots on their shoulders, to the extent that such details are discernible. Moreover, to the right and left of the two front bodhisattvas are two groups of two worshipers each, recognizable as such because they are seated on square mats rather than on lotus pedestals. They hold their hands in front of their chests in an attitude of prayer. Although they also have an aureole behind their heads, like all the other figures shown, they wear different hats and clothing and have different hand gestures. In addition, there are two figures standing on the left and right of Vairocana's lotus pedestal, which I discuss in detail below.

It is interesting to observe that the sizes of the Buddhist figures on the mirror are graded in strict hierarchical order: the Vairocana Buddha at the center is the largest, the two bodhisattvas are second in size, and then come the Eight Bodhisattvas and finally the four worshiping figures.

The closest parallel to the Buddhist images on mirror O-0323 is the frontispiece illustration to Volume 13 of the *Dafaju tuoluoni jing* 大法炬陀羅尼經 (Dhāraṇī of the Lamp of the Dharma), discovered in 1974 inside the statue of Śākyamuni on the fourth

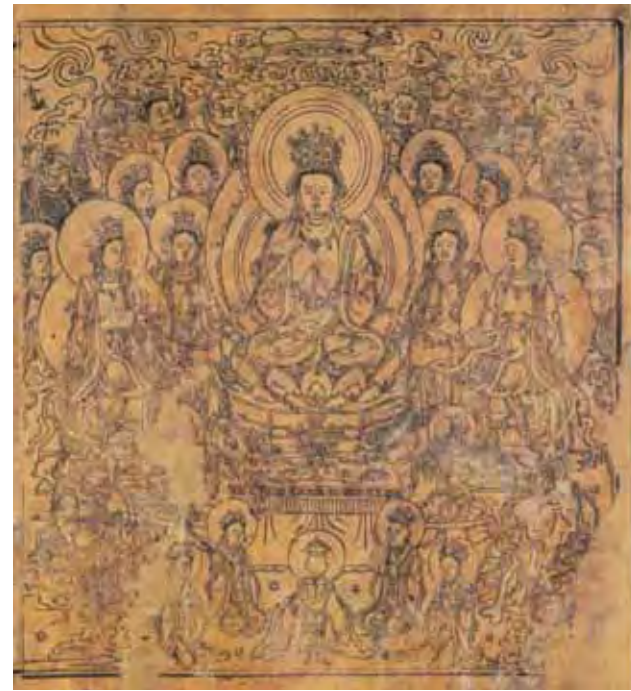


FIGURE 10



FIGURE 11



FIGURE 12



FIGURE 13

FIGURE 10:
The frontispiece illustration to Volume 13 of the *Dafaju tuoluoni jing* 大法炬陀羅尼經 (Dhāraṇī of the Lamp of Dharma), discovered in 1974 inside the statue of Śākyamuni on the fourth story of the Timber Pagoda (dated 1056) in Fogong Monastery in present-day Yingxian, Shanxi Province. From Shanxi Sheng Wenwuju and Zhongguo Lishi Bowuguan 1991: color pl. 5, p. 6.

FIGURE 11:
Vairocana Buddha surrounded by eight bodhisattvas at the fifth and highest story of the Yingxian Timber Pagoda in Shanxi Province. From Chen Mingda 1980.

story of the Timber Pagoda (dated 1056 CE) of Fogong Monastery in present-day Ying Xian (Shanxi) 山西應縣佛宮寺 (FIG. 10).¹⁵ The text was originally translated into Chinese by the Indian monk Jñānagupta (523–600 CE) and his associates (T 1340). It was printed as part of the Khitan Tripitaka, a project sponsored by the Liao emperors Xingzong (r. 1031–1054 CE) and Daozong (r. 1055–1101 CE) to print a complete edition of the Chinese Buddhist canon in woodblock, completed in 1062 CE.

The center of the frontispiece is occupied by the Vairocana Buddha, sitting in the lotus position on a lotus pedestal with his hands in the wisdom-fist *mudrā* and protected by a canopy of inverted lotus petals. The image of Vairocana is very much the same as the one on mirror O-0323, only in this woodblock print Vairocana's five-wisdom crown (*wuzhibaoquan* 五智寶冠, also known as *wufobaoguan* 五佛寶冠, five-Buddha crown) and the necklace are complete and clearly visible. Moreover, it also has the flowery knots, formed by ribbons hanging smoothly from the crown, two on each side: one on the shoulders and the other just above the elbows. To the left and right of Vairocana are the two large bodhisattvas, surrounded by the Eight Bodhisattvas and the eight classes of protectors of the Buddhist world (*tianlong babu* 天龍八部).¹⁶

The images in the lower half of the frontispiece illustration, however, differ significantly from the ones on mirror O-0323. In

front of Vairocana Buddha is an altar with floral vases and other offerings. On each side of the altar, a kneeling figure is holding a lamp. Another four worshiping figures are kneeling in front of the altar, along with a fifth figure kneeling in adoration in the center before Vairocana. In the lower left and right corners of the illustration are two ferocious guardian deities.

Although neither the images on mirror O-0323 nor those in the frontispiece illustration are in a strictly geometric arrangement, and the hand gestures and attributes of the figures in both images are not clear enough for definitive identification, the assemblies of Eight Bodhisattvas on both this mirror and the illustration are very similar to the type of deities one would see in Liao Buddhist mandala compositions. Continuing the traditions established in the Tang dynasty and augmented with new translations from Sanskrit, both Huayan and Esoteric Buddhism flourished and even synthesized in the Liao dynasty.¹⁷ As a result, architectural elements and images closely connected with the Esoteric tradition, such as the mandala, were fused with Huayan doctrines and imagery. Temples, monasteries, pagodas, and tombs were built or decorated in the form of mandalas, and Buddhist images were placed in mandala-like arrangements. As Alexander Soper pointed out long ago, a set of eight bodhisattvas was a “canonical favourite” in Liao Buddhist art.¹⁸ In addition, Phyllis Granoff and Pratapaditya Pal have shown that the Buddhist ideology in the

FIGURE 12:
Gilded bronze Buddha Vairocana. Early eleventh century. Liao dynasty. Height 21.5 cm. Purchase, Lila Acheson Wallace Gift, 2006 (2006.284), The Metropolitan Museum of Art, After Leidy 2007:10.

FIGURE 13:
Line drawing of the Eight Bodhisattvas Mandala on the north wall of the upper relic crypt of the Chaoyang North Pagoda, 1043 CE. Illustration from Wang Changchen et al. 2007: fig. 21, no. 2, p. 66.

cult of “Eight Great Bodhisattvas” relies less on specific deities than on the magic numbers of “four” or “eight” and their directional symbolism: “[T]he power of the eight bodhisattvas lies not within their identity as one or another bodhisattva, but is more related to a general conception of the efficacy of a group of four or eight beings as protector. The reason for their potency seems, moreover, to be connected with the directional or astronomical symbolism of the quadruples.”¹⁹

In Liao Buddhist art, we have several examples of such mandalas, or mandala-like arrangements. For example, on the fifth and highest storey of the Ying Xian Timber Pagoda, Vairocana Buddha, seated on a lotus throne with his hands in the *mudrā* of the wisdom fist, is surrounded by eight bodhisattvas (FIG. 11). Although the hands of all the bodhisattvas are missing, making it impossible to identify them based on *mudrās*, from other attributes scholars have argued that this assembly comprises a three-dimensional Buddhist mandala.²⁰ Moreover, many small portable sculptures datable to the Liao dynasty, such as a gilded bronze Buddha Vairocana (early eleventh century; height 21.5 cm) in the collection of the Metropolitan Museum of Art in New York (FIG. 12),²¹ gilded bronze statues of Bodhisattva (inscription dated to 1008 CE; 28.5 cm), Śākyamuni (height 20.7 cm), and Avalokiteśvara

(height 18.5 cm) in the National Palace Museum in Beijing, and a seated Amitābha in the Nelson-Atkins Museum of Art, Kansas City,²² were once part of larger assemblages of Buddhist sculptures that were composed into miniature three-dimensional mandalas so as to aid in the visualization of the magic cosmos.

Besides such architectural and sculptural mandalas, the most commonly understood type of mandala is the diagrammatic representation of the Buddhist cosmos. One example from the Liao dynasty is the mandala engraved on the northern wall of the stone reliquary box in the above-mentioned North Pagoda at Chaoyang, which, as we have seen, is dated to 1043; on it, the Vairocana Buddha (now partly erased) is surrounded by the Eight Great Bodhisattvas (FIG. 13).²³

The Buddhist images on mirror O-0323 as well as on the frontispiece illustration to Volume 13 of the *Dafaju tuoluoni jing* belong to a third type of mandala: two-dimensional pictorial representations of a three-dimensional mandala or mandala-like arrangement.²⁴ The images engraved on the mirror actually depict an assemblage of figures listening to Vairocana Buddha preaching (*shuofa tu* 說法圖). Besides the mandala-like arrangement with Vairocana at the center surrounded by two large bodhisattvas, eight attending bodhisattvas, six guardian kings, and four worshiping

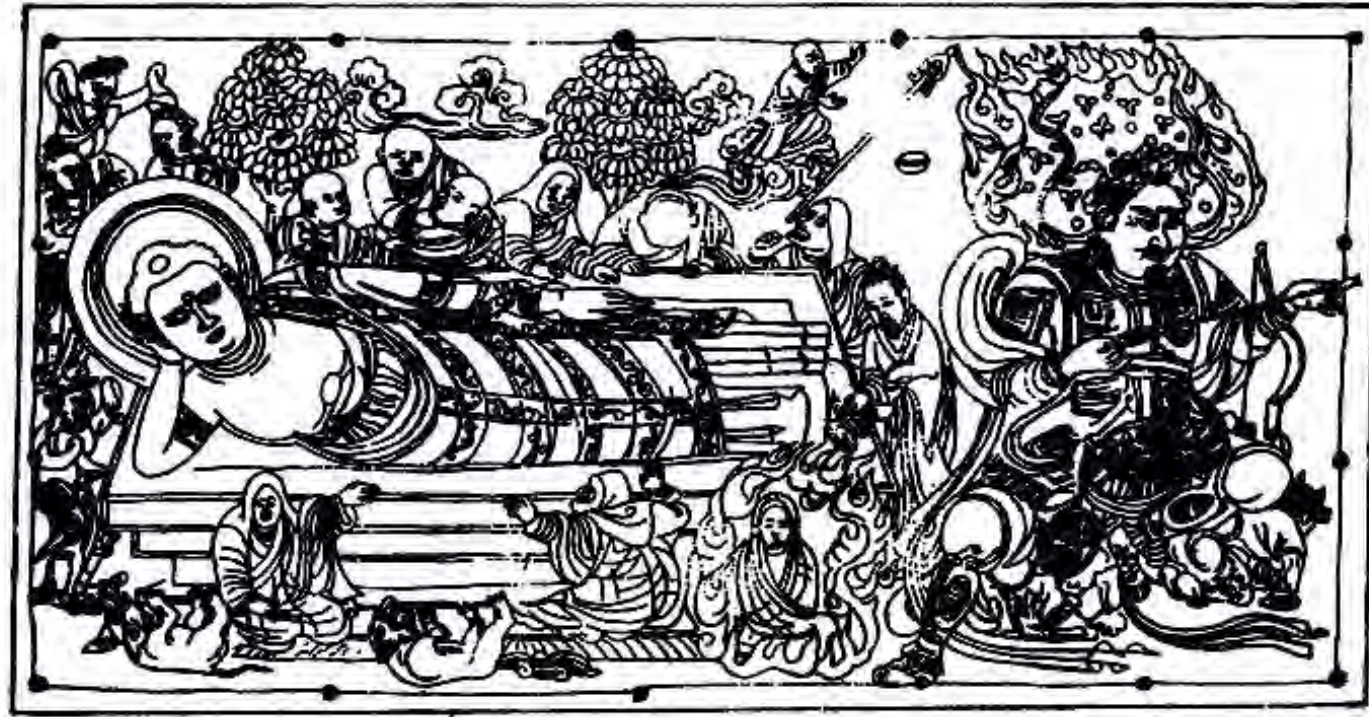


FIGURE 14

figures, there are on the upper part of the mirror on each side of the canopy two groups of human Buddhas, each comprising three figures (FIG. 9; see also v. 1: PL. 124). These are the Buddhas of the past.²⁵ In addition, the scattered celestial flowers, the radiating rays of light near the mirror's upper edge, and the auspicious clouds engraved in faint lines, all give a sense of depth and space.

Another significant feature of mirror O-0323 is that two mysterious figures are standing on the left and right of the lotus pedestal on which the Vairocana is seated (FIG. 9). The right one, holding his hands in *añjali mudrā* (Ch. *Hezhang yin* 合掌印) in front of his chest, is probably the boy-saint Sudhana (Ch. *Shancai tongzi* 善財童子), whose pilgrimage to visit fifty-three spiritual friends in search of enlightenment, narrated in the last chapter (the “Gaṇḍavyūha,” Ch. “Rufajiepin” 入法界品) of the *Avatamsakasūtra*, have inspired numerous popular pictorial and sculptural narratives during the Song (960–1279 CE) and Liao dynasties.²⁶ A youthful figure with two tufts of hair on his head, Sudhana is barefooted and wears loose garments with a long scarf. The presence of Sudhana in this assembly suggests that the imagery of mirror O-0323 embodies the teachings of the “Gaṇḍavyūha” chapter of the *Avatamsakasūtra*, which was originally circulated independently. As Dorothy Wong has pointed out in another, similar context:

“In doctrinal terms, the painting [i.e., the silk painting from Dunhuang, Ten Stages of Bodhisattvahood, now in the Musée des Arts Asiatiques-Guimet in Paris] is an exposition of the path of spiritual advancement, from a description of . . . Sudhana’s pilgrimage and realization of enlightenment under the guidance of the two great bodhisattvas.”²⁷ Thus the attendance of Sudhana at Vairocana’s sermon along with the Two Great Bodhisattvas indicates a Huayan approach to Buddhist enlightenment.

The figure to the left of Vairocana’s pedestal is even more enigmatic. Wearing a scholar’s hat and robe, this is the only figure on mirror O-0323 that does not have a halo behind his head (FIG. 9). I first thought this could well be an image of the donor who commissioned the Buddhist engraving on the mirror. But comparison with contemporary Buddhist images from other regions suggests another possibility: this figure might be a religiously significant historical figure. During the Song dynasty, in the Grotto of Complete Enlightenment (Yuanjuedong 圓覺洞) at Baodingshan in Dazu (Chongqing) 重慶大足寶頂山, for example, there are two standing figures, one portrayed as a Confucian scholar and the other as a monk, flanking the triad of the “Three Worthies” of Huayan Buddhism, Vairocana, Samantabhadra, and Mañjuśrī. As scholars have argued, these two are most likely Liu

FIGURE 14: The *Parinirvāṇa* scene engraved on one of the silver plaques of the miniature wooden coffin, discovered in the stone reliquary deposit box in the North Pagoda in Chaoyang, Liaoning Province. Illustration from Wang Changchen et al. 2007: fig. 25, first panel, p. 73.

Benzun 劉本尊 (855–939 CE), a famous local Buddhist layman and the founder of Sichuan Esoteric Buddhism, and his spiritual heir Zhao Zhifeng 趙智風 (1159–1249 CE), the founder of the Baodingshan Buddhist sanctuary.²⁸ It is a general trend in the development of Chinese Buddhist iconography since the Tang dynasty that images of eminent and learned monks and other sanctified historic figures were portrayed in sculptural or pictorial forms independently or alongside other Buddhist deities. Examples include Huineng 惠能 (638–713 CE), the sixth patriarch of Chan Buddhism;²⁹ the Central Asian monk Sengqié 僧伽 (d. 710 CE);³⁰ and the big-bellied, laughing Buddha, Budai 布袋 of the latter Liang dynasty (907–923 CE).³¹

It is therefore no accident that there is a group of Liao, Song, and Xixia (Tangut, 1038–1227 CE) images depicting the *Parinirvāṇa* scene in which a secular old man, sometimes bearded, stands at the feet of the Buddha who is about to enter into *Nirvāṇa*. These figures are often secular and “Chinese”³² in their appearance: they usually wear scholar’s hats and Chinese-style garments.³³ One such example is the *Parinirvāṇa* scene engraved on one of the silver plaques of a miniature wooden coffin discovered in the stone reliquary-deposit box in the North Pagoda at Chaoyang (FIG. 14).³⁴ At the feet of the reclining Buddha stands a bearded man. Wearing a long loose robe, he is clearly distinguished from everybody else in the picture. His two hands are extended to hold the Buddha’s feet. This is probably a local development of Buddhist iconography at a time when Buddhism thrived and penetrated local societies, and various schools of teaching developed in different regions in China. As a result, some significant historical figures became the object of local cults and, thus deified, were incorporated into the Buddhist pantheon. The figure on mirror O-0323 could be a historic figure, although his identity is difficult to pinpoint at this stage. If so, it would appear entirely appropriate that this figure is standing near the preaching Vairocana at the opposite side of Sudhana, the famous devotee of Buddha’s teaching. Associated with popular stories of Sudhana’s pilgrimage, the iconography of the Buddhist images on mirror O-0323 illustrates the theme of seeking enlightenment from the ritual approach formed by the Huayan and Esoteric fusion.

In sum, through a comparison with similar Buddhist images, the scene represented on mirror O-0323 can be identified as Vairocana Buddha preaching to a large entourage, including the boy-saint Sudhana and possibly a donor or a significant historical figure.

THE FUNCTION OF THE MIRROR

MIRROR O-0323 is clearly not a toilet article for daily use. It is instead one of those “transformed utilitarian objects” whose quotidian utility was altered to serve new and significant social and cultural functions.³⁵ The transformation process in this case involved its use in particular religious and ritual contexts, enhanced by the engraving of Buddhist images onto the reflective surface.

In recent decades a number of bronze mirrors, some engraved and some not, have been excavated from tombs and pagodas in China, and mirror O-0323 should be considered in conjunction with this growing body of material. In addition, bronze mirrors engraved with Buddhist images (called *kyōzō* 鏡像 in Japanese) also appeared in Japan and Korea.³⁶ A comprehensive study of the distribution and historic significance of these mirrors, and of their roles in the cultural exchanges in East Asia, is beyond the scope of this essay.³⁷ Here I shall merely ask some basic questions relevant to the understanding of mirror O-0323: Why were Buddhist images engraved onto the reflective surface of the mirror? And what was the cultural function of such mirrors?

In his provocative recent book, *Shaping the Lotus Sutra: Buddhist Visual Culture in Medieval Chinese Culture*, Eugene Wang advances the theory that the engraving of images onto bronze mirrors was mainly inspired by the mirror’s optical properties. At the beginning of the chapter on “Mirroring and Transformation,”³⁸ Wang makes a specific point about one optical property of the mirrors:

It should be noted that the mirror analogy is premised upon the optical properties of the convex bronze mirror, which differ markedly from those of modern flat-glass mirrors covered with a mercury amalgam. . . . It is for good reason that the convex mirror has the capacity to inspire associative thoughts about its reflection as a window onto a heightened plane of experience. One additional quality adds to its perceived otherness.³⁹

These optical properties inherent in the convex mirror may have facilitated the symbolic investment by medieval Chinese in this reflecting medium. Probably influenced by the convex mirror’s optical properties of gathering, condensing, and transforming the reflected visual field,

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*they believed that the mirror possessed the magical ability to display images other than the beholder of the mirror.*⁴⁰

Wang suggests that the convex surface of the mirror distorted the images, creating a notion of “otherness” that made mirrors special or magic; this, to him, explains why medieval Chinese carved pictures onto the mirror surface in order to invoke the divine presence of deities such as Buddhas and bodhisattvas.⁴¹ Mirror O-0323, however, raises some questions about this stimulating interpretation.

Apparently, Wang’s characterization of the optical properties of the mirrors was inspired by Wolfgang M. Zucker, whom he cites. In discussions of the convex mirror in Jan van Eyck’s famous painting *Marriage of Giovanni Arnolfini with Jeanne de Cenani*, Zucker commented as follows on the change from convex metal mirrors to glass mirrors in early modern Europe:

*Mirrors, in general, were valuable before the process of covering a plane glass with a mercury amalgam was introduced in the sixteenth century. This process was cheaper and also allowed large size. But the optical properties of the plane mirror are very different from those of the convex half sphere. It does not diminish the size of the object it reflects, but its scope is much more restricted. Faithfully it reproduces what lies within its field, but it does not gather and does not concentrate.*⁴²

Building on Zucker’s observation of the contrast between plane glass mirrors and convex metal mirrors, Wang elaborates on the optical qualities of the convex mirrors and applies Zucker’s ideas directly to medieval Chinese bronze mirrors.

But close scrutiny reveals that none of the mirrors that Wang illustrates in his article and book are significantly convex, be it the Water-Moon Avalokiteśvara (Ch. *Shuiyue Guanyin* 水月觀音) mirror in Seiryōji 清凉寺 in Kyoto (Japan),⁴³ the mirror that the wooden statue of Indra holds in its hand at Akishinodera 秋篠寺 in Nara,⁴⁴ or the mirror depicted on the east wall of Mogao Cave 61 at Dunhuang (Gansu) 甘肅敦煌莫高窟.⁴⁵ Even in the case of the rectangular mirrors depicted on the east and north ceiling slopes of Cave 31 at Dunhuang, which Wang had claimed in an earlier article to be convex,⁴⁶ but changed to “concave” in his book,⁴⁷ we are not sure if they are really convex.

In contradistinction to Wang, I would like to stress the fact that most Chinese (as well as Korean and Japanese) bronze mirrors were cast and their reflective surface is flat (or only slightly convex), while many European mirrors—whether made of copper, tin, or silver—were produced by hammering and are consequently much thinner and often convex, and sometimes, as Zucker emphasizes above, semispherical.⁴⁸ It is certainly true that during some periods in their history, Chinese bronze mirrors were cast in a slightly convex shape; this was particularly true from the Eastern Han (25–220 BCE) through the Six Dynasties (220–589 CE), as many examples in the Cotsen Collection attest.⁴⁹ Mirror O-0323, however, has a perfectly flat reflective surface, as do most specimens since the Tang dynasty, including, significantly, all known specimens with Buddhist carvings on them. In fact, the Song-dynasty scientist Shen Gua 沈括 (1031–1095 CE) stated in his *Mengxi bitan* 夢溪筆談 (*Dream Pool Essays*, 1088) that “later people” (presumably his contemporaries) had been accustomed to use flat mirrors. Even when they obtained ancient—slightly convex (*weitu* 微凸)—mirrors, they would sand the surface flat.⁵⁰ Convexity is simply not a significant optical quality of late medieval Chinese bronze mirrors. Even earlier on, the Chinese had no difficulty in producing large-size mirrors that were perfectly flat, as attested by a rectangular bronze mirror from the Western Han dynasty excavated at Wotuocun, Zibo (Shandong) 山東濰博窩托村, which measures 115.1 × 57.7 cm and weighs 56.5 kg.⁵¹

What made bronze mirrors magic and sacred in Chinese contexts, I think, was not the alienating convexity of their reflective surface, but, quite to the contrary, their inherent ability to reflect objects faithfully, which lent itself to drawing analogies with the human mind. In other words, mirrors were chosen to be ritual objects because of their utility as a metaphor for the understanding of the phenomenal world. In an insightful essay, “The Mirror of the Mind,” Paul Demiéville has examined the mirror metaphor and its antecedents in Chinese, Indian, and Western thought and pointed out the diverse uses of this metaphor. It is worth quoting his conclusion:

To some, reflections in a mirror serve to illustrate the unreality of the phenomenal world. To others, on the contrary, the clear mirror is like the absolute, reflecting back to man his ideal image. Or again, the mirror’s property of faithfully reflecting objects without being touched by them is

*compared to the detachment of the sage, who apprehends reality in an impersonal and immediate manner. There are in short the two aspects of the mirror, the one active, the other passive. For most thinkers, what is significant is the necessity of cleaning the mirror to bring back its clarity, and they liken this cleaning to the purification of the human spirit, which had to purge itself of passions in order to be able to reflect purity. The obscured mirror is then comparable to the impure spirit, which can only know the true in an imperfect and mediate way.*⁵²

The diversity of metaphorical uses of mirrors illustrates their cultural significance. The versatility of the mirror metaphor also reflects on mirror O-0323 with its multiple layers of meanings and symbolisms. We have seen that it combines the traditional Chinese motifs of the quest for immortality on the reverse side of the mirror, with the Buddhist images on the obverse; and within its Buddhist frame of reference, it refers to the doctrinal approaches to enlightenment in both the Huayan and the Esoteric traditions. The mirror thus may be said to embody the pervasive practice of religious syncretism under the Liao dynasty. Even the mirror’s five-character inscription has multiple connotations. There are, for instance, several possible translations of “*liangxin*” 兩心: It could be understood as “the minds of the multitude and the Buddha” (*zhongshengxin* 衆生心 and *foxin* 佛心),⁵³ but it could also mean “two hearts of the lovers,”⁵⁴ or “two souls of the deceased couple” buried together, as was the custom. Which of the different meanings and connotations applied depended on the context of usage. It was the context, not the canonical texts or the lexicographers, that produced the meaning.

The mirror metaphor was a metaphor that ancient people—whether Chinese or Indian, Buddhist or Taoist—lived by.⁵⁵ That is to say, the metaphor of the mirror structured some of the basic understandings of their users’ social and religious experience. The physical and social experience of using the mirror provided a device for teaching and understanding philosophical and religious ideas. A bronze mirror could thus become the object that embodied the metaphor.

In Buddhism, the mirror metaphor is especially prevalent. After surveying numerous passages concerning mirrors in Buddhist literature, Alex Wayman concluded that “it would not be possible to find another Buddhist metaphor-simile so enduring

through the vicissitudes of religious history, and so revelatory of Buddhist attitudes or instructive on how the educated Buddhist would structure his arguments on crucial issues of his religion and associated philosophies with a metaphor-simile.”⁵⁴ Perceived, in China, as a “religion of images” (*xiangjiao* 像教), Buddhism was especially apt to illustrate its religious doctrines through pictorial means. The engraving of Buddhist images onto a mirror, like other forms of Buddhist art, was an expression of religious teaching and understanding in pictorial language.

The time depth of such metaphorical use of objects in China remains incompletely explored. As Demiéville suggested in the aforementioned essay, scattered references in pre-Qin texts indicate that by the Warring States period, mirrors already carried some metaphorical associations, transcending their primary role as valuable luxury objects (see Mackenzie, this volume). In addition, from the first century CE, mirrors began to bear inscriptions and decorations with mystic connotations, referring to the activities of the transcendents (*xian* 仙) “who do not know old age, who drink from the Jade Spring when thirsty and eat jujube when hungry, and who drift under the heavens and roam over the Four Seas,” to quote just one example.⁵⁷ In the process of religious persuasion, aiming to make people (both oneself and others) believe or understand a religious practice such as seeking immortality, ritual objects such as mirrors and swords were of great potential usefulness as metaphorical devices, as is well documented in early and medieval Chinese literature.⁵⁸ In a recent book, Robert Ford Campany discusses the repertoire of religious and cultural practices that were devised in early medieval China for the purpose of “making transcendents”: avoiding grains, breathing exercises, intricate alchemical procedures, and so forth.⁵⁹ As a textual scholar, Campany does not include material objects in his discussion, but I am confident that we can add the use of mirrors in Taoist rituals to the list. By analogy, I think, the important role mirrors played as a metaphor in Buddhist approaches to enlightenment explains why Buddhist images were engraved onto the mirror surface.

Thus, mirror O-0323 could have been used as a votive offering, a relic, or an evil-averting amulet. Although its original contexts of usage and deposition are unknown to us, and we no longer know whether it was used to decorate a pagoda or a tomb, placed on an altar, deposited inside of Buddhist statues, or even held close as a personal item, one thing is certain: this mirror was revered as a sacred religious object.

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ACKNOWLEDGMENTS

I would like to thank Lyssa Stapleton and David Scott for their insights on the Cotsen collections, and Yen Chuan-Ying, Pai Shih-Ming, Lin Sheng-Chih, Dorothy Wong, Mario Poceski, and Michelle Wang for their help in identifying the Buddhist iconography on the mirror, and two anonymous reviewers for their suggestions. Needless to say, I am fully responsible for any error.

NOTES

1 Wei Daoru 2009: 30–33.

2 Another example of such practice is a votive bronze mirror excavated from the underground reliquary deposit at the Leifeng Pagoda 雷峰塔 in Hangzhou (Zhejiang 浙江杭州 (Zhejiang Sheng Wenwu Kaogu Yanjiusuo 2002: 188–191), on which the decorative motifs and inscription on the reverse side can be dated to the early Tang dynasty (618–907), while the engraved Buddhist images on its reflective side are datable to the Wuyue 吳越 kingdom (907–978). The Leifeng Pagoda was completed in 977 CE.

3 Sen 1999; Schulten 2005.

4 The text is erroneously read clockwise in v. 1: 120.

5 Chaoyang Beita Kaogu Kanchadui 1992; Wang Changchen et al. 2007: 77–79, pl. 57.2, 3.

6 For a new interpretation of *lingzhi* as "excrescences," see Company 2002: 27–28.

7 Liu Shujuan 1997: 81, fig. 67; also in Hebei Sheng Wenwu Yanjiusuo 1996: no. 223.

8 Liu Shujuan 1997: 81, fig. 68; also in Hebei Sheng Wenwu Yanjiusuo 1996: no. 224.

9 Hebei Sheng Wenwu Yanjiusuo 2001: 126–161.

10 See Frederic 1995: 46–47; Saunders 1960: 102–107; Lee 1999: 15–16. The Sanskrit reconstructions of this *mudrā* are controversial.

11 For comprehensive new studies of Huayan Buddhism, see chapters in Hamar, ed. 2007.

12 The *Avatamsakasūtra* was first translated into Chinese by the Indian monk Buddhahadra in 422 CE (T 278, 60 fascicles), and by the Khotanese monk Śikṣānanda in 699 CE (T 279, 80 fascicles), and again by Prajña (744–810?) in 798 (T 293, 40 fascicles). For the textual history of this *sūtra*, see Hamar 2007: 139–159.

13 Sickman and Soper 1971: 192; Gridley 1993: 61.

14 “Esoteric Buddhism” is also called “Tantric Buddhism.” For questioning the usage of the term “Esoteric Buddhism,” see Sharf 2002; McBride 2004; Orzech 2006.

15 Shanxi Sheng Wenwuju and Zhongguo Lishi Bowuguan 1991: color pl. 5, p. 6; pl. 7:39–47.

16 For the eight classes of the protectors of the world, see Frederic 1995: 276–282.

17 Several important monks in the Liao dynasty were versed in both Esoteric and Huayan traditions, and actively pursued a ritual approach formed by the fusion of both Esoteric and Huayan Buddhist traditions. See Wei Daoru 2009: 30–33; Lü Jianfu 1995: 472–489; Yan Yaozhong 1999: 82–94.

18 Sickman and Soper 1971: 443.

19 Granoff 1968–1969: 80–95, esp. 92–93; Pal 1972/1973; for the development of the “Eight Great Bodhisattvas” mandala in Dunhuang, see Liu Yongzeng 2009.

20 Steinhardt (1997: 109, 120–121) argues that the timber pagoda as a whole is a mandala. See also Gridley 1993: 65.

21 Leidy 2007.

22 Jin Shen 2004a: figs. 2–4, 8. For other gilded bronze sculptures, see Howard 1984: 13–16.

23 Chaoyang Beita Kaogu Kanchadui 1992; Wang Changchen et al. 2007: 63–67; 66, fig. 21.

24 Here I use the expanded definition of the term “mandala.” I am certainly aware of the stricter definition, which only includes two-dimensional diagrammatic representations of Buddhist universes. In Japanese art history, this term is also used loosely to include the third type. For a detailed discussion of the term “mandala,” see ten Grotenhuis 1999: 1–4.

25 Frederic 1995: 116.

26 Fontein 1967; Morimoto 1998; Li Fangyin 2002.

27 Wong 2007: 355.

28 Howard 2001: 63–66.

29 Howard et al. 2006: 397.

30 Xu 1998.

31 Howard et al. 2006: 399–310.

32 The “Chinese” look does not automatically mean that these historic figures were necessarily Chinese. The aforementioned Sengqie was a monk from Central Asia, but as Lothar von Falkenhausen (1998: 415) points out, his images lack any “foreign” physical features.

33 Jin Shen 2004b: figs. 1, 4, 8, 9.

34 Chaoyang Beita Kaogu Kanchadui 1992; Wang Changchen et al. 2007: 69–72, 73, fig. 21; pls. 25, 47A.

35 Basalla 1982: 183–201.

36 For Japanese and Korean engraved Buddhist mirrors and bibliographies, see Naniwada 1990; Yamato Bunkakan 2006.

37 Professor Mimi H. Yiengpruksawan (personal communication, 2009) is preparing such a study in a wider East Asian context.

38 This chapter was first published in part as Wang 2004.

39 Wang 2005a: 247–248

40 Wang 2005a: 248

41 Wang 2005a: 247–255.

42 Zucker 1962: 243.

43 Wang 2005a: 251, fig. 5.5.

44 Wang 2005a: 268, fig. 5.14.

45 Wang 2005a: 309, fig. 5.35.

46 Wang 2004: 512. See also Wang 2005a: 263, 272–273, figs. 5.11, 5.17.

47 Wang 2005a: 263, caption for fig. 5.11b.

48 Although both fabrication methods were practiced in both China and Europe, casting is characteristic for bronze working in ancient China, as hammering is for Europe. Commenting on metalworking in the Chinese Bronze Age, Robert W. Bagley states that “[w]hat sets the Chinese metal industry apart is its reliance on casting to make objects that elsewhere were made by hammering.” (Bagley 1987: 17).

Bagley is commenting on the situation in the Bronze Age, but it is equally true for bronze mirror production even in late medieval China.

49 Dong Yawei 2000.

50 Shen Gua, Hu Daojing (ed.) 1987: 630; Dong Yawei 2000: 42.

51 Li Xueqin ed. 1986: pls. 187–188, p. 67.

52 Demiéville 1987: 33.

53 Shen 2006: 60.

54 “*Liangxin tong*” was a common phrase in Tang and Song love poems.

55 For the importance of metaphor, see Lakoff and Johnson 1980.

56 Wayman 1974.

57 See Cahill in v. 1: 38–41; Cahill 1986; Brashier 1995 and this volume.

58 Fukunaga 1973.

59 Company 2009.

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The Technical Analysis of Chinese Mirrors

*Of refined shape and divine fusing. Lustrous material and excellent workmanship.
Like a pearl emerging from its container. It resembles the moon stopping in the void.
On your eyebrows, draw in kingfisher blue. Opposite your cheeks, apply rouge.
Your fine white silk window and embroidered curtains
are all contained in its reflection.*

THIS PANEGYRIC, inscribed on the Sui (581–618) or early Tang (618–906) mirror O-0363 (see v. 1: PL. 83), is not an idle boast. The mirror is indeed of lustrous material and excellent workmanship; cast in a ternary copper-tin-lead alloy of exactly the right composition (70% copper, 25% tin, and 4% lead), its reflection would have been bright and undiminished. By the time it was cast, around the turn of the seventh century CE, bronze mirrors had been in existence in China for some 2,700 years. They were made across numerous cultures, periods, and geographical locations, and they continued to develop into the eighteenth century CE.

The earliest evidence of scholarly interest in Chinese bronze mirrors dates from the final years of the Northern Song period (960–1126 CE), when the Emperor Huizong 徽宗 (r. 1100–1025 CE) commissioned a group of scholars under the editorial direction of Wang Fu 王黼 to document the imperial collection of antiquities (O'Donoghue 1990: 27). The resulting catalogue described nearly 900 objects, of which just over 100 were mirrors. Mirrors have since been extensively studied by Chinese and Japanese antiquarians as part of their engagement with the material heritage of the past. Since the twentieth century, this research has become greatly enriched by scientifically documented archaeological discoveries.

The interest of Western scientists in Chinese and Japanese mirrors was first spurred during the nineteenth century by investigations

into the so-called magic mirrors (Brewster 1832; Ayrton and Perry 1878–1879; Bertin and Duboscq 1880). These mirrors reflect patterns from their polished surfaces when illuminated by a strong light, preferably sunlight, the pattern having no discernible origin, as the polished surface appears perfectly even, with no perturbations. Between 1870 and 1875, several articles puzzling over this issue appeared in the scientific journal *Nature*. A brassworker had shown in 1877 that a heavily stamped brass, when polished from the unworked side, produced a series of reflections representing the image on the reverse, but his evidence was largely ignored. More than one hundred years later, the debate is still going on (Chen Yuyun et al. 1987; Saints and Tomlin 1996), especially as the Chinese mirrors are not made by stamping but by casting. In 2006, Berry advanced the theory that the projected image results from pre-focal ray deviation phenomena. The image intensity can be explained by a Laplacian analysis of the height function of the relief. For patterns consisting of steps, this theory predicts a characteristic effect, confirmed by observation. The image of each step exhibits a bright line on the low side and a dark line on the high side. Laplacian optical analysis of a magic mirror image indicates that steps on the reflecting surface are about 400 nm high and laterally smoothed by about 0.5 mm, which would be visually unobservable, but enough for the mirror to produce the

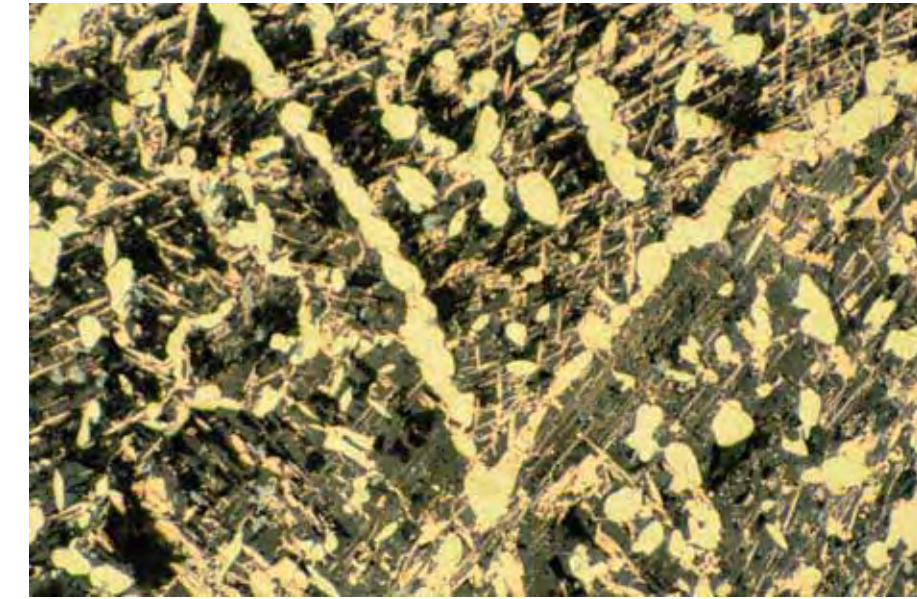


FIGURE 2

patterned effect, perhaps from differential effects due to casting or subsequent finishing processes (Berry 2006).

The current engagement with Chinese mirrors by scholars outside of China is based in the early archaeological and art historical studies by Umehara (1943), Karlbeck (1926), Karlgren (1941), Collins (1934), and Koop (1924). Some of the mirrors in these early works are now considered to be fakes or reproductions (Lai 2006). Indeed, collectors have always had to be wary of problems with the authenticity of some of their mirrors (Yetts 1931; Rupert and Todd 1935; Bulling and Drew 1971–1972; Nakano 1994). These difficulties still exist today, and the present essay discusses them with specific reference to the approximately 95 mirrors in the Cotsen Collection. Many previous studies of Chinese bronze mirrors provide technical information that can help us understand the composition, patina, corrosion, casting, and shaping of the mirrors. My own technical studies on the Cotsen mirrors, the results of which are introduced below, add to this body of evidence.

EARLY MIRRORS

THE EARLIEST KNOWN CHINESE MIRROR was excavated in Guinan county (Qinghai) 青海貴南, in 1977, and is dated to about 2000 BCE (Zhu Shoukang and He Tangkun 1993: 51). Early examples tend to be of modest size, 4 to 8 cm in diameter, and from 1 to 3 mm in thickness. A number of them from excavated Bronze Age contexts from Xinjiang 新疆 are discussed by Mei (2000). For example, a cast-bronze mirror from the Tianshanbeilu 天山北路 cemetery

in Hami 哈密 (Xinjiang) (Mei 2000: FIG. 2.10), dated between 1900 AND 1100 BCE, measures 5.6 cm in diameter and is quite thin, 2 to 3 mm, while another mirror dated to 1400–1000 BCE, from the Wupu 五堡 cemetery, also in Hami, is 5 cm in diameter (Mei 2000: FIG. 2.11).

The earliest mirror in the Cotsen Collection (O-0803; see v. 1: PL. 2), 11.4 cm in diameter and 2 mm thick, is thought to be from the Qijia 齊家 culture, dated to 2100–1700 BCE, at the inception of the Chinese Bronze Age (for further discussion, see Jaang, this volume). As suggested by Fitzgerald-Huber (1995), Qijia was connected to contemporaneous cultures on the Eurasian steppes, such as the Andronovo culture. The star-shaped designs as seen on the Cotsen example are comparable to design elements from the Andronovo culture. The discovery of several excavated mirrors with handles from Xinjiang also suggests these cultural connections, since handled mirrors became increasingly common in Central and Western Eurasia from the first millennium BCE and are associated with several nomadic peoples (Jacobson 1995: 182). The Cotsen Collection, as well, has a later handled mirror stylistically related to bronzes from the northern steppes (O-0885; see v. 1: PL. 61). Elsewhere in China, handles on mirrors are not seen until the Song dynasty.

The Andronovo culture, sometimes called the Sintashta-Petrovka complex, represents a collection of western Siberian steppe peoples from 2300 TO 1000 BCE. It had connections with the Tianshanbeilu culture in Xinjiang (Mei 2000: 72), suggesting that Chinese bronze technology may have been influenced by the eastward extension of Andronovo influence. Stone-mold casting and

FIGURE 2:
Photomicrograph of the Qinghai mirror from the sixth century CE, revealing alpha-islands in a groundmass of slightly corroded beta-phase, showing that the mirror has been quenched from about 650 °C. Chinese mirrors were not quenched; therefore this is an exotic import. Etched in alcoholic ferric chloride. Magnification × 450.



FIGURE 1

the use of arsenical copper, widely seen over the Eurasian steppes during the second millennium BCE, are also seen in the early metallurgy of Xinjiang, the Gansu Corridor, and adjacent regions.

Despite the early use of arsenical copper and ternary alloys of copper-arsenic-lead in Xinjiang, the evidence suggests that Xinjiang mirrors were already made in copper-tin-lead alloys, much like later Chinese examples. Two mirrors from the Hami 哈密 region were cast in tin bronze, with 22 to 23 percent tin (Mei 2000: 35), implying that mirror craftsmen were already intentionally selecting specific alloys for mirror production that were out of the ordinary range of copper alloys used for other artifacts. The very low lead content is a significant compositional similarity between the Qijia mirror in the Cotsen Collection and those from Xinjiang. Mirror O-0803 has 75.2 percent copper, 18.6 percent tin, and 0.3 percent lead, showing that higher tin content alloys without lead additions were already in use. It also has two small holes near one edge, perhaps for the attachment of a handle, a feature often seen in early mirrors, such as those from Aidinghu, Turfan (Xinjiang) 新疆吐鲁番艾丁湖, and Banfanggou, Ürümqi (Xinjiang) 新疆乌鲁木齐板房沟 (illustrated in Mei 2000: FIG. 3.14). Such single or double holes near the perimeter of mirrors rapidly disappear in later Chinese cultures. Instead, mirrors with central bosses and a hole for suspension from a cord, already common in these early periods, became enduringly predominant.

The possible use of stone-mold technology is suggested by the difficulty the craftsman had in producing the circular bands around the outer rim, which are awkward to carve in stone in a smooth circle but much easier to produce in clay. This would also conform to what is known about the casting technology from this region before the more general use of ceramic piece-molds.

COMPOSITIONAL STUDIES

THE COMPOSITIONAL DATA for the mirrors in the Cotsen Collection analyzed in the course of the present study are tabulated in the appendix to this chapter. Many previous analyses of Chinese mirrors show that ternary copper-tin-lead alloys predominate. There is less information available concerning trace elemental composition or lead isotope studies. This is partially due to the difficulties in sampling complete mirrors, as owners may be reluctant to allow destructive sampling of these precious objects. As a consequence, X-ray fluorescence analysis (XRF), a noninvasive technique, is often used to obtain elemental data, but the technique has inherent limitations as a surface analytical tool, and it cannot reliably determine the content of trace elements such as nickel, antimony, iron, zinc, silver, manganese, and cobalt. Nevertheless, we can obtain a broad overview of compositional trends over time.

The ideal range of alloy composition for Chinese mirrors is about 26 percent tin, 3 percent lead, and 71 percent copper, with a variation of plus or minus 10 percent for each element. In both very early and later periods, there may be much deviation from this, as the above-mentioned Qijia mirror illustrates. A Shang-period mirror in the Cotsen Collection (O-0427; see v. 1: PL. 3) is made in a low-tin leaded bronze with some arsenic content. Analysis gave the following results: 75.3 percent copper, 11.2 percent lead, 1.4 percent silver, 3.7 percent tin, and 7.1 percent arsenic. Arsenic-containing alloys with more lead than tin are anomalous, because with this amount of tin, the alloy color would be yellow-gray and not white at all. Analysis of Shang-period bronzes from Hanzhong 汉中 (Shaanxi province) shows that a circular disk was made in an alloy with 18 percent tin, but many bronzes of different types contained high amounts of lead (Mei et al. 2009). The mirror examined here would fit well into this general range of Shang bronzes, contrasting with later products. During the Warring States period (ca. 450–221 BCE), for example, lead is usually kept low, between 3 and 5 percent.

FIGURE 1: Mirror from Qinghai province, dated to the sixth century CE. Made in an alloy of 21% tin and 79% copper, with no lead. Photograph courtesy of TK Asian Antiquities, and Melanie Roy, Director of Research.

An unusual Late Bronze Age mirror in the Cotsen Collection (O-0201; see v. 1: PL. 57) also has more lead content than tin, and the composition, of roughly 60 percent copper, 14 percent tin, and 19 percent lead, places the alloy in the low-tin, heavily leaded category. Stylistically, this mirror belongs to the northern border zone of China, and it may represent a continuing tradition going back to Early Bronze Age roots in this area.¹

Because of the extensive contacts with nomadic tribes, Xinjiang, Gansu, and Qinghai are the areas where foreign influences are most apparent in bronze fabrication. As a case in point, much later than the specimens discussed so far, the mirror shown in FIG. 1, from Qinghai province, whose precise find-spot is unknown but which has been dated by association with other material to the sixth century CE (Roy, personal communication, 2010), is entirely non-Chinese in its metallurgy. Microstructural investigation (FIG. 2) showed that it is a beta-quenched bronze. Bronzes, typically of 21 to 22 percent tin with no lead, were quenched from between 700 and 600 °C, from the beta-phase region of the copper-tin binary system (Scott 1991). As far as we know from present data, this is the only beta-quenched bronze found on Chinese territory, and it must have been an exotic import.

Composition is directly related to microstructure. In low-tin bronzes, the most common phases are the alpha phase, which can absorb between 5 and 14 percent of tin, depending on the casting and cooling conditions, and the (alpha + delta) eutectoid phase, a blue-gray constituent, which tends to be brittle (Scott 1991). As the amount of the eutectoid phase increases, so does the brittleness of the resulting structure, which is why the high-tin bronzes, those with 21 to 28 percent tin, often used in ancient China, will shatter easily if dropped. The reason for the general distinction between low-tin and high-tin alloys is that they tend to be metallographically distinct (Hanson and Pell-Walpole 1951). Low-tin bronzes usually consist of alpha grains, with an infill of (alpha + delta) eutectoid, as they cool from a higher-temperature zone between liquidus and solidus that is principally alpha. A eutectoid phase results from the decomposition of a higher-temperature solid phase in the system, which then breaks down on cooling into two separate phases. It is called a *eutectoid* transformation to distinguish it from a *eutectic*, which arises from the breakdown of a liquid at higher temperatures into two discrete phases. The eutectoid transformation in tin bronzes commonly invokes the change from a higher-temperature alpha solid solution into a mixture of

FIGURE 3: Etched photomicrograph of the microstructure of the Tang mirror, revealing fine Widmanstätten precipitation of the (alpha + delta) eutectoid phase with a scatter of small lead globules and two larger areas of porosity. Magnification × 450. Etched in alcoholic ferric chloride.

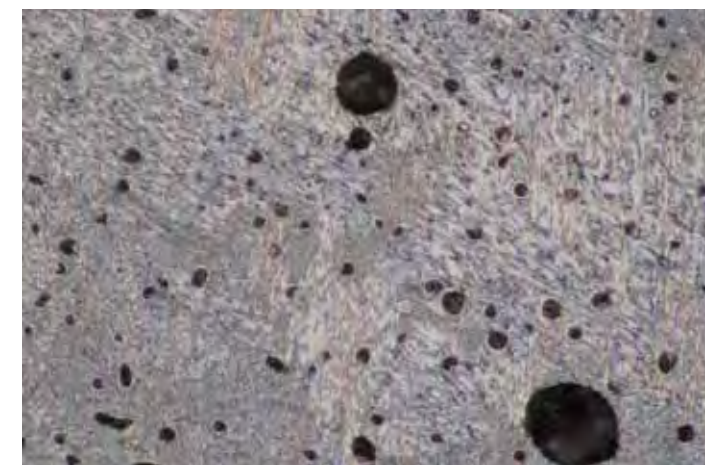


FIGURE 3

the alpha phase with an infilling of the (alpha + delta) eutectoid. If the bronzes are slowly cooled, this higher-temperature alpha region can accommodate more tin, so that less of the eutectoid phase is evident. The alpha phase can absorb about 14 percent of tin, but in normal casting practice, there is usually some eutectoid phase present even in bronzes with 5 to 8 percent of tin. In the cast condition, these alloys usually undergo dendritic segregation. FIG. 24 is a good illustration of the appearance of a dendritic casting, visible with a hand lens in many bronzes on polished or naturally etched surfaces. The dendrites are frequently snowflake-like crystals interlocked in the cast solid. High-tin bronzes, on the other hand, cool from the higher-temperature beta region. Dendritic segregation is generally absent in these alloys, as they solidify from the higher-temperature phases of the beta or gamma form, which are often in the form of grains rather than dendrites. This lack of dendritic segregation is of great benefit, because it produces an alloy with a finely dispersed matrix of the (alpha + delta) eutectoid with an infill of small lead globules, since lead is not soluble in the bronze matrix at room temperature.

We can contrast the microstructure of the Qinghai mirror shown in FIG. 2 with that of the classic high-tin bronze of the Tang dynasty mirrors in the Cotsen Collection. One specimen (O-0134; see v. 1: PL. 100), thought to date from the eighth century CE, is made in a copper-tin-lead alloy, which has cooled below the 520 °C isothermal of the copper-tin system before solidifying. In other words, it was cast under more usual conditions and was not subject to rapid cooling from higher temperatures.

The microstructure of this mirror (FIG. 3) represents the archetypical Chinese high-tin leaded bronze mirror morphology, consisting of a finely interlocked Widmanstätten precipitation of the

(alpha + delta) eutectoid, arising from the decomposition of the higher-temperature beta solid. As the beta phase cools, it breaks down into a fine mixture of alpha + (alpha + delta), which crystallize along certain planes of the former grains; the process results in a finely interlocked precipitate is known as the Widmanstätten precipitation. It is quite possible that Chinese mirrors could have cooled quite quickly in the molds, but we know from their structures that they were never quenched products. The Widmanstätten precipitation ensures that the lead globules are finely dispersed and that the surface will take a highly reflective finish on polishing. To some extent, this is a natural crystallization phenomenon associated with the compositions used for the Chinese mirrors, and will occur on casting and cooling of the alloy. The skill of the metalsmith was to obtain a high-quality casting, in which porosity was kept to a minimum and the fine structure of the intermeshed phases assured.

From the Warring States period, bronze mirrors were in wide use in southern China, while during the Han period (206 BCE–220 CE), they became popular throughout the entire country (Chou 2000). After the Song dynasty (960–1279 CE), the composition and design of mirrors changed substantially, and eventually bronze was replaced by brass, the alloy of copper and zinc (Kerr 1990), and then by glass during the middle of the Qing dynasty (1644–1911 CE). During this immense time period, many changes and developments took place both in technology and alloy compositions, although the basic concept of a cast-bronze mirror providing a reflective surface and a decorated back remained intact over the millennia.

The constraints on casting a relatively thin flan of metal meant that efforts had to be made to purify the starting materials as much as possible to avoid surface imperfections or defective castings, which would ruin the reflective surface on polishing. In the Cotsen Collection, the most common minor element detected by X-ray fluorescence spectroscopy is arsenic, which appears as a trace impurity in several mirrors. The prevalence of arsenic as a significant minor component of bronze alloys is revealed by the analyses given by Chase et al. (1995) for Eastern Zhou ritual bronzes in the Freer Gallery of Art, Smithsonian Institution, most of which contain arsenic. In fact, arsenic is very beneficial, assisting with the whiteness of the color of the mirrors and acting as a deoxidizer, improving the soundness of the cast products. But arsenic is not necessarily present at all in Bronze Age alloys from other regions of the world.

The Chinese metalworkers presumably either had access to copper ores that contained some arsenic or were deliberately adding arsenical ores to the smelt. Aside from the Shang-dynasty specimen O-0427 (see v. 1: PL. 3)—which, as we have seen, contains 7.1 percent arsenic—the only mirrors in the Cotsen Collection to show substantial amounts of arsenic include two from the Warring States, O-0424 and O-0360 (see v. 1: PLS. 5, 8), with 5.9 and 6.0 percent, respectively, and the already-mentioned unusual Late Bronze Age specimen from the Northern Zone, O-0201 (see v. 1: PL. 57), with 6.9 percent. These percentages represent significant amounts of arsenic. In the bronze technology of later periods, arsenic was no longer commonly utilized. This could be due to changes in the types of ores utilized for the smelting of copper, or to deliberate control over the sources and exploitation of metals.

In the literature of the Western Han (206 BCE–8 CE), three different terms are used to indicate the purity of the copper used: *sanlian* 三鍊, *jiulian* 九鍊, and *bailian* 百鍊. These can be translated, respectively, as “threefold,” “ninefold,” and “hundredfold” refinings (Zhu Shoukang and He Tangkun 1993: 52). By fire-refining the molten copper, impurities such as sulfur, iron, arsenic, and antimony would be sequentially reduced, resulting in a very pure copper which was used for the highest-quality mirrors. The copper was then alloyed with lead and tin, which made it easy to cast. The alloy, when polished, was silver-white in color. The alloying process is alluded to in the inscription on the Three Kingdoms-period (220–265 CE) mirror O-0133 in the Cotsen Collection (v. 1: PL. 74), which reads: “I made a bright mirror/ In seclusion refining the three metals.” Indeed, nondestructive XRF analysis of this mirror reveals that the copper, lead, and tin used were all carefully selected and refined in order to produce a final casting that was free from defects formed from dross or inclusions. The only additional elements found by XRF were traces of arsenic, nickel, and silver, none of these in amounts that would diminish the quality of the casting.

During most of the Chinese Bronze Age, from about 2000 BCE to 770 BCE, the bronze alloys used for making mirrors might be variable in composition and included not only the high-tin bronze alloys with 22 to 27 percent tin, but also those technically defined as low-tin bronzes, with tin contents from about 5 to 14 percent, examples of which have already been discussed. This kind of bronze composition was essentially the same as that used for bronze vessels and ornaments. The color of these mirrors is golden

rather than white, as the addition of tin to copper changes the color from the salmon-red of pure copper to the golden hue of bronze; only with higher tin additions, usually from 20 to 28 percent tin, does the alloy turn to a pale silver-white or gray-white color.

By the later part of the Zhou dynasty, and especially from around 400 BCE onward, high-tin bronzes with lead additions became prevalent. They remained so until alpha-brass mirrors with about 20 percent zinc content appeared during the Song dynasty. Some Qing-dynasty mirrors can have zinc contents even higher than this, above 40 percent zinc, which places them in the beta-brass category of the copper-zinc alloy system, meaning that the alloy is a two-phase mixture of grains of beta in a matrix of alpha. One such mirror made of beta-brass is in the collections of the Victoria and Albert Museum (Kerr 1990: 103, pl. 89).

MIRRORS WITH SIGNIFICANT ZINC CONTENT

THE PRESENCE OF ZINC in ancient mirror alloys is potentially useful in establishing a *terminus post quem*, the earliest point in time at which zinc may have been used in the manufacture of Chinese bronze mirrors. According to the analyses of mirrors in the Carter Collection carried out by Christman (2000: 358), this would have been during the Late Tang period, around 900 CE, although zinc does not become common until sometime around 1100–1200 CE.

Ming dynasty (1368–1644) examples from the Carter Collection were found to contain over 10 percent of zinc (Chou [ed.] 2000: 370), while several from the Song and Jin (1115–1234) dynasties contained over 20 percent of lead (Chou [ed.] 2000: 381–384). The increase in the percentage of cheap lead would have cut the cost of production while impairing the quality of the polished surface of the mirror. But the presence of substantial amounts of zinc during the Tang dynasty does not accord with the chronology of zinc use proposed by Zhou Weirong (2007), and Tang-style mirrors with high zinc contents may well be later reproductions.

Whenever analysis detects small amounts of zinc in alloys of objects alleged to date much earlier than the Tang period, this indicates that the objects in question must be either later copies or modern reproductions. It is true that very early finds of brass artifacts are reported from Late Neolithic China, which have no later parallels. A brass flake and brass tube were found from the Yangshao 仰韶 culture site at Jiangzhai 姜寨 in Lintong 臨潼

(Shaanxi), dated to 4100–3600 BCE, and two fragments of brass cones from the Longshan culture site at Sanlihe 三里河, Jiao Xian 膠縣 (Shandong), dated to 2300–1800 BCE (Zhou 2007: 182). But these anomalous developments should be seen, not as proof of an exceedingly early brass-working tradition in China, but rather as evidence for the lack of continuity between early experimental metallurgy and the culturally embedded concept of alloying that followed in later periods, during which the technology of fabrication of copper-zinc alloys, by all indications, was completely lost. In later antiquity up to the Tang dynasty, there is no evidence whatever for the use of zinc in China. According to Zhou (2007: 182), the earliest indigenous brass began in the tenth century CE, during the transition from the Five Dynasties (907–960 CE) to the Northern Song. From the eleventh century CE onward, brass became better known. By the Jiajing 嘉靖 period (1521–1567 CE) of the Ming dynasty, the zinc content of brass ranged from 10 to 20 percent, and by the Wanli 萬曆 period (1573–1620 CE) it had risen to over 30 percent, often with no tin content. This development explains the occurrence of beta-brass mirrors in late-period Chinese mirror alloys, along with a variety of other alloy types. Because of the universal absence of zinc in mirror alloys before the Five Dynasties period, we generally are very suspicious of any analyses that show traces of zinc, and these suspicions are usually confirmed by metallographic studies on the mirrors concerned: they are later copies or reproductions. For example, mirror O-0292 in the Cotsen Collection (see v. 1: PL. 130), a later reproduction cast in Japan, was made in an alloy of 77 percent copper, 3 percent tin, 7.3 percent lead, and 7.8 percent zinc. Its inscription confirms its recent manufacture.

He Tangkun (1990) undertook a compositional study of Song-period mirrors, which he divides into four groups: those with high tin and moderate lead (the classic mirror composition); low tin and high lead (the most common Song group, a typical example being a mirror with phoenix and handle comprising 70% copper, 7.9% tin, and 26.2% lead); high copper, low tin, and low lead (a typical example being a Huzhou 湖州 bronze mirror with 85.3% copper, 9.5% tin, and 5.1% lead); and lastly mirrors with copper, tin, lead, and zinc (an example being a Huzhou plain patterned mirror with 67.9% copper, 13% tin, 7.6% lead, and 8.2% zinc). The Song/Jin mirror O-0751 (see v. 1: PL. 125) belongs to the first group here, that of the classic mirror composition. Chou (2000: 2) states that some of the mirrors from later periods, such as the

Song, Jin, Yuan (1279–1368), and Ming, often employed a low-tin/high-lead alloy which enabled a lower melting-point alloy and a greater ease of flow in the molten state, but with a concomitant loss of accuracy in detail due to greater shrinkage when the bronze solidified. The alloys with higher lead content, as seen in these Song examples, cannot reproduce fine detail and will also suffer from increased corrosion, as the corrosion resistance of the higher-tin alloys is lost. With lower tin and lead contents, the color is yellow rather than white, although the material is less brittle and not so easily broken.

THE TERNARY PHASE DIAGRAM AND ALLOY MELTING POINTS

OVER THE PERIOD from the Warring States to the Song, the composition for the high-quality mirrors changed relatively little, hovering around 69 to 72 percent copper, 22 to 25 percent tin, and 3 to 6 percent lead. By referring to the ternary phase diagram (FIG. 4) for the copper-tin-lead alloys, we can see that the liquidus temperatures of these alloys is in the range of 800–850 °C, which greatly facilitates the casting process.

Remarkably, very similar compositions were used in the Roman period for Roman bronze mirrors (for a general background see Lloyd-Morgan 1981). One specimen in the British Museum (GR 1814, 7-4, 1063) consists of 69.5 percent copper, 22.8 percent tin, and 6.8 percent lead (Meeks 1993a: 66); a Ptolemaic ring, also in the British Museum (GR 1930, 7-15.3), was cast in an alloy of 69.2 percent copper, 24.6 percent tin, and 4.5 percent lead (Meeks 1993a: 66). Looking at the ternary alloy phase diagram, we can see that increasing the lead content and decreasing the amount of tin raises the liquidus of the resulting alloy; and with increasing lead concentrations, not only is there a danger that pools of the immiscible lead would form in the cast bronze alloy, rather than being finely dispersed, but the resulting color tends toward a silver-gray hue rather than a silver-white. On the other hand, increasing the amount of tin to around 40 percent and reducing the percentage of copper, while leaving the lead content at around 10 percent, produces lower melting-point alloys, but only at great expense in terms of tin usage; it also increases the brittleness of the alloy still further and creates no improvement in the color of the resulting alloy. Reducing the tin content to lower levels, such as 12 percent,

produces an alloy of golden yellow color, and the whiteness is lost. We can therefore explain why ancient metalsmiths arrived at the compositional parameters for their high-quality ternary alloy: it was the one perfectly adapted for making a silver-colored bronze mirror.

In Europe, bell-metal is often thought of as a high-tin alloy, but the alloys used for casting Chinese bells are much more variable in lead content, containing 5 to 15 percent tin and 1 to 22 percent lead (So 1995: 432). The high-tin bronze used for mirrors is too brittle for large bells and would be liable to crack when struck, so the tin content of bells is usually much less than that used for mirrors.

The overall analytical spread of the lead, tin, and copper contents of the Cotsen mirrors is shown on the ternary Cu-Sn-Pb diagram in FIG. 5. The cluster of green dots toward the 25 percent tin area on the right-hand side of the diagram is in agreement with previous analytical studies.

MIRRORS MADE OF IRON

IT IS INTERESTING TO NOTE that mirrors made of iron were a development of the Late Eastern Han (25–220 CE) and of the Three Kingdoms period. For the most part, the central knobs of these iron mirrors were hemispherical and decorated principally with Phoenix patterns, often inlaid in silver or gold. Unfortunately, very few of these survive, due to the extensive corrosion of the iron (Guoli Gugong Bowuyuan 1971). We can assume that these mirrors were made in a high-carbon white cast iron, which was the prevalent technology in China. None have been examined metallurgically, to the best of my knowledge.

THE CASTING OF MIRRORS

THE PREDOMINANT TECHNOLOGY for casting mirrors in ancient China involved the use of ceramic piece-molds, employing the same kind of piece-mold approach to fabrication used for the Chinese bronze vessels. Mirrors before the Han dynasty were made in ceramic piece-molds, apart from some very early examples. By the Han, the knowledge of lost-wax casting became more prevalent, and both techniques were employed for making decorative metalwork. The use of ceramic piece-molds for mirror production continued until the period of the Sui and Tang dynasties, when

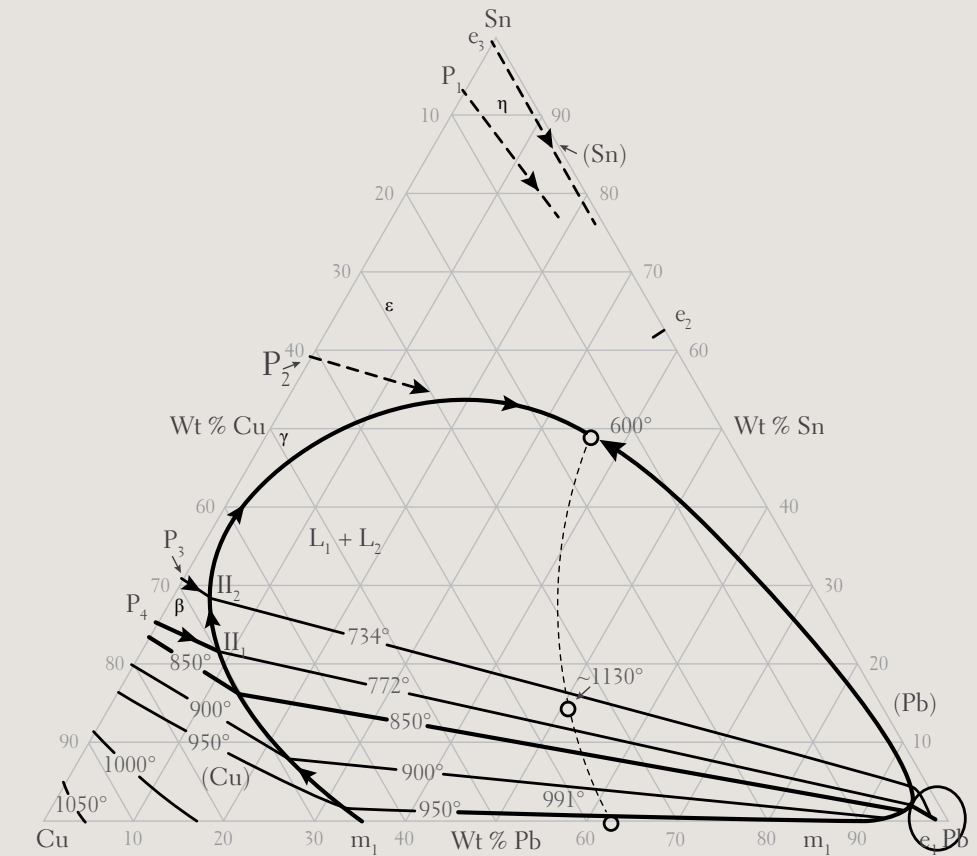


FIGURE 4

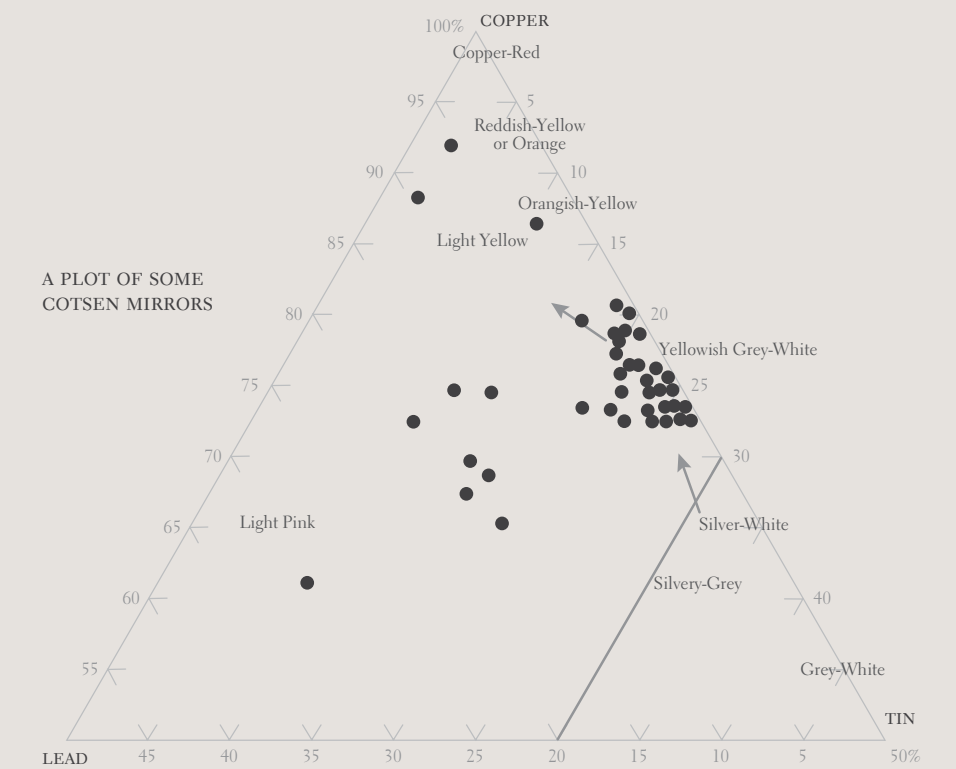


FIGURE 5

FIGURE 4: Diagram of a ternary liquidus for the copper-tin-lead system showing alloy liquidus curves. The Chinese mirrors have liquidus temperatures from 850 to 800 °C. Chinese mirrors of the high-tin variety have liquidus values close to the arrow on the P4 tie-line shown on the diagram. After Scott 1991.

FIGURE 5: Plot of ternary compositions of the mirrors in the Cotsen Collection. Most of the mirrors conform to the classic compositional field where the majority of green dots cluster. The spread of other green dots across the diagram are generally from mirrors of later date, very early date, or unusual composition. Diagram by the author.

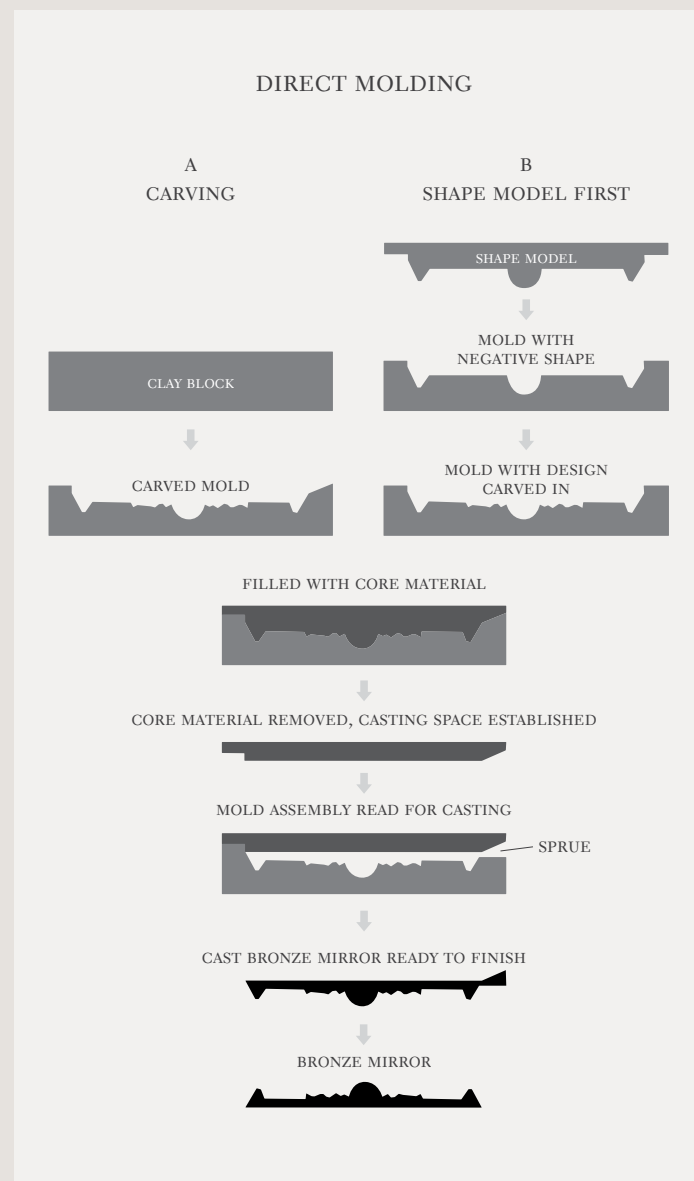


FIGURE 6

FIGURE 6: Diagram of possible stages in the direct molding of a mirror. After Murakami et al. 2003.

FIGURE 7: Schematic drawing of ceramic piece-mold technique of casting Chinese bronze mirrors. After Murakami et al. 2003.

FIGURE 8: Schematic drawing of fabrication steps for making a Chinese mirror from the lost-wax process. After Murakami et al. 2003.

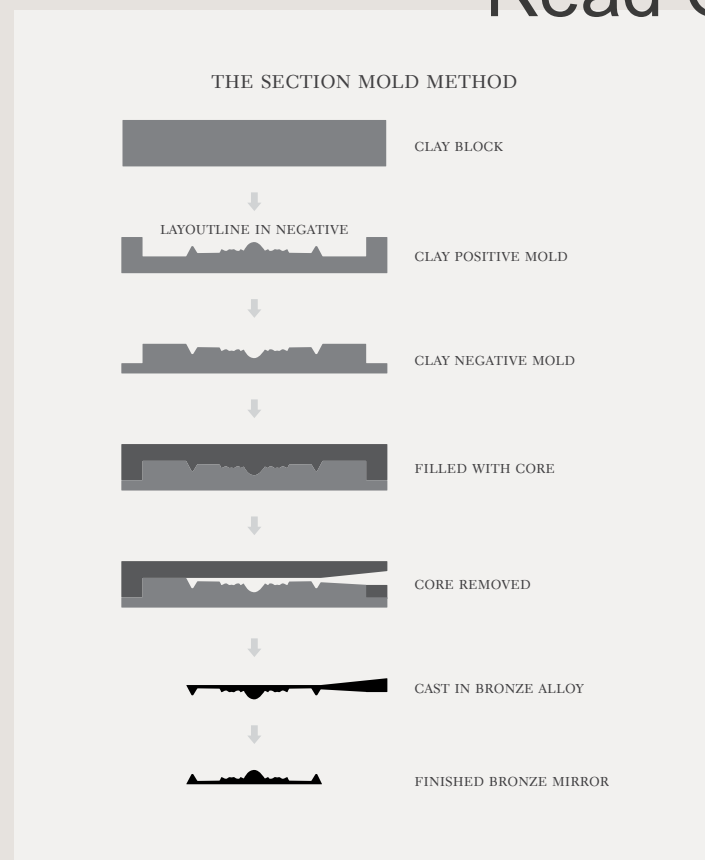


FIGURE 7

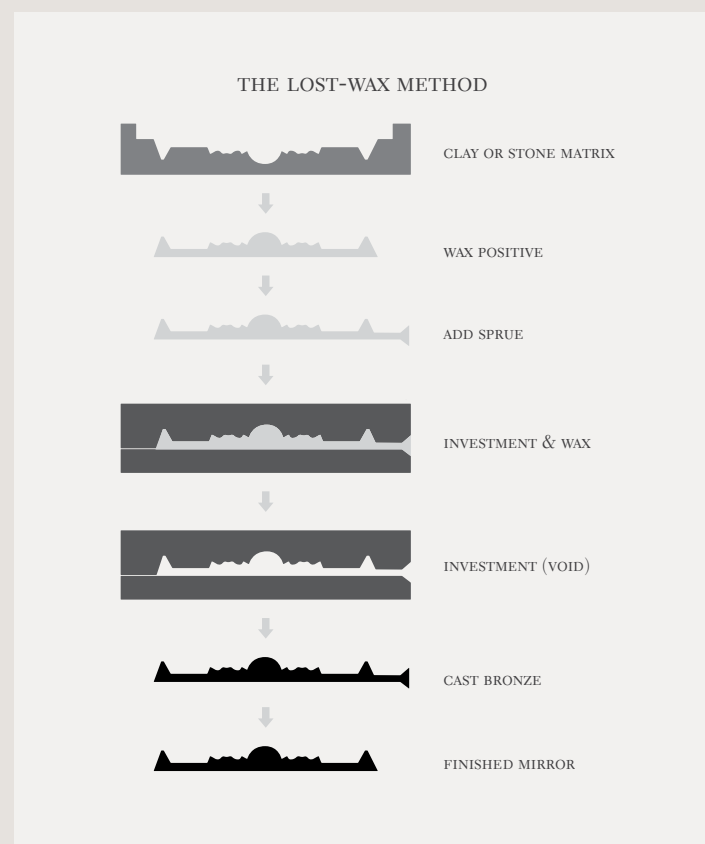


FIGURE 8

many of the mirrors are not made in piece-molds at all, but by lost-wax casting (Nakano 1994: 17). Visual inspection alone is often insufficient for discerning the technology used for making a mirror, but there are a number of general characteristics evident from visual and microscopic studies that can help us make a determination (Christman 2000: 99).

For molds, the following methods of production are possible:

- (1) The clay mold was taken from an original model, made in wood or clay, which was then fired and assembled to form a two-piece mold in which the bronze alloy was cast.
- (2) The clay mold was impressed with designs into the soft clay, which was then baked and assembled to form a two-piece mold.
- (3) A combination of techniques could be employed in which the original model was used to create a design, with additional elements added in the form of stamps or incisions into the clay. The molds were then fired and the bronze cast.
- (4) It is known that stone molds were sometimes used during the Han dynasty (Zhu and He 1993: 52). If stone was used, the design of the mirror had to be carved into the surface of the stone before casting.
- (5) Stone molds could be reused a number of times before being ruined by the casting process. Baked clay molds, by contrast, could be used only once, although the model from which the design was taken could be used to produce more clay molds for continued production.
- (6) Some mirrors were made in two-part construction, usually consisting of a flat bronze sheet for the mirror itself, which could be cast or worked into shape, and inlaid into a decorative cast back, often of openwork design. After the introduction of lost-wax casting, a number of possible additional techniques became available for making mirrors.
- (7) The mirror was modeled directly in wax, which was then invested in clay; the wax was then molten out and the clay baked dry before pouring in the molten bronze.
- (8) Sprig molds, suggested by Christman (2000: 100), could be used to make wax shapes pressed into a shallow clay or stone relief, which could then be attached to a wax blank. Two Tang-dynasty mirrors in the Carter Collection

have identical pairs of phoenixes and floral decoration on lobed borders, strongly suggestive of such a technique (Chou [ed.] 2000: no. 66a, b).

- (9) The wax components could be modeled or made in parts and assembled in the wax to create mirrors with different borders or decoration.
- (10) The wax model was formed entirely by using a master-mold to make the wax form, from which the bronze mirror was cast.

The use of lost-wax casting allowed the craftsman to design mirrors with three-dimensional scenes, which was not possible in a baked clay mold if the mold was made by impression from a wood or other original form. This is because the original master had to be pulled away from the clay mold casing without breakage, which limited the extent to which undercuts were possible in the design. Therefore, most mirrors made before the Sui and Tang periods could not have undercut designs, and this is generally found to be the case. FIG. 6 illustrates some of the steps in the direct molding of a mirror from a carved block. The carved block in this case, on the left-hand side of the diagram, could have been made of stone as well as of clay.

The use of ceramic molds, and some of the ways in which they could be shaped to produce the mirror, are shown in FIG. 7.

By the use of the lost-wax process, a number of copies could easily be produced from a master form, or by the use of stamps made in wax from an original model, or by direct carving in the wax. Possible steps in this process are shown in FIG. 8.

Once lost-wax casting began to be used for mirrors, there was no limit to the extent to which undercuts could be incorporated in the design. Some of the little animal figures seen on the animal and grape designs of the Tang period (as in mirrors O-0234, O-0742, O-0753, and O-0874; see v. 1: PLS. 95–99), must have been modeled in wax, because they could not have been produced in clay molds.

There are differences in the gradation of the grape pattern, traces of adhesive seepage around the cut-out designs, and scrape marks where such seepages were trimmed from around the base of the beast motif in mirrors examined by Nakano (1994: 16), who also states that wax models could have been made by first pouring wax into a blank earthenware or ceramic mold, and then decorating the blank with incised or applied motifs. An example in

the Cotsen Collection is the large Buddhist votive mirror O-0323 (see v. 1: PLS. 120–124; for a detailed study, see Guolong Lai, this volume), which has a number of applied wax circular decorative elements added to the back.

After the Song dynasty, the impression method was sometimes used, in which a mold was made by pressing a finished mirror into soft clay before firing the clay (Nakano 1994: 17). This method is said to have been widely used during the Song and Jin dynasties to make usable reproductions of classical mirrors, as well as in Japan, to produce copies of Chinese mirrors (Nakano 1994: 17). A possible example in the Cotsen Collection of a later copy of a Han original is mirror O-0233 (see v. 1: PL. 77), which contains a little zinc, but is otherwise perfectly acceptable; it is not a modern imitation.

FINISHING AND DECORATION OF BRONZE MIRRORS

THE FINISHING AND REFINISHING of bronze mirrors, especially of the reflective surface, was an important part of mirror technology. Even with a high-tin bronze, mirrors could still tarnish in houses with high humidity conditions, and so were often in need of repolishing. The portrait, dated 1799, of Xue Chengji 薛承基 by Hua Guan 華冠 (dates unknown) (Nanjing Bowuyuan 1982: pl. 49; see FIG. 9), depicts mirror polishing during the Qing period. In the words of Rose Kerr (1990: 90):

*Metal mirrors, particularly those with a lower tin content, needed to be repolished at regular intervals. An idea of how frequently mirrors required treatment is given in the popular late Ming novel, *Jinping mei* (The Golden Lotus). In one chapter, great excitement is caused in the hero's household by the arrival of an itinerant mirror-polisher. The heroine exclaims that her mirror is so worn that for the last two days it has been impossible to see anything clearly in it. A collection of large and small octagonal mirrors and a rectangular dressing-mirror are presented to the mirror-polisher. Fixing them onto his portable work-stool he "uses mercury" to refurbish them, and in a very short time has them bright and shining new again. The young ladies are then able to admire their reflections which are "as clear as an autumn pool.*



FIGURE 9

The tool used by such a mirror-polisher could well have been made of fired pottery. A thirteenth-century CE tomb in southwest China (Zhu and He 1993; the authors do not provide further provenience information) yielded a thin disk, 26 cm in diameter, with three circular grooves on the back, which may have served to secure it to a workbench. Its grinding surface was worn smooth through repeated use and bore traces of blackish powder and silver smears from the polishing process. It remains unverified, however, whether this substance is mercury, which is referred to in the Ming novel as a polishing agent. There has been considerable discussion concerning the presence or absence of mercury in Chinese bronze mirrors. Analytical studies rarely show the presence of mercury in the patina of Chinese mirrors, even though mercury and tin are frequently mentioned in early texts in association with their finish. According to the *Huainanzi* 淮南子, written under the patronage of Marquis Liu An 劉安 of Huainan 淮南 (179–122 BCE), a polishing compound called *xuanxi* 玄錫 was used to finish the surface of mirrors. The text reads:

After being rubbed with xuanxi, the mirror is so bright that it can reflect even a single hair of an eyebrow (Huainanzi, "Xiuwu" 淮南子脩務訓, [Huainanzi jiaoshi 19.1966]; translation after Zhu Shoukang and He Tangkun 1993: 52).

According to the *Duoneng bishi* 多能郵事, written by Liu Ji 劉基 in the early Ming period, this *xuanxi* consists of one part tin, one part mercury, six parts alum, and one part deerhorn ash (Zhu Shoukang and He Tangkun 1993: 57). It is a grayish-white powder that gradually changes to black. Experiments by Chen Yuyun et al. (1987) showed that after treatment with this mixture, a thin silvery surface is formed on the bronze. Exactly how this effect was achieved has been clarified by Meeks (1988a, 1988b, 1993a, 1993b), who found that, when mercury and tin are mixed together, a very sluggish reaction occurs at room temperature, and the mixture must be heated to form a mercury-tin amalgam; heating at 200–250 °C produces a pasty gamma-phase HgSn₆. The gamma phase decomposes at 214 °C, and mercury can be driven off by heating above 357 °C with tin diffusion into the substrate. Further details of the binary mercury-tin equilibrium diagram are explained in Meeks (1993b). A thin layer of nu intermetallic compound develops at the outer surface over a thick layer of epsilon intermetallic compound; if the surface of the object is heated above 520 °C, a layer of (alpha + delta) eutectoid phase develops under this layer and is contiguous with the copper substrate. Yet very little evidence exists to support the use of tinned surfaces made by applying a mercury-tin amalgam to the mirrors, and this applies equally to the mirrors of the Cotsen Collection. The collection has a few mirrors that show a trace of mercury when analyzed by X-ray fluorescence spectrometry, but three of these are of modern manufacture (they are discussed further below). Hence, the presence of mercury by itself is not a sufficient argument for the authentic use of *xuanxi*. The only authentic mirror in the collection to show a trace of mercury on analysis is the double-tier mirror O-0424 from the Warring States period (see v. 1: PL. 5).

Meeks (1993a) discovered that a cold, mechanical application of a mercury-tin amalgam to the polished surface of a 25-percent tin bronze did produce a subtle surface effect. The treatment involved rubbing the polished bronze mirror with a small crushed pellet of the amalgam. After two minutes, the treated surface

appeared more noticeably silver-colored. Optical microscopy revealed that a silver-colored film obscured all but a faint trace of the morphology of the underlying eutectoid microstructure. Examination of the surface with a scanning electron microscope confirmed that this layer is very thin, perhaps 10 to 100 nm, and appears to consist of tin with some mercury. Meeks thinks that this extremely thin coating may result from localized heating of the amalgam when it is rubbed onto the surface of the mirror; the heating breaks down the gamma compound into its constituent parts, allowing the tin to bond to the surface. If that is the case, it is possible that mercury could have been slowly lost by volatilization over the centuries, although usually in metallurgical processes one would expect to find evidence for mercury within surface layers. Conceivably, thus, *xuanxi* could have been used to enhance the silvery finish of the Chinese mirrors as claimed in the *Huainanzi*, and this may explain the presence of mercury on mirror O-0424. But other chemical treatments could also be used to improve the silver color: when a mirror was rubbed with vinegar, for example, this would selectively dissolve a little copper from the outer surface of the mirror, increasing the silvery color as the percentage of the delta phase at the surface.

EARLY ATTEMPTS TO CHARACTERIZE MIRROR PATINAS

BY THE SONG DYNASTY, connoisseurs made a general distinction between four types of surface finish found on mirrors (Zhu and He 1993). These were *heiqigu* 黑漆古 (“black lacquer antique”), *lüqigu* 綠漆古 (“green lacquer antique”), *shuiyinqi* 水銀漆 (“quicksilver white”), and *qianbai* 鉛白 (“lead-gray”). An excellent example of the “black lacquer antique” is mirror O-0246 (see v. 1: PL. 69) from the Eastern Han period. Its lustrous and water-repellent glassy surface is an enduring example of the mysteries of this type of patina. Whether its black surface is an effect of burial or of deliberate patination is unclear, but it is a prominent feature of many Chinese bronze mirrors and highly prized by collectors. Parts of the surface of this mirror are so well cast that no finishing or smoothing was necessary. FIG. 10 is a photomicrograph of part of one figure decorating the surface. The slight surface undulations are a direct imprint of the mold surface.



FIGURE 10

For circular design elements, parts of the surface are polished after casting, as the detail from mirror O-0246 shows in FIG. 11. Here a special hollow tool that would stay clear of the central boss was used with an abrasive, creating the circular striations seen on the surface, which are limited to these areas of the design.

An example of the “green lacquer antique” is mirror O-0349 (see v. 1: PL. 72) from the Eastern Han, which, like the black-surfaced example O-0246, is also quite enriched in tin compounds on the outer surfaces, but which here is predominantly green in color. Its inscription, like many others, refers to the “three metals,” and indeed this mirror is an example of the classic mirror composition in a casting of excellent quality.

The “quicksilver white” patina is well illustrated by the Tang mirror O-0234 (see v. 1: PL. 95), which is cast in an alloy of 68 percent copper, 25 percent tin, and about 3 percent lead. The copper-tin intermetallic eutectoid phase accounts for the brilliant silvery hue of this mirror.

FIGURE 10:
Surface detail of mirror O-0246.
Photomicrograph by the author.

FIGURE 11:
Detail of mirror O-0246, showing
the circular striations left from
polishing after casting in the areas
of surrounding the dimples.
Photomicrograph by the author.



FIGURE 11

THE GRINDING OF MIRRORS TO SHAPE

THE POLISHED SURFACE could be made flat during grinding, but the movement of the hands and arms would often result in a slightly convex mirror finish. From the Han to the Tang dynasties, in particular, mirrors were often purposefully ground to achieve a convex surface so that the mirror could provide a wider-angle reflection—a virtual image.

Some mirrors required a considerable amount of finishing work: the plain reflecting surface would need to be extensively smoothed and polished. Any casting sprues or vents would need to be cut away from the finished mirror, and evidence of their presence removed by grinding and smoothing. The decorated surface was often chased with a chisel or ground and polished with abrasives. The polishers first used fine-grained stones and pieces of charcoal to grind the mirror and then, reputedly, applied *xuanxi*. However, surface examination of several high-quality castings in the Cotsen



FIGURE 12

Collection shows that in many cases (as in mirror O-0246, mentioned above) the as-cast surface was so good that no further surface finishing was carried out in much of the surface decoration.

The Song-dynasty scholar Shen Gua 沈括 (1031–1095 CE) wrote in his *Mengxi bitan* 夢溪筆談:

When the ancients cast jian, they would make the big ones with a flat surface, the small ones with a convex surface. When the front side is convex, it is possible to have the entire face reflected in the mirror, for a convex surface shrinks the image allowing the face in its entirety to be reflected. These mirrors were designed so that if the image was smaller than the reflecting surface, the shape of the surface would enlarge it; or if the image was too large, the slope would shrink it. Later generations lacked the skill to produce this kind of mirror. Some people, upon obtaining this kind of mirror, ground the surface until it was flat, much like the famous musician Shi Kuang 師曠 who played when he was not supposed to, to the detriment of his music (Mengxi bitan, “Qiwu” [Mengxi bitan jiaozheng 19.630]; translation after Guoli Cugong Bowuyuan 1971: 93, transcription changed to pinyin)

FIGURE 12:
Detail of mirror O-0360.
Magnification of inlay on the
outer rim shows small pieces
of malachite and turquoise
decoration. Photomicrograph
by the author.

DECORATIVE TECHNIQUES

THE NONREFLECTING REAR SURFACES of all mirrors in the Cotsen Collection are decorated. Techniques used for decoration and coating include gilding, silvering, plating, lacquering, painting, and inlay. Several double-tier mirrors are also part of the collection. These are relatively heavy, complex mirrors with a plain reflecting surface riveted, soldered, or glued to the decorated back. This type of mirror first evolved, according to Dohrenwend (1964: 80), during the Spring and Autumn period (770–450 BCE), though the specimens in the Cotsen Collection date no earlier than the Warring States. The inlay materials used are malachite, copper, gold, turquoise, jade, shell, mother-of-pearl, a variety of other minerals, and glass paste. Glass arrived late in China, the earliest archaeological evidence coming from the second half of the first millennium BCE (Brill et al. 1991). Common adhesives were animal glue and plant gums. For example, Fourier-transform infrared spectroscopy (FTIR), applied by Costello to a double-tier mirror in the collections of the Harvard University Art Museums (HUAM 1943.52.155), showed that the adhesive used was a natural gum, while a sheet metal overlay on a Tang dynasty mirror (HUAM 1943.52.158) was affixed with a mixture of animal glue and flour paste (Costello 2005).

An interesting example is the double-tier mirror O-0360 (see v. 1: PL. 8), dated to the Warring States period. The circular outer band of the decorated back is inlaid in small pieces of malachite and turquoise, partially obscured by subsequent corrosion of the bronze of the mirror itself, producing cuprite, malachite, and, in some places, azurite. A detail of the inlay is shown in FIG. 12.

The flat polished disk of the front of this mirror can be detached from the back, which reveals excellently preserved textile pseudomorphs adhering to the rear surface of the decorated back plate. The direction of the weave of the remaining textile morphology is the same across the entire back side of the surface, showing that the decorated back had a silk textile inner surface between it and the flat front plate (FIG. 13). In exposed areas of the design, the textile has completely degraded and been lost, while the copper corrosion products developing on the interior of the back have preserved the textile remnants.

FIG. 13 shows that this textile was a plain weave, with multiple strands of silk fibers forming both the warp and weft. The blue material seen in this figure is made of crystals of azurite, which



FIGURE 13



FIGURE 14



FIGURE 15



FIGURE 16

often form where the carbon dioxide content of the environment is elevated for one reason or another, as in areas that are poorly accessible and hidden under corroding bronze, as is the case here. Because it is often not possible to separate the two parts of these double-tier mirrors, there may be other examples where textiles have been used as a decorative element but have not yet been discovered. To my knowledge, the present example is the first one to be published.

While on the subject of textiles, it is worth commenting on the extraordinary mirror O-0186 (see v. 1: PL. 54), also from the Warring States period, which has been published by Mackenzie (1999; see also Mackenzie, this volume). Its decoration is in embroidered silk, which, if genuine, would be highly exceptional. The design is in a coarse chain-stitch, with a figure in a red robe depicted in juxtaposition with several other figures (for an interpretation of this decoration, see Hanmo Zhang, this volume). Use of red and yellowish-gold pigments painted on the surface after the embroidery had been done makes the design of the scene easy to read. Mackenzie notes:

[I]f the decoration because of its sophistication suggests a date as late as the Han period, the form of the mirror suggests an earlier date. The back has a simple loop in the center and a raised concentric ridge about one centimetre in from the edge. Plain backed mirrors like this are not uncommon in the fourth century BCE in Chu tombs and may originally have been painted, or as this mirror suggests, embellished with a textile design. (Mackenzie 1999: pp).

Technical examination found nothing to contradict Mackenzie's assessment, and this mirror remains a possible illustration of another kind of surface design, which in most cases would have been subject to biodeterioration and dissolution. It is also possible that this is an example of later reuse of a plain mirror. The improbably early radiocarbon date of 3497±20 B.P. (calibrated age 1883–1754 BC) obtained on the silk hints at the possibility of problems with its authenticity (Lyssa Stapleton, personal communication, 2011).

Textiles may also have been used to create patterns in molds or wax models which were subsequently faithfully reproduced in the casting. Some of these fine textile- or feather-related patterns are to be seen in many Warring States-period mirror designs (Bulling 1955). The problem of how to create them has been addressed by Maryon (1963), who examined an interwoven dragon motif on a mirror of Shouzhou 壽州 type from the Warring States period in the Royal Ontario Museum (933.12.18). Maryon suggests this pattern was made from spun threads, probably wool, slightly stiffened in gum. These threads were dipped in molten wax or lacquer to form the background design which, when completed, was pressed into the clay form to produce raised textile-related designs on the mirror surface. Intricate surface designs could certainly have been made by such a technique. To illustrate this, FIG. 14 presents a photomicrograph of mirror O-0460 (see v. 1: PL. 56). It is easy to visualize the animal figure as a cut-out in wax applied to the surface of a hardened textile backing, which was then used to create a ceramic mold. The protruding wax animal form would make a deeper depression in the clay, which would then be reproduced as an elevated feature on the mirror, as we see in this case.

Careful examination of mirror O-0792 (see v. 1: PL. 90), from the Tang dynasty, shows that it is made in a high-tin bronze with a small amount of lead and a trace of arsenic, but the front is of hollow construction, as a worked silver plate has been inset into the back of the mirror, which has then been gilded, probably with mercury amalgam gilding. The examination of this decorated back found a small tear on the silver surface, showing that the silver sheet was mechanically attached to the otherwise plain back and that a hollow exists between the silver and the bronze, as can be seen in FIG. 15. These silver-inlaid mirrors, gilded with lion and bird decoration with fine ring-matting background, can be dated on the basis of their similarity to specimens excavated from the tomb of Wei Meimei 韋美美 in the eastern suburbs of Xi'an, dated to 731 CE (Hu Lingui et al. 1992). Multi-lobed examples such as this mirror are more numerous than round forms, as the lobed design was fashionable under the Tang.

Some two-part mirrors of hollow construction have backs that are completely gilded, including the edges of the disk into which the front reflecting part is set. One Warring States-period example is mirror O-0245 (see v. 1: PL. 43), where extensive remains of mineralized wood can be seen on the surface.

Appearances can be deceptive. Mirror O-0308 (see v. 1: PL. 91), from the Tang dynasty, appears to be gilded upon visual inspection, but it is in fact silvered by application of a silver amalgam to the cast-bronze mirror, which creates the illusion of an embossed golden surface panel. This is merely an imitation of a double-tier mirror with an inlaid embossed sheet. The mercury-amalgam silvered surface presents a golden appearance because the silver has tarnished, forming a thin film of acanthite (silver sulfide), creating an interference film of a yellow hue.

The finely painted mirror O-0322 (see v. 1: PL. 131) has a fairly convincing metallic composition, although it is considered a modern piece in the catalogue. The decoration is similar in concept to square mirrors of the Tang, decorated in the *pingtuo* 平脱 (a term also known by its Japanese pronunciation as *heidatsu*) technique in which delicate designs of birds and flowers are cut out and embedded in a lacquered surface (Yen 2005: 5). This mirror itself, which was broken across the center and repaired before being painted, may well be authentic, but the painted decoration has been analyzed and shows the presence of soap-like constituents, suggesting a forgery. It is possible, however, that these components represent decomposition by-products resulting from the interaction of paints and binding media; similar metal soaps have been identified from paintings in different contexts. A definitive answer requires further research.

Mirror O-0422 (see v. 1: PL. 50), from the Warring States/Western Han transition, a thin casting made in the classic mirror composition, has also been skillfully painted. The design has been painted in vermilion and malachite, as was confirmed by X-ray diffraction analysis of a tiny chip of paint from one edge.

The use of mother-of-pearl, turquoise fragments, and amber is shown in the Tang mirror O-0649 (see v. 1: PL. 106; for more discussion, see Charlotte Horlyck, this volume, pp. 160–169). The blue-green mineral fragments were confirmed as turquoise by X-ray diffraction. The shell inlay work has been very skillfully incised to produce portraits of the figures represented on this decorated back (FIG. 16).

Another interesting inlaid example, mirror O-0832 (see v. 1: PL. 80), dates from the Northern and Southern Dynasties period or slightly later; it utilizes a number of different techniques and

FIGURE 13: Detail of mirror O-0360. Preserved textile of silk multi-strand plain-weave, pseudomorphs on the rear of the back plate show that the original decorative scheme incorporated a textile interlayer. Photomicrograph by the author.

FIGURE 14: Mirror O-0460. Photomicrograph showing probable use of stiffened textile design over which wax or cut-out figures are then applied before creating the ceramic mold. Magnification × 25. Photomicrograph by the author.

FIGURE 15: Detail of mirror O-0792 showing detail of fine repoussé work and the hollow under the silver sheet applied to the mirror. Photomicrograph by the author.

FIGURE 16: Fine incised decoration in the shell inlay work of mirror O-0649 has been used to create these fine portraits of the main figures, adhered in a mineral matrix, with turquoise fragments and amber glass paste. Photomicrograph by the author.



FIGURE 17



FIGURE 18



FIGURE 19

materials to achieve the inlaid design. Some of the inlays, in what could be described as an intaglio technique, are of minerals or glass inlay, such as the creamy-gray-colored one shown in FIG. 17, which is made of glass. Some of the inlaid designs are made of gold leaf on a decayed organic base, as illustrated in FIG. 18.

One of the most interesting inlays is the glass paste material that contains randomly distributed flecks of gold within the glass. The gold flecks in this material are still vivid today and represent a sophisticated decorative use of gold for this time (FIG. 19). Conventionally, early Chinese techniques of decoration are said to have included *luodian* 螺鈿 (inlaid shell; also known in Japanese pronunciation as *raden*) and the already-mentioned *pingtuo* (silver and gold sheet inlay), while the Japanese are credited with developing *makie* 蒔絵, “sprinkled illustrations” of gold filings, or *hiramakie* 平蒔絵, with the appearance of flat gold, often associated with work in lacquer (*qi* 漆, *J. urushi*). But mirror O-0832 exhibits a very well-preserved sprinkled-gold glass-inlay technique, showing that it was already in use in China by the mid-first millennium CE. The use of gold foil in China goes back to the Shang period, but it is hard to find comparable examples of fine, sprinkled gold decoration in other examples of Chinese art from the period during which this mirror was made; perhaps this glass was an import.

Bronze mirrors with decorative glass intaglio are uncommon. From the late Warring States period, two such specimens were excavated from a tomb near the site of the Eastern Zhou royal palace in Luoyang city in 1992 (Luoyang Shi Wenwu Gongzuodui 1999: 9, color pl. 1); they are now in the collection of the Luoyang Museum. The better-preserved of the two features ornamentation of hooks in the shape of the Chinese character *shan* 山; it measures 14.5 cm in diameter and has eighteen blue and white glass beads with dark

blue eyes inlaid into the back surface. A recent study by Gao Xisheng and Yang Guoqing (2007) revealed another mirror from Luoyang, containing inlaid glass beads with gold leaf wrapped around them. Examples of this kind of glass decoration have not been found outside the Luoyang area. Mirror O-0832 is much later in date and may show that such techniques of decoration had been used in mirror production over a long period in different cultural settings.

Electron microprobe analysis was carried out on a tiny sliver of light gray glass from one of the glass intaglios of mirror O-0832. The weathering of this glass sample was severe, as can be seen in the backscattered electron view of the polished surface shown in FIG. 20. The bright area, which is uncrazed, is the only remaining region of sound glass. The exterior zone is heavily leached in alkalis, as the following analytical totals reveal. In TABLE 1, Areas 1, 2, and 3 represent the composition of the uncorroded glass, and Area 4 is taken from the darker rim of corroded glass, where

SiO ₂	69.7	69.6	69.2	72.7	55.0
Al ₂ O ₃	2.56	2.63	2.59	2.45	2.13
FeO	0.69	0.68	0.71	0.72	0.62
CaO	5.58	5.69	5.78	5.56	2.95
MgO	0.82	0.84	0.84	0.72	1.27
BaO	nd	nd	nd	nd	9.74
CuO	0.14	0.19	0.18	0.14	2.95
PbO	0.62	0.58	0.56	0.45	15.0
Na ₂ O	19.52	19.03	19.28	0.11	7.53
K ₂ O	0.62	0.59	0.60	0.25	4.05
Total	100.28	99.81	99.77	83.18	99.65

TABLE 1: ELECTRON MICROPROBE DATA FOR LIGHT GREY GLASS FROM MIRROR O-0832.

extensive loss of sodium and some losses of lead and potassium have occurred; they have been replaced by chlorine, due to the formation of chloride salts. Corrosion has not affected the brighter region shown in FIG. 20, and very good analytical totals were obtained from this glass. The composition of a typical Chinese eye-bead from the late Warring States period is shown for comparison in TABLE 1. Chinese glasses are characterized by unique compositional characteristics, being high in both barium and lead. These components are absent in the pale gray glass analyzed here, indicating that this glass is likely to have been imported. During the Warring States to the Han dynasty, from about the fifth century BCE to the early third century CE, glass was extensively imported to China from regions farther to the west (Brill et al. 1991: 26). However, Mesopotamian glass usually has higher concentrations of magnesium, calcium, or potassium than those found in mirror O-0832: the composition would be atypical for a Mesopotamian origin (Moorey 1999: 211). Many early glasses, such as those of the Sasanian period (224–651 CE) of Persia, roughly contemporaneous with mirror O-0832, were made with plant ash and have high levels of potassium and magnesium as a result (Brill 1999, vol. 1: 85–87); from this we may conclude that this glass is not from the Sasanian cultural area either. In fact, this low-magnesium, low-potassium glass prevailed in the Mediterranean area and continental Europe during the Roman and Byzantine periods (Shortland et al. 2006), whereas plant-ash glass is commonly found east of the Euphrates. XRF analysis of the central blue glass bead showed the presence of barium; this component is therefore of Chinese fabrication. It turns out that pieces of glass of different origins have been put together to make the multicolored inlays with which this mirror was adorned.

FIGURE 20: Backscattered electron microprobe image for the light gray glass from mirror O-0832. The bright area in the center of the photomicrograph is uncorroded glass. Photomicrograph by the author.

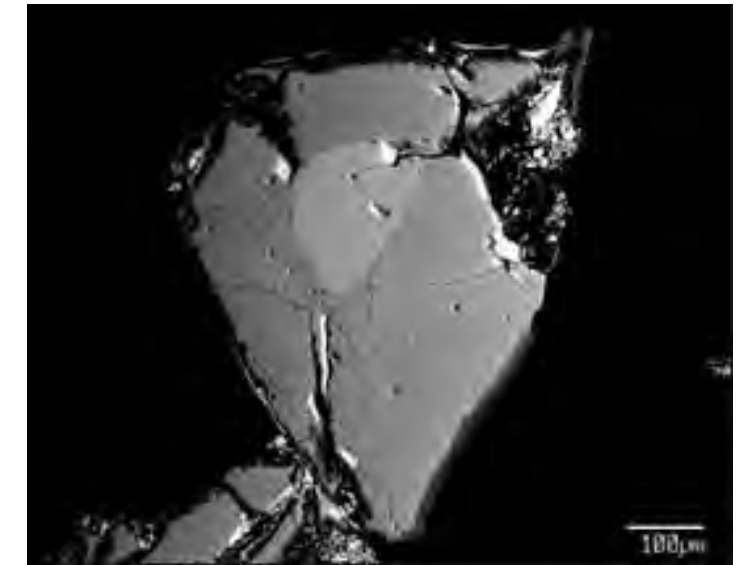


FIGURE 20

The bright area to the center of the photomicrograph in FIG. 20 is the area from which the first three sets of analytical data were taken.

Lacquered mirrors were also being produced from an early period. Chinese lacquer was made from the sap of a variety of trees, commonly *Rhus vernicifera*, and has been in use in China since the Neolithic. A famous vermilion lacquered wooden bowl found at the site of Hemudu 何姆渡 in Yuyao 余姚 (Zhejiang) in 1978 has been dated to around 5000 BCE (Wan et al. 2007). Urushi lacquer, principally urushiol, is naturally catalyzed at high humidity, by the enzyme laccase, into a complex of polysaccharide and polymerized urushiol that is of extraordinary chemical stability (Kumanotani 1995). The survival of the urushi lacquer coating on the Warring States-period mirror O-0185 (see v.1: PLS. 44–45) is a testament to its stability. Usually, organic coatings become badly degraded when they come in contact with cupric ions, which emanate from bronze, yet the adhesion of the lacquer film to the bronze of mirror O-0185 is still excellent and shows no sign of degradation.

Upon examination, the silver-inlaid design of mirror O-0879 (see v. 1: PL. 109) revealed unusual fabrication techniques. The inlaid design in silver, which imitates aspects of Persian artistry, has been accentuated visually by contrast with a black lacquered background, set into the recess on the reverse of the mirror. The lacquer surface is hard and uneven and could not be sampled without risking damage to the mirror. X-ray fluorescence analysis showed that the lacquer is colored with iron sulfides or oxides that are nonmagnetic. There are copper sulfides on the contiguous bronze surface, a feature not commonly encountered in corrosion studies of this collection.

FIGURE 17: Decayed glass inlay in mirror O-0832. Photomicrograph by the author.

FIGURE 18: Detail of mirror O-0832. Fragments of gold leaf remain on this decayed fill where most of the gold has been lost. Adjacent to this, we can see the glass paste with gold-leaf-scattered inlay. Photomicrograph by the author.

FIGURE 19: Detail of mirror O-0832, showing flakes of gold in the glass inlay. Photomicrograph by the author.

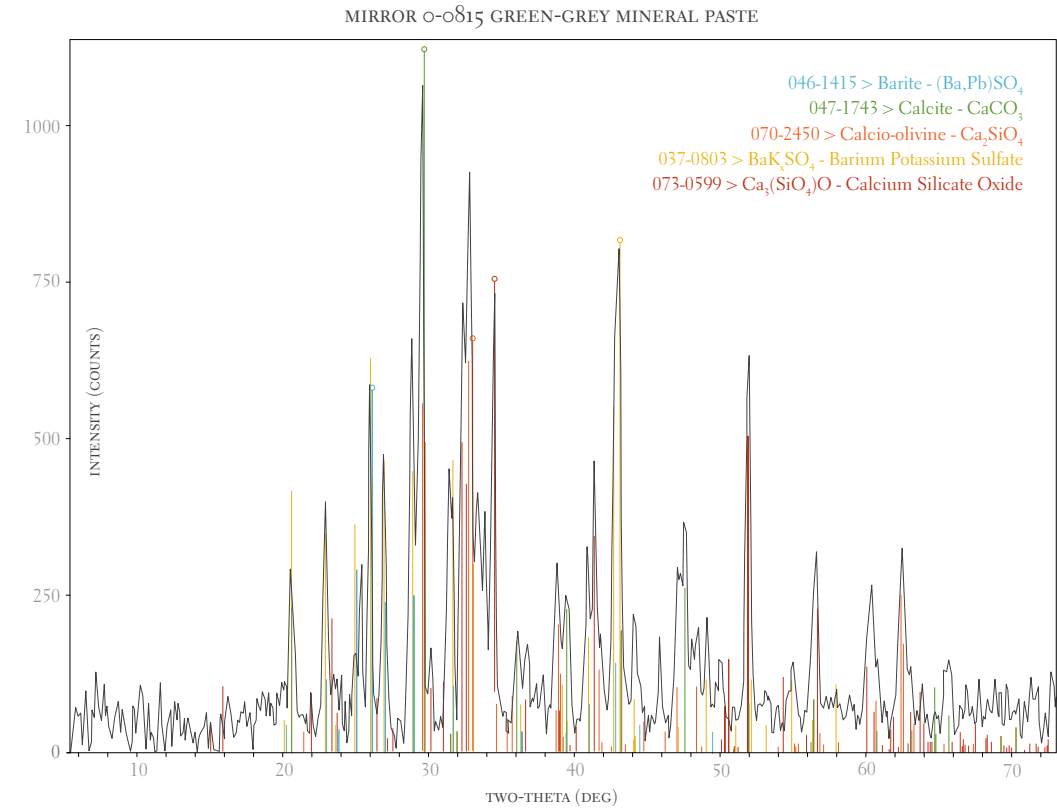


FIGURE 21

Another remarkable mirror in the collection, mirror O-0815 (see v. 1: PL. 79), is thought by some to be a recent fake, but is more probably an extraordinary example of reuse. The mirror was originally a plain-backed mirror; the front of the mirror has a break across the entire surface. The mirror was then repaired and the figures of the frolicking or boxing boys added. The presence of the heavily mineralized wood covering both the figures and the mirror back is evidence for the burial and natural corrosion of the mirror subsequent to the figural decoration being added to the back. Suzanne Cahill (in v. 1: 180) ascribes this painted scene to the Three Kingdoms period or the Northern and Southern Dynasties; Lothar von Falkenhausen (this volume, pp. 25–26) suspects a considerably later date. The figures of the boys and the surrounding decoration are built up in a kind of mineral paste and are raised in relief on top of the background surface; they come in green-gray and brick-red colors. X-ray diffraction studies (XRD) showed that the green-gray paste was composed of calcite (CaCO_3), calico-olivine (Ca_2SiO_4), and barium potassium sulfate (BaK_2SO_4). XRD of another area gave barium potassium sulfate, periclase, MgO , zinc sulfide, ZnS , calico-olivine, and calcite, while a third showed the presence of a variety of barite, BaSO_4 , which is a much more common mineral. These are complex results demanding further research. While gypsum, calcite, or natron were used in the West, barium compounds figure prominently in ancient Chinese glass

and frits such as Han blue, Han purple, and early glass beads. One of the XRD scans is shown in FIG. 21.

The presence of the calico-olivine suggests the possibility that a ground-up ceramic or mineral paste was used in the fabrication of these figures. Barium potassium sulfate has never been reported before from archaeological contexts and may represent the weathering of a barium compound, such as barite, in the presence of potassium-containing groundwaters, but at this stage it is not possible to say whether this is true or not, as, to my knowledge, we have no comparable material whatever.

The reddish mineral mixture is similarly complex. XRD (see FIG. 22) found the presence of marcasite (FeS_2) along with the previously identified components of calcite, calico-olivine, and barium potassium sulfate. Although marcasite might be responsible for the reddish color of this pigment, it is unusual and may not be the whole explanation.

Finally, mirror O-0815 also displayed an unusual array of corrosion products on the bronze itself. The XRD chart in FIG. 23 shows malachite, tin sulfide (berndite, 4HSnS_2), and connellite. Both tin sulfide and connellite are rarely reported as natural alteration products. Connellite is discussed below, in the section dealing more specifically with corrosion products. The sources for the tin sulfide are numerous and may be related either to environmental factors or subsequent corrosion of the bronze in the indoor environment.

FIGURE 21: X-ray diffraction scan of the green-gray mineral paste from mirror O-0815, showing the presence of a complex mineral assemblage of barite, calcite, calico-olivine, barium potassium sulfate, and calcium silicate oxide, the latter subsumed to be calico-olivine.

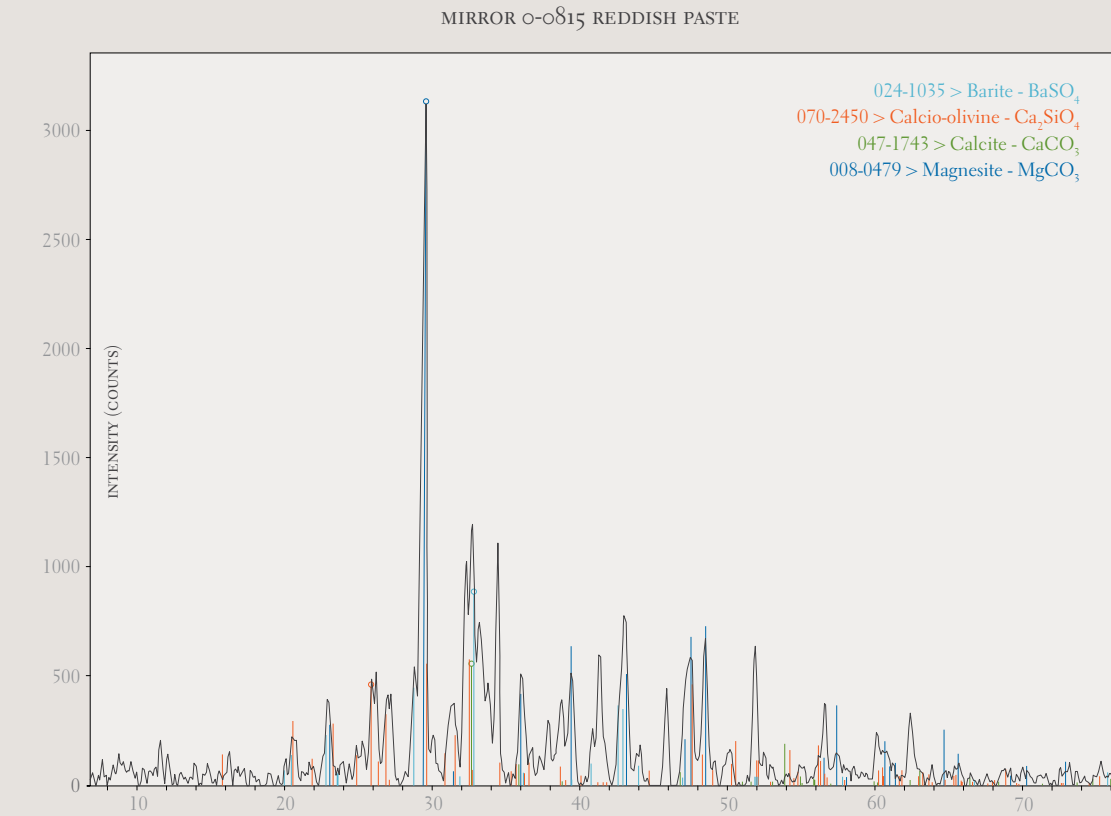


FIGURE 22

FIGURE 22: X-ray diffraction scan for the reddish mineral paste from mirror O-0815, showing the presence of an iron sulfide, probably marcasite, calcite, barium potassium sulfate, and probably calico-olivine, here shown as calcium silicate oxide.

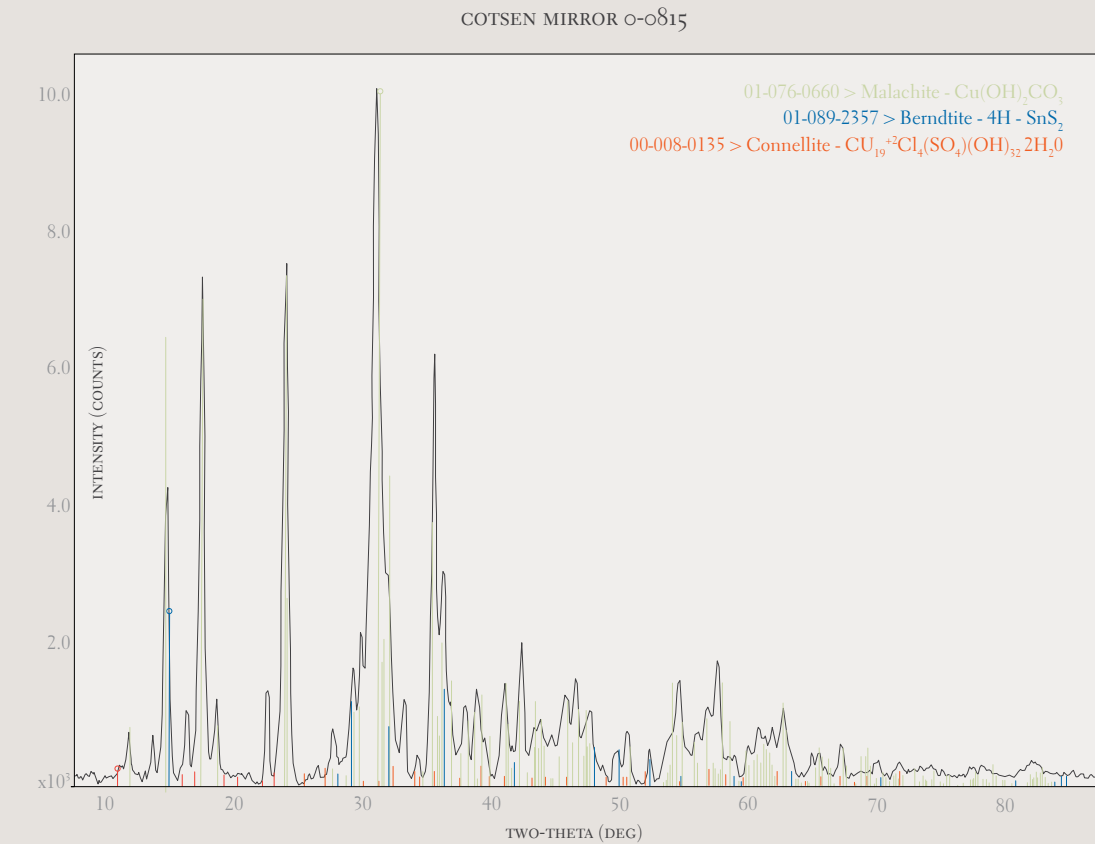


FIGURE 23

FIGURE 23: X-ray diffraction data for the corrosion crust from mirror O-0815.

CORROSION AND PATINA

THE GENERAL PATINA on tin bronzes usually results in an enrichment in tin and loss of copper from the surface, creating a corroded surface of a variety of colors. These colors range from the red of cuprite, the green of malachite, and the deep blue of azurite, to the black of the largely amorphous tin oxides that make up the remarkable black-surfaced (*heiqigu*) mirrors.

For the past 140 years at least, arguments have ensued over the origin of the color of the black-surfaced Chinese mirrors. Was this a deliberate patina created when the mirror was made, or a type of corrosion known to afflict high-tin bronze alloys in which the tin-oxide-enriched surface assumes a black color from the effects of burial? Or were both types of corrosive phenomena involved in different artifacts? It is difficult to adduce sufficient evidence to decide these questions.

Attention to the black-surfaced mirrors was first drawn by Morin in 1874. Many excavated mirrors retain a silvery-colored surface which is simply the color of the polished metal. During corrosion, the alpha-phase solid solution and the alpha component of the eutectoid present the common mode of attack, frequently engulfing the lead globules in the metal to a depth that varies from 25 to 200 microns. The delta phase remains uncorroded and retains or imparts a silver-colored surface appearance, as seen in several mirrors in the Cotsen Collection, such as the already-mentioned O-0234 from the Tang dynasty (see v. 1: PL. 95).

The black-surfaced mirrors show the same kind of corroded surface, with the important difference that the delta phase of the eutectoid is also corroded. Although the corrosion reaches to a depth of only a few micrometers (Chase and Franklin 1979; Yao and Wang 1987), this is sufficient to produce a black coloration. Soil minerals are absorbed into the corroded surface layer, which, in addition to some cassiterite or stannous oxides, may include silicon, aluminum, iron, and sulfur. Collins (1934) found a Han-dynasty mirror that had been only partially buried in the typical Chinese loess soil. The buried part had a blue-black patina, while the exposed part remained silver-colored. Analysis of the typical black patina by Taube et al. (2008) found it to be composed of $\text{Sn}_{1-x}(\text{Cu,Fe,Pb,Si})_x\text{O}_2$, while studies by Wang et al. (1995) propose a nanocrystalline SnO_2 . Meeks (1988a, 1988b, 1993a, 1993b), Rubin et al. (1983), and Zhu and He (1993) are of the opinion that all occurrences of the black patinated bronzes can be accounted

for by natural phenomena during burial. On the other hand, Chase (1977, 1983), Chase and Franklin (1979), Chase and Wang (1997), Wang et al (1995), and Wang Changsui et al. (1989) think that many of these patinas were deliberately made at the time of manufacture with the aim of producing a black-surfaced mirror. It is possible that both suggestions are correct, as we know that burial can produce a black surface, but may also have been artificially created as well. Owing to the similarity of the results, it will be hard to resolve the question for each individual case. The square mirror O-0647 (see v. 1: PLS. 92–93), for example, has a partially black and partially silver-colored surface close to the perimeter of the mirror, suggesting that the black color is due to an effect of burial rather than a deliberate patina.

Although the mirror when in use required a brightly polished and highly reflective finish, there is a remarkable variation in the condition and appearance of Chinese mirrors. Even the black-patinated bronzes were capable of reflecting an image of the object. The black-patinated bronzes are very corrosion resistant. The patina is indeed a form of corrosion, but one that passivates the surface and renders the underlying metallic substrate relatively protected; by contrast, most other finishes would have been subject to tarnishing in moist air.

Cast leaded bronze of a multiphase microstructure consists of alpha-phase islands in a matrix of the (alpha + delta) eutectoid phase with small lead globules interspersed in the matrix. In the process of corrosion, the alpha phase tends to be removed and converted during corrosion to copper salts, which may be partially leached away. The small globules of lead may similarly be corroded to basic lead carbonates or oxides. The tin content becomes converted to one of the tin oxides. Additive or subtractive events may occur on corrosion, and in the case of loss of material, the resulting “patina” may reveal microstructural features of the underlying cast alloy. Etched surface patinas on archaeological bronzes in general are unusual. Given the variety of decorative surface treatments that could be used on mirrors, we cannot be certain that such corrosion is not intentional. Additive effects with high-tin bronzes often produce warty corrosion due to localized breakdown of the passive surface oxides, particularly those of tin. On the Warring States–period double-tier mirror O-0648 (see v. 1: PL. 10), for instance, the back surface appears to be etched due to loss of patina either from corrosion or extensive cleaning (see FIG. 24). The dendritic structure of this mirror is seen in the surface,

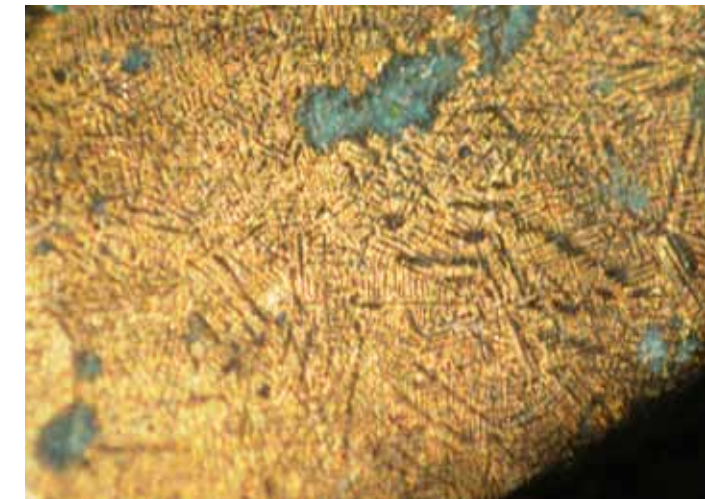


FIGURE 24

FIGURE 24:
The surface of mirror O-0648 showing dendritic morphology of the cast structure, probably a result of natural corrosion processes. The dendritic form is indicative of a lower-tin alloy, confirmed by XRF analysis. Photomicrograph by the author.

FIGURE 25:
Part of the decorated surfaces of mirror O-0720, showing the matte yellow appearance. In the left-hand view, the surface reveals pits with cuprite below the immediate surface, showing some corrosion in depth, and light green excrescences overlying the etched surface. Photomicrograph by the author.



FIGURE 25

suggesting that this mirror is not made in the classic high-tin alloy and contains yellow, rather than white, metal. XRF analysis found only 18 percent of tin. Visual observation confirms that the exposed metal is yellow rather than white. The lead content of this alloy is also very low.

Another example of a curious etched surface relief is seen in mirror O-0720, from the Warring States (see v. 1: PL. 38), which has a very fine, textile-like pattern as its background decoration. This mirror is also of lower tin content, with 19 percent tin and 3 percent lead. The color of this alloy is still a pale yellow. Two representative photomicrographs of the surface are shown in FIG. 25, in which the etched topology of the surfaces can be clearly seen.

In many of the bronzes from the Tang dynasty and later, the extent of corrosion is remarkably limited, and the surfaces may still possess the shiny silvery aspect they had when they were first made. This is due to the passivation of the surface from the high-tin content, which is usually disrupted by warty corrosion following local breakdown of the passive film. For details concerning the nature of patina in Chinese bronzes, the interested reader is referred to the works by Scott (2002), Chase (1993); Chase and Franklin (1979); Chase and Wang (1997); Taube et al. (1995); Meeks (1993a, 1993b); Robbiola et al. (1998, 2004); and Robbiola and Portier (2006).

REPRODUCTIONS, COPIES AND FORGERIES

OF PARTICULAR INTEREST in connection with the present study are historical attempts to replicate ancient patinas. Chinese connoisseurs of the past, as well as collectors and conservation scientists today, remain fascinated by the appearance of excavated bronzes with their varied colors and surface finishes. During the Southern Song (1127–1279 CE) and Ming dynasties, many attempts

were made to imitate both the style and patination of these treasured artifacts, with their black, tin-enriched patinas or smooth and subtle light greenish-blue surfaces, incorporating corrosion products of copper, tin, and lead. Many techniques were developed to try to replicate these finishes; they range from the simple adhesion of ground-up malachite with glue binder to the thinly patinated surface, often with a cuprite crust only a few micrometers thick (if at all), to highly complex chemical treatments. As Kerr (1990: 21 *et passim*) notes, the deliberate forging of Chinese bronzes was already prevalent by the time of the Song dynasty.

Several recipes have survived for producing the greens and reds of the patinas that were much admired. Gao Lian 高濂 (fl. 1580–1600), a Ming-dynasty collector, records a complex treatment to produce an artificial patina that begins with applying a mixture of sal ammoniac, alum, borax, and sulfuric acid to the surface of the bronze and baking it. Next, the object is placed in a pit lined with red-hot charcoal that has been splashed with vinegar. (Chinese vinegar was commonly made from bamboo or rice. Some of these vinegars, while essentially containing acetic acid, comparable with Western products, might be considerably more complex. For example, Zhang et al. [2008] mention the presence of organic acids, phenols, aldehydes, ketones, alcohols, and lipids in Chinese bamboo vinegar.) A variety of substances are added to the surface of the object to encourage salt efflorescence, such as pigment, piles of salt placed on certain areas of the bronze surface, metal filings, or cinnabar. The treatment ends with burial of the bronze in acidic soil for an extended period of time. Bamard (1961: 214) provides examples of other historical recipes for the alteration of surface appearance, including the following, from the *Dongtian qinglu ji* 洞天清祿集 by Zhao Xigu 趙希鵠 (fl. 1231):

The method of faking archaic bronzes is achieved by an application of quicksilver and tin powder—the chemical

mixture now used to coat mirrors. This is firstly applied uniformly onto the surface of the new bronze vessel, afterwards a mixture of strong vinegar and fine sand powder is applied evenly by brush; it is left until the surface color is like that of dried tea, then it is immediately immersed into fresh water and fully soaked. It therefore becomes permanently the color of dried tea; if it is left until it turns a lacquer-like color and immediately immersed into fresh water and soaked, it thereby becomes permanently the color of lacquer. If the soaking is delayed the color will change. If it is not immersed in water it will then turn into a pure kingfisher-green color. In each of these three cases the vessel is rubbed with a new cloth to give it lustre. Its bronze malodor is covered by the quicksilver and never appears; however the sound of old bronze is dainty and clear, whilst the sound of new bronze is turbid and clamorous—this cannot escape the observation of the connoisseur.

The situation regarding the original period of manufacture of Chinese bronze mirrors is complicated by a variety of factors, and the disputation of any mirror's authenticity may take numerous subtle turns. As Nakano Toru has written (1994: 44):

During the Liao dynasty (907–1125), Tang mirrors were faithfully reproduced, but because the base metal used was yellowish in colour [a low-tin bronze; DAS], they can usually be identified as later reproductions. Some mirrors from the Northern Song period are modelled closely on Tang originals, but since they also include many features that are distinctive of the Song Period, it is unfair to call them reproductions.

This information is taken from the review by Nakano (1994), who provides an excellent account of some of the technical aspects of dealing with reproductions and reuse of older mirrors. For example, he writes that “Many Han dynasty TLV mirrors and those from the Tang with lion and grape design were reproduced for scholarly purposes during the Ming and Qing periods” (Nakano 1994: 44).

The aforementioned mirror O-0233 (see v. 1; PL. 77) may possibly be one of these later imitations, as it contains a trace of zinc and thus cannot date as early as the Three Kingdoms



FIGURE 26



FIGURE 27

FIGURE 26: Mirror O-0421, showing casting bubbles protruding from the surface of the decorated surface. On visual inspection without a microscope, these bubbles cannot be observed. Magnification × 60. Photomicrograph by the author.

FIGURE 27: Surface photomicrograph of the unusual patina on mirror O-0421 which is flaking away from the surface, revealing a gray-purple underlayer. Magnification × 55. Photomicrograph by the author.

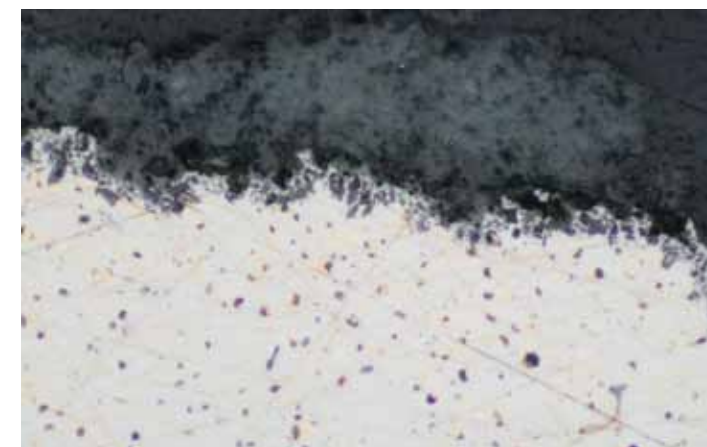


FIGURE 28

period, even though its style and iconography would suggest this; but its patina and condition show signs of considerable age.

Nakano also mentions (1994: 45) that “Qing dynasty forgeries of Warring States period mirrors were so well-made that many remain on display today labeled as originals.” The detailed analytical study of such cases remains a desideratum. Finally, mirrors have been recently made for the art market with the intention to deceive the buyer into thinking that the mirror is from a much older date than the nineteenth to twenty-first centuries CE. Every collection contains disputed mirrors, and the Cotsen Collection is no exception. However, in my opinion, 90 percent of this collection may be considered authentic.

The mirrors in the Cotsen Collection, like most Chinese bronze mirrors in private collections, were obtained on the art market and lack a clearly defined archaeological context and date to give them a solid provenance. Such specimens can be assigned to a number of different categories of origin. We may distinguish, for instance:

- (1) Mirrors that originate from the period they are said to come from (the vast majority of pieces in the collection)
- (2) Mirrors that are said to be very old but clearly show signs of modern manufacture (e.g., mirror O-0096; see v. 1: PL. 31)
- (3) Mirrors that are old but are copies of “authentic” mirrors originating from an earlier period (e.g., mirror O-0233; see v. 1: PL. 77)
- (4) Mirrors that are old but are local copies or poorly made imitations of “official” issues (no obvious instances in the Cotsen Collection, due to the collector's requirements of high artistic quality)
- (5) Mirrors that do not pretend to be what they are not and are made as modern reproductions (e.g., mirror O-0292; see v. 1: PL. 130)

FIGURE 28: A cross section through mirror O-0421, revealing a very superficial penetration of the leaded bronze alloy of only a few microns in depth. The small spots in the unetched section are of lead, and the alpha + delta eutectoid has very limited corrosion indeed. There is no cuprite present, and the rather fluffy-looking corrosion crust that can be seen has no penetration into the metal at all and lacks the appearance of a genuine corrosion or patina. Photomicrograph magnification × 400; unetched. Photomicrograph by the author.

FIGURE 29: Photomicrograph under crossed polars of the cross section of mirror O-0421, showing that the patina is of recent origin. Magnification × 400; unetched. Photomicrograph by the author.



FIGURE 29

- (6) Mirrors that may have been altered or changed since they were made (e.g., mirror O-0322; see v. 1: PL. 131).

Among the dubious mirrors in the Cotsen Collection are the Warring States-style specimens O-0421 (see v. 1: PL. 15), O-0129 (see v. 1: PL. 28), O-0096 (see v. 1: PL. 31), and O-0127 (see v. 1: PL. 32). If original, all four mirrors would have been made in clay or stone molds, but this is unlikely because they all show tiny bubbles protruding from the surface. Such bubbles are commonly found when a molding material (such as silicon rubber) is used to take an impression from an original mirror: small hollows due to gases in the molding material are reproduced as small solid bubbles of metal in the cast product (FIGS. 26, 30, 32–34).

Moreover, all four specimens have patinas that are not particularly convincing: the thin, cloudy, greenish patina of O-0129 is entirely lacking in any cuprite or corrosion in depth; and the light blue-green hue of O-0096, O-0127, and O-0421 raises doubt as well. Mirror O-0421, in addition, has a milky, flaking patina over the metallic surface of the mirror face, which is highly anomalous (FIG. 27). In conjunction with the surface bubbles, their unsatisfactory patina clinches the argument that these mirrors are not genuine but were probably reproduced from ancient originals.

As part of a scientific evaluation, a cross section was cut from the edge of mirror O-0421 and examined using a metallurgical microscope and an electron microprobe. The resulting optical photomicrograph is shown in FIG. 28, in which it can be seen that the patina penetrates only very superficially into the remaining sound metallic grains.

The conclusion that the patina was not consistent with the presumed age of the bronze was confirmed by an examination of the polished section under polarized light, shown in FIG. 29. A thin, yellowish copper-oxide corrosion crust can be seen just under the light green corrosion crust.



FIGURE 30

These thin, yellowish cuprite crusts adjacent to the metallic matrix are an indication that the cuprite is not especially crystalline and has grown as a result of superficial corrosion which has been chemically induced. The final puzzle is the identity of the flaking, crazed patina, which was analyzed by Debye-Scherrer X-ray powder diffraction on a Rigaku R-Axis Spider X-ray diffractometer in Weissenberg geometry. The result is shown in FIG. 31. The principal components are tin oxide and calcite, but not the form of the black tin oxide that we associate with the black-surfaced bronzes of antiquity; instead, there is a fluffy, white-gray tin oxide layer that is entirely artificial.

Another mirror in the collection that is problematic in details of patina and surface is mirror O-0874 (see v. 1: PL. 99). As evidenced by the incidence of casting bubbles on the surfaces of various mirrors (FIGS. 30, 32–34), it is a later reproduction. This mirror is, moreover, one of three that shows small amounts of zinc content. The other two are O-0398 (see v. 1: PL. 34), dated to the Warring States, and O-0744 (see v. 1: PL. 78), dated to the Eastern

Han. Among these, mirror O-0398 has a thin green patina which is not particularly convincing; the presence of zinc may be taken as an additional indicator against authenticity.

METALLOGRAPHIC AND MICROSTRUCTURAL STUDIES OF SOME SELECTED MIRRORS

CHINESE MIRROR ALLOYS create an interesting array of metallographic textures, the documentation of which is important in our understanding of diagenetic processes following burial of bronze alloys. The sample taken from one edge of the Tang-dynasty mirror O-0753 (see v. 1, PL. 97), for example, preserves part of the original surface of the mirror in the corroded matrix. There is a thin blue-gray line separating the corroded interior and exterior corrosion products. The same view under crossed polar illumination reveals the green, outer corrosion products overlying the original surface and the red cuprite with the darker gray-black of the metallic

FIGURE 30: Mirror O-0127. Surface detail showing casting bubbles and unsatisfactory patina. Photomicrograph by the author.

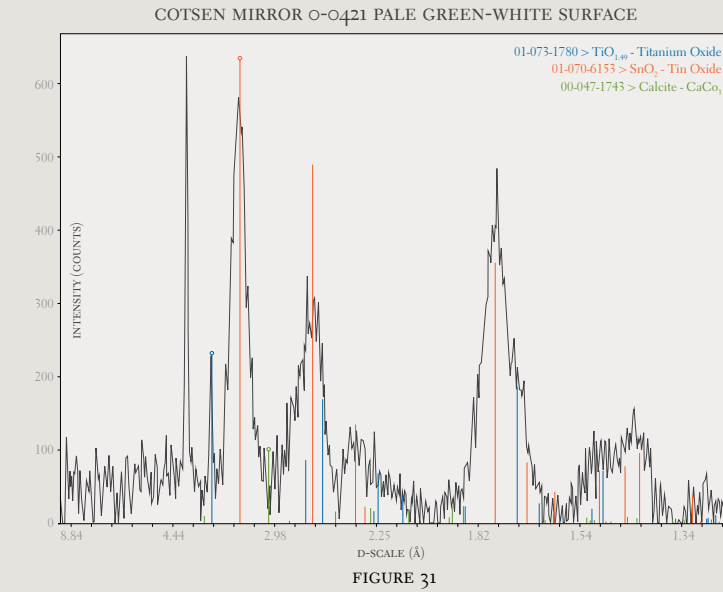


FIGURE 31: X-ray powder diffraction scan of the surface corrosion from mirror O-0421, showing that the “fluffy,” whitish corrosion is principally tin oxide and calcite.



FIGURE 32

FIGURE 32: Mirror O-0096. Surface detail showing casting bubbles and unsatisfactory patina. Photomicrograph by the author.



FIGURE 33

FIGURE 33: Mirror O-0129. Surface view showing casting bubbles and unsatisfactory patina. Photomicrograph by the author.



FIGURE 34

FIGURE 34: Mirror O-0874 showing casting bubbles. Photomicrograph by the author.

matrix underneath. The lead inclusions and the (alpha + delta) eutectoid phase have been preferentially attacked here, leaving isolated islands of the alpha phase, showing that this mirror contains less tin than the two other Tang examples examined here. During the process of corrosion, the outer region of the microstructure cracked, allowing septae of cuprite to then invade the already corroded matrix. The retention of the alpha phase and corrosion of the delta phase is less commonly seen in these Chinese mirrors, but that is what has occurred here, and it is a consequence of the different environmental conditions to which the mirror has been exposed during burial. The texture of this mirror was further investigated with the electron microprobe; a backscattered electron view is shown in FIG. 35. The bright white spots are lead globules, the jagged light gray regions are the alpha phase, and the darker, granular background is the eutectoid mixture.

A complex corrosion morphology of this mirror is revealed in FIG. 36, where the immediate surface appears to be quite enriched in delta phase, overlying a thick area of corroded metal in which both the alpha and delta phases have been attacked, followed by a region of internally corroded sound metal remnants in which the alpha phase remains uncorroded with an infill of corroded delta. It is unusual to see all of these features in one metallographic section of a Chinese bronze.

Mirror O-0293 (see v. 1: PL. 41), from the Early Warring States period, has an unusual surface appearance, where the lighter corrosion accretions appear patterned, resting largely on the smoother purple-colored parts of the design. The composition is that of a typical leaded-tin bronze with only moderate tin content (FIG. 37).

The morphology of the corrosion crust here is quite different from that seen in mirror O-0134 (see v. 1: PL. 100), discussed above. There the outer structure had an acicular nature from the Widmanstätten-related precipitation. Here, the structure is derived from a dendritic segregation of the phases with a correspondingly coarser microstructure.

This early Warring States mirror is cast in an alloy with less tin content than the two Tang examples examined in detail here. The optical photomicrograph reveals a coarse dendritic structure, with a scatter of lead globules, nonmetallic sulfide inclusions, and a cored, dendritic structure with residual islands of the (alpha + delta) eutectoid, typical of lower-tin-content cast bronzes.

The microstructure reveals some evidence of slip planes in the copper-rich areas near the surface, showing that some of the design elements of this mirror may have been sharpened after casting by cold-working of the surface. The surface color of this mirror is therefore influenced by its microstructure. The yellowish surface has corroded to a variegated corrosion surface incorporating copper oxides and carbonates.

Mirror O-0291 (see v. 1: PL. 127) has an unusual appearance as well as an atypical, highly leaded composition. It contains about 16 percent lead, 18 percent tin, and about 2 percent arsenic. The surface also contains a trace of mercury. The overall microstructure is that of a heavily cored, moderate-tin bronze, with large lead globules containing unusual copper-rich tiny precipitates, copper sulfide inclusions, and islands of the (alpha + delta) phase eutectoid. The corrosion crust has two worrying characteristics: a general absence of deep-red cuprite within the patinated surface, and a predominance of green corrosion products, which makes it advisable not to rely on this patina to argue for any great age. The lead globules within the patinated surface have also not totally corroded and have only lost the tiny copper-rich precipitates within them, a unique feature previously not recognized in Chinese bronze mirrors. This mirror, with chrysanthemum design, thought to be a Korean specimen of the Koryŏ dynasty (936–1392), is almost certainly of recent manufacture.

Mirror O308 (see v. 1: PL. 91), a Tang-style example, is made in the classic mirror composition, with 23 percent tin, 3 percent lead, and a little arsenic. It has a microstructure with only a few small copper sulfide inclusions present, a testimony to the alloy refining of the Tang metalsmiths, with small finely dispersed lead globules and an (alpha + delta) eutectoid matrix, which again shows the Widmanstätten-type morphology on a fine scale (FIG. 38). This mirror has a heavily altered zone toward the outer surface, much enriched in tin oxide, but its overall structural morphology is similar to that of mirror O-0134.

Mirrors with authentically old surfaces hold much interest. First of all, let us examine the patina of mirror O-0233 (see v. 1: PL. 77), in Eastern Han style but possibly of later date, which has already been mentioned above in connection with the problem of zinc. This mirror is made in an alloy with about 20 percent tin and 3 percent lead. It contains a little porosity and rather more copper sulfide inclusions than the microstructure of the two Tang

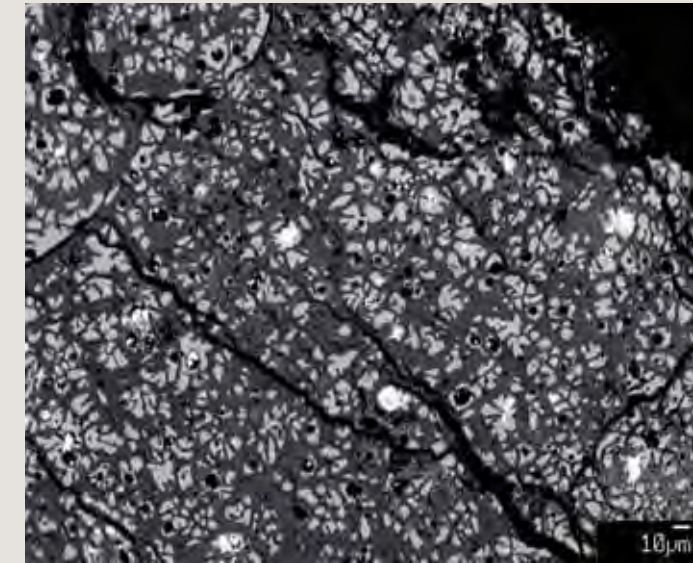


FIGURE 35

FIGURE 35: Electron microprobe backscattered electron image of mirror O-0753, made in a ternary copper-tin-lead alloy, shows an unusual amount of internal corrosion which penetrates 300 microns into the metal, corroding the alpha + delta eutectoid completely and leaving unusual islands of a phase behind. The bright white spots are larger lead globules. The small bar represents 10 microns. Photomicrograph by the author.

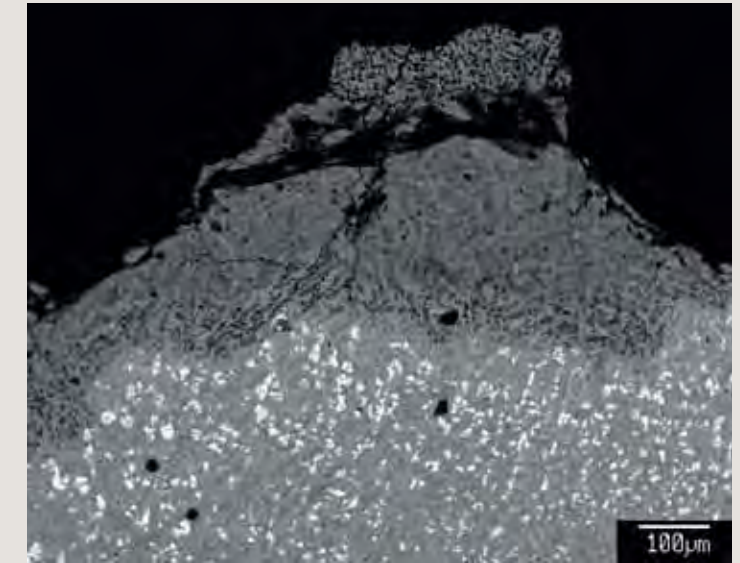


FIGURE 36

FIGURE 36: A small sample was taken from the edge of mirror O-0753, which has suffered from quite deep corrosion around the rim, creating a curious discontinuity between the delta-enriched surface and the general corrosion of both phases beneath, before reaching metallic remnants of uncorroded alpha phase. The alloy composition as obtained by XRF was 76.6% copper, 21% tin, and 3.6% lead. Photomicrograph by the author.

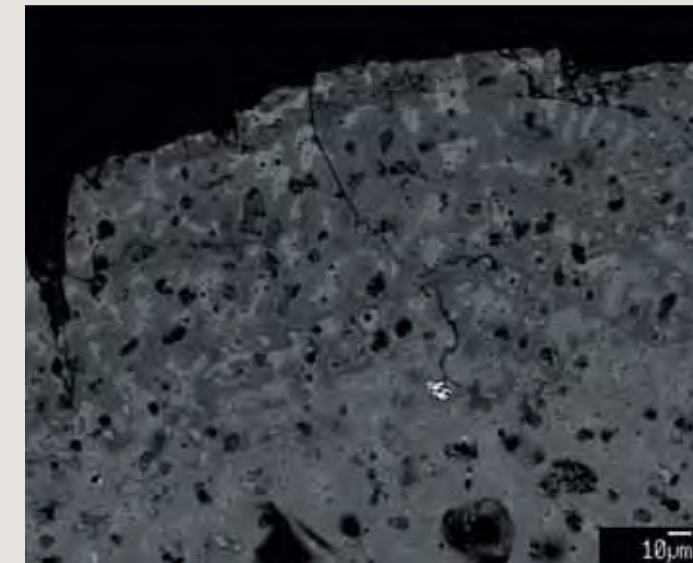


FIGURE 37

FIGURE 37: Mirror O-0293 showing the considerable depth of corrosion, extending over 100 microns into the metallic matrix. Considerable loss of lead has occurred from the surface zone, with mostly delta-phase remnants in a mass of corroded alpha-phase. One remaining lead globule is shown by the bright white area in this backscattered electron image. Photomicrograph by the author.

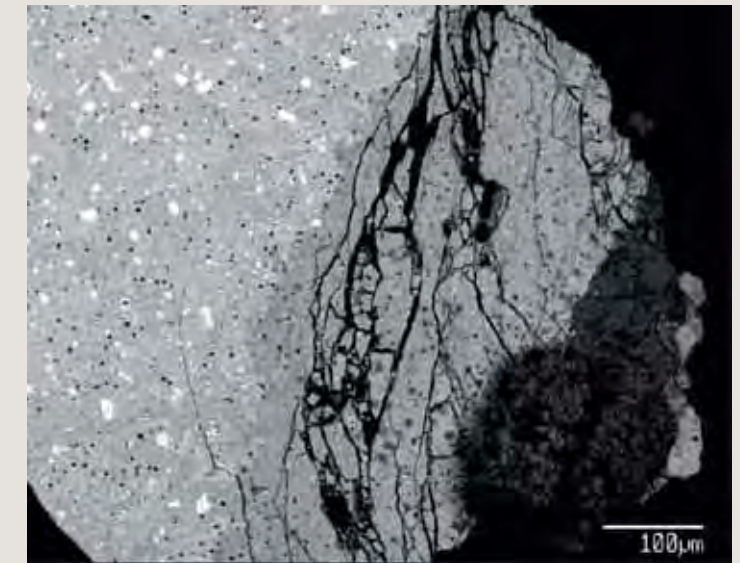


FIGURE 38

FIGURE 38: Backscattered electron micrograph of mirror O-0308, showing the corrosion crust on the right-hand side of the image, and the uncorroded alloy on the left. Photomicrograph by the author.

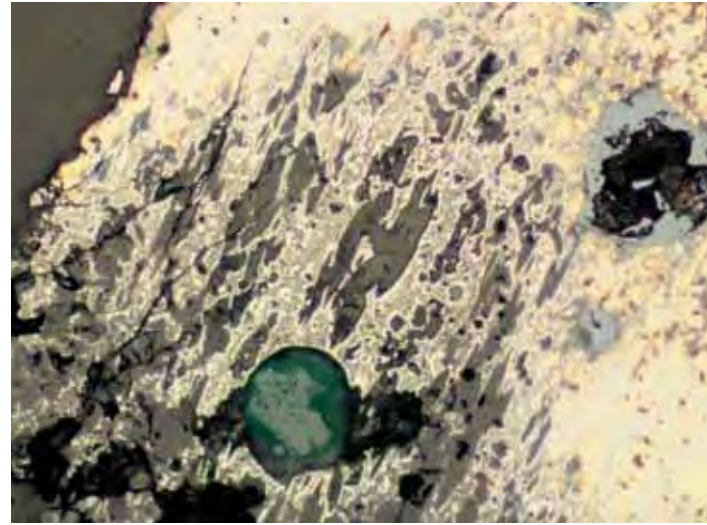


FIGURE 39

examples already discussed. Corrosion has removed both the copper-rich alpha phase from the copper areas, as well as the copper from the (alpha + delta) eutectoid, leaving only the delta phase and the corroded matrix at the outer surfaces, which are corroded to several tens of microns into the remaining metal. This mirror has a blackish green patina and may represent a black-patinated mirror which has subsequently undergone some corrosion, as the greenish corrosion disrupts some of the patina. The polished section is shown in FIG. 39. There can be no doubt that this mirror is genuinely old, even if not from the Eastern Han period, as the extent of corrosion seen here cannot be simulated by artificial corrosion.

A curious discovery links together two very different mirrors, one from the Western Han, O-0779 (see v. 1: PL. 59), and the other from the Sui dynasty, O-0774 (see v. 1: PL. 81). Both specimens contain connellite $\text{Cu}_{19}\text{Cl}_4(\text{SO}_4)(\text{OH})_{32}\cdot 3\text{H}_2\text{O}$ in their patina. Connellite is a complex mineral group isostructural with buttgenbachite $\text{Cu}_{36}\text{Cl}_{7.9}(\text{NO}_3)_{1.1}(\text{OH})_{63}(\text{H}_2\text{O})_4$. The XRD data for mirror O-0779 are shown in FIG. 41.

How can we account for the occurrence of this apparently rare corrosion product in the patina of two widely disparate bronze mirrors? The principal factor is created by environmental variables, rather than by composition. For connellite to form, there must be both chloride ions and some sulfate ions in the burial environment. The problem can be examined with the aid of a stability diagram based on the work of Pollard et al. (1990) (FIG. 40). Crystallization of the connellite on the two mirrors must have taken place in a saline environment, but with sufficient sulfate ion content that the stability field of paratacamite was not reached. Connellite has been reported geologically from widely different milieus, which

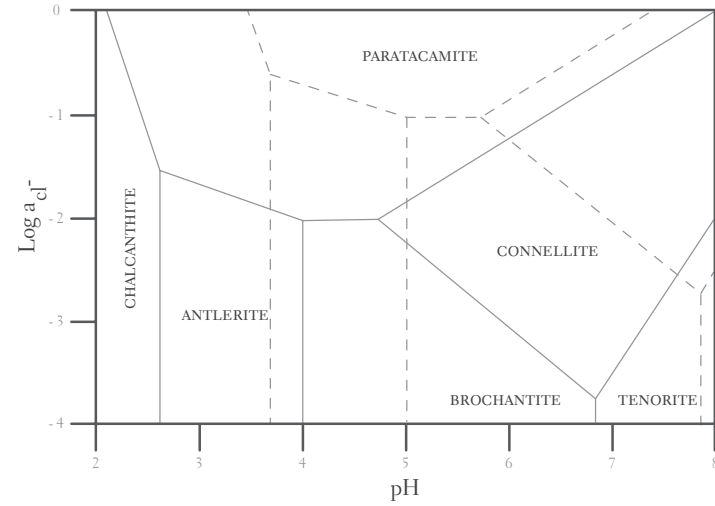


FIGURE 40

suggests that its occurrence in ancient bronze patinas may have been underestimated due to a lack of applied research directed toward patina characterization. Thus, the apparently anomalous presence of connellite in these Chinese bronzes, may, with time, come to be seen as part of the corpus of alteration products and routinely recognized as such.

The typical patina components seen in mirrors as a result of corrosion are malachite and cuprite, as seen in FIG. 42 for the Warring States-period mirror O-0304 (see v. 1: PL. 39).

In mirrors with chloride-induced corrosion, atacamite and paratacamite are the most commonly encountered, with one example of botallackite. The Warring States-period lacquered mirror O-0185 (see v. 1: PL. 45), for example, shows the presence of atacamite on the front reflective surface (FIG. 43). Atacamite is the most common chloride species on these mirrors.

The Tang-period mirror O-0742 (see v. 1: PL. 96) shows a complex patina (FIG. 44) that incorporates paratacamite, malachite, atacamite, cuprite, and a lead-tin sulfide, PbSnS_3 , which has probably arisen from conjoint corrosion of the lead and tin content with sulfur contaminants in previous storage or display, since it is not a part of a patina on this mirror in the sense of an overall film, nor has it been reported before in Chinese contexts.

CONCLUSIONS

THE COTSEN COLLECTION IS AN ESPECIALLY INSTRUCTIVE ONE: it contains mirrors from the early periods when bronze first began to be used as a reflective surface, to mirrors with ternary copper-



COTSEN MIRROR O-0779

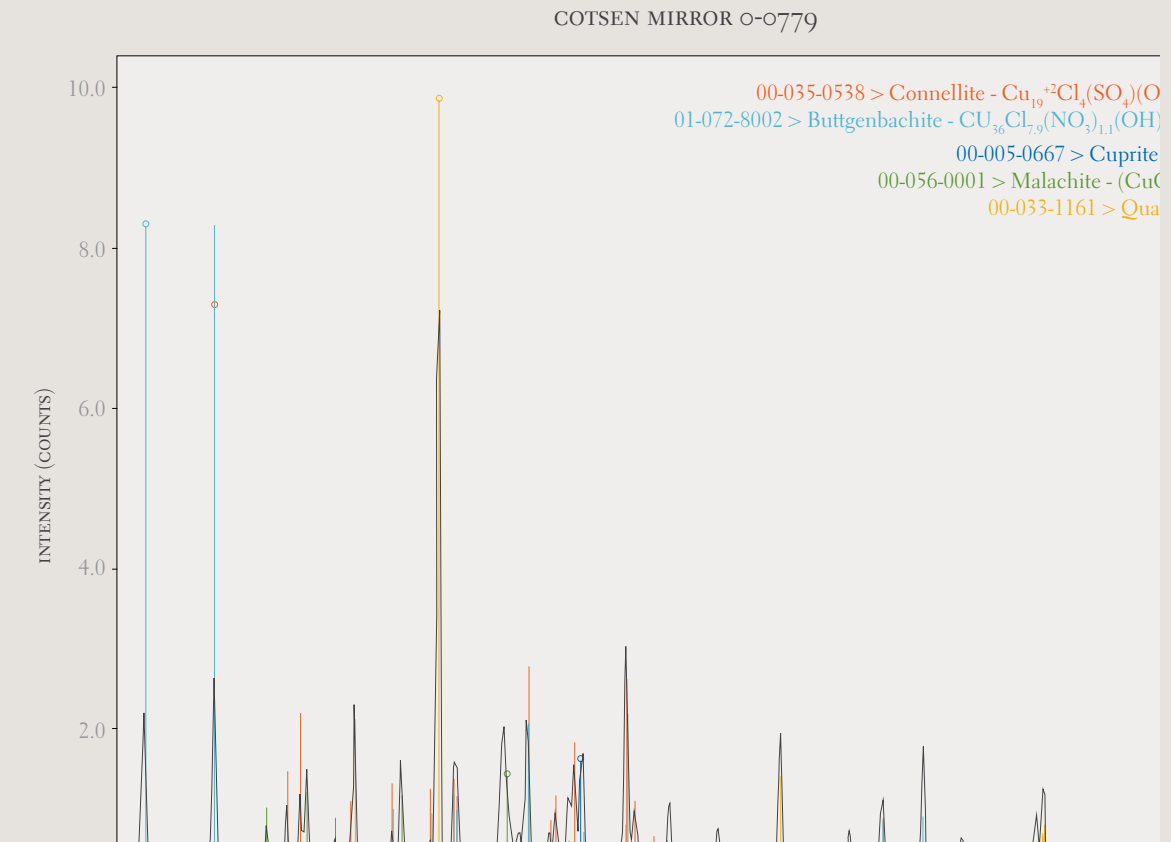


FIGURE 41



COTSEN MIRROR O-0304

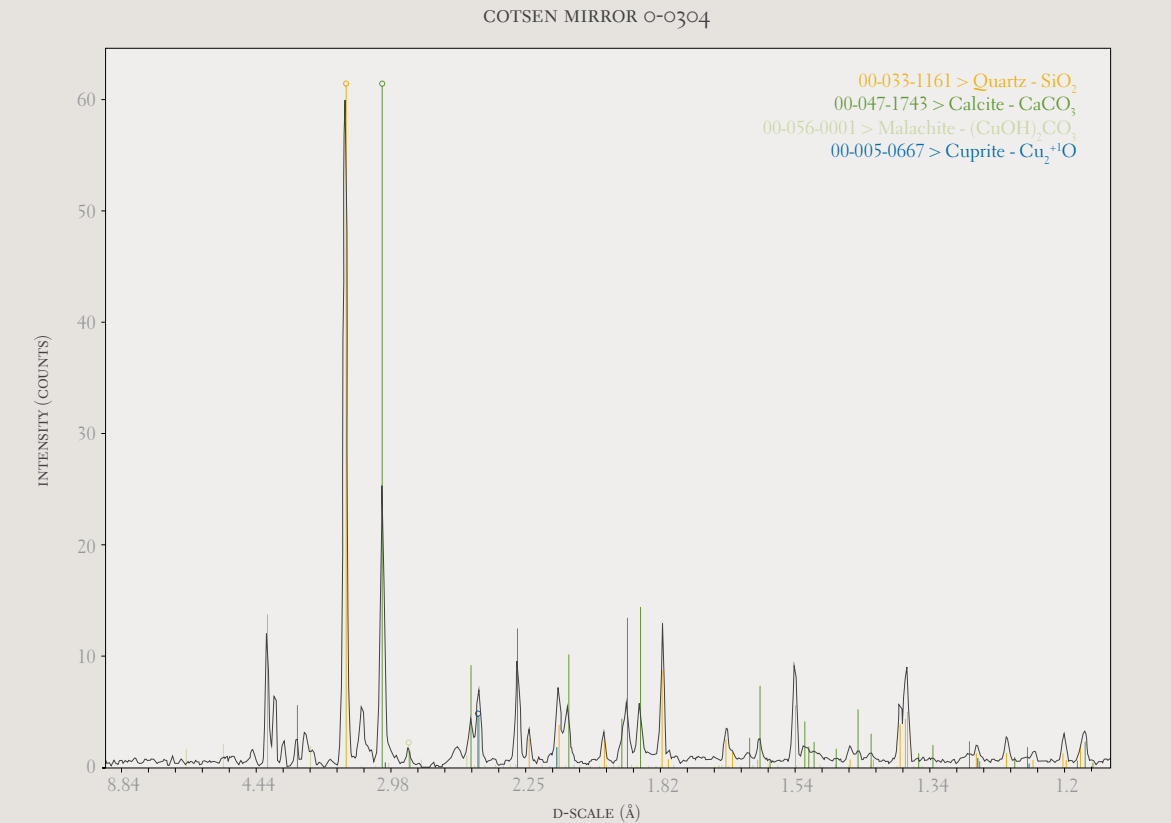


FIGURE 42

FIGURE 41: X-ray diffraction data for the corrosion crust from mirror O-0779. Chart by the author.

FIGURE 42: X-ray diffraction spectrum for mirror O-0304.



COTSEN MIRROR O-0185

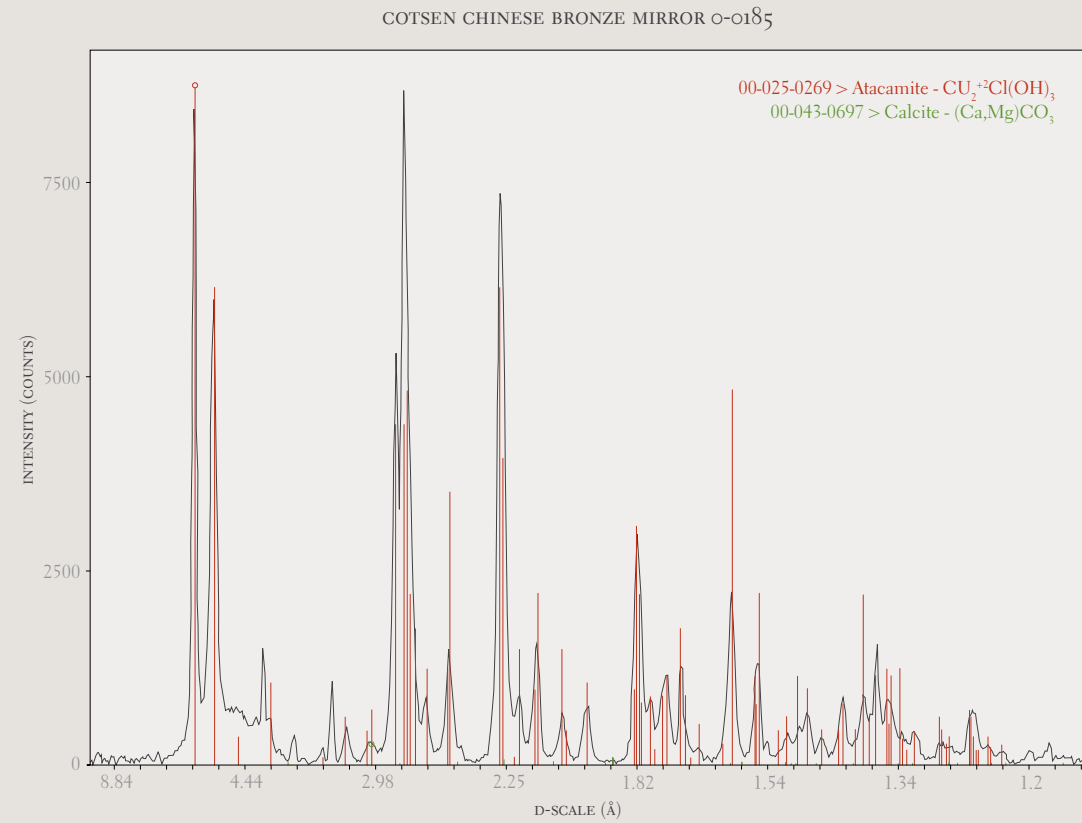


FIGURE 43



COTSEN MIRROR O-0742

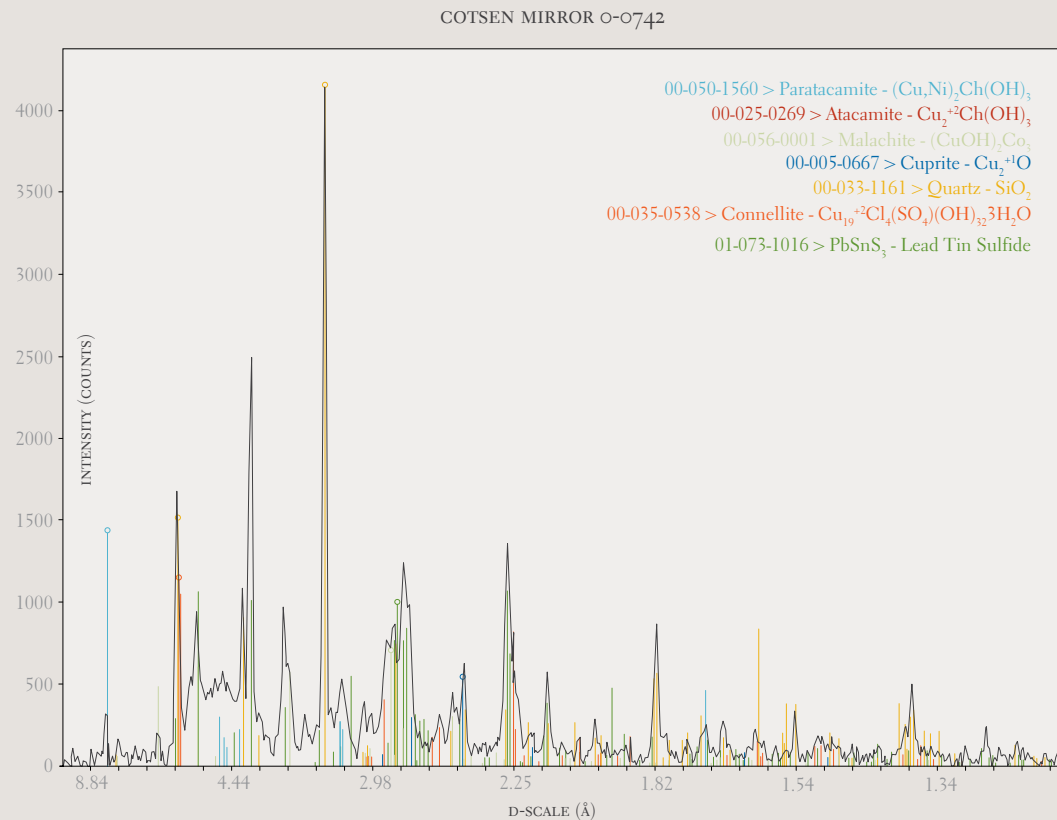


FIGURE 44

FIGURE 43:
X-ray diffraction data
for mirror O-0185.

FIGURE 44:
X-ray diffraction data
for mirror O-0742.

tin-lead compositions which remained unchanged for thousands of years. The range of decorative techniques used on the Cotsen mirrors represents an extraordinary variety of techniques, some rarely encountered. The textile interleaving between front and back surfaces of mirror O-0360, combined with the mineral inlay around the border in malachite and turquoise, the preservation of silk embroidery in O-0186 and the use of textiles to create designs directly in the model from which the bronze was cast, all testify to the sophistication of mirror craftsmen and the range to which other materials were put in creating mirrors. The Cotsen Collection is especially rich in mirrors whose techniques challenge us to find comparable examples elsewhere; the gold glass inlay on mirror O-0832, the use of sprinkled gold fragments in glass, and the use of glass of different origins, some of Chinese manufacture and others imported, all provide that challenge. Some of the techniques of decoration discovered during this study have no known parallels in the literature—for example, the ceramic paste composition used to decorate the back of mirror O-0815 with the scene of boys at play.

The collection is highly instructive in terms of the range and type of patinas and corrosion. Etched surface designs, as well as selectively polished parts of the mirrors, may simply belong to a corpus of surface finishes whose true extent we have yet to

grasp. A good range of different surface colors due to corrosion, as well as mirrors whose surfaces appear to be as bright and undiminished as the day they were cast, form a collection through which the viewer can begin to appreciate some of the accomplishments of the Chinese metalsmiths and the beauty of bronze alloys in all their multiplicities. Over the years, not only has this variety attracted Chinese scholars themselves to reproduce the castings of earlier cultures, but it has ensured a continued succession of fakes and reproductions, which are the bane of the modern collector of Chinese art. In studying antiquities that have no known provenience along with those that do, our knowledge of Chinese mirrors has gradually deepened and will continue to do so in the future. More comparisons are now possible with collections such as the Cotsen, enabling a more informed discussion to be presented as a result of archaeological research. The present article has certainly benefited from these advances.

The value of a detailed scientific study of the complex issues raised by Chinese mirrors is clearly in evidence here. The present survey of one particular collection is hardly a complete one, but it has been useful. Not only have new results been produced, adding to our knowledge of ancient Chinese mirror-making, but new questions concerning aspects of patina and decoration—still unresolved and awaiting further research—have been raised in the process.

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I would like to thank Suzanne Cahill for the translations, Drew Pomatti and Seppi Lehner for assistance with the X-ray fluorescence analysis work and for some photomicrographs. Funds for one of the two sets of EPMA analysis carried out at UCLA Geology Department were kindly supplied by the Cotsen Institute fund. I would also like to thank Lloyd Cotsen, Karen Hudson, and Lyssa Stapleton for making the collections available for study over the past several months.

Appendix

COMPOSITIONAL AND TECHNICAL INFORMATION REGARDING THE COTSEN MIRROR COLLECTION

MOST OF THE ANALYSES were acquired with a Bruker Handheld XRF instrument using an Al/Ti filter at 40KV 1.5 microAmps for 180 seconds. Standards made from ternary alloys of copper, tin and lead were used for comparison. The usual range of accuracy quoted for such analyses is ± 10 percent for major elements and

± 20 percent for minor and trace. Some additional analyses were carried out with electron microprobe analysis on polished sections from seven of the mirrors. This analysis was performed on a Joel SuperProbe at the Department of Geology, University of California, Los Angeles, with the assistance of Dr. Frank Kyte.

MIRROR	DYNASTY OR DATE	COMPOSITION	NOTES
O-0803	Qijia	Cu 75.2%, Sn 18.6%, Pb 0.3%, Fe 0.1%	No As, no Hg
O-0427	Shang	Cu 75.3%, Sn 3.7%, As 7.1%, Ag 1.4%	High As content
O-0460	Qin	Back: Cu 71.8%, Sn 21.4%, Pb 8.2% Front: Cu 77.4%, Sn 19.0%, Pb 6.5%	No As, No Hg.
O-0424	Warring States	Cu 53.3%, Sn 10.5%, Pb 29.9%, As 5.9%, Fe 0.4%	High As content, some Hg
O-0648	Warring States	Cu 79.0%, Sn 18.5%, Pb 0.3%, Fe 0.3%	No As, no Hg
O-0200	Warring States	Cu 72%, Sn 13.2%, Pb 14.5%	No As, no Hg
O-0421	Warring States	Cu 61.2%, Sn 24.3%, Pb 1.7%, Fe 0.2%	No As, no Hg Reproduction
O-0186	Warring States	Cu 75.1%, Sn 20.2%, Pb 3.7%, As 0.3%, Fe 0.3%	No Hg
O-0833	Warring States	Cu 69.2%, Sn 22.8%, Pb 5.3%, As 0.7%, Fe 0.4%	Trace As, no Hg
O-0778	Warring States	Cu 84.2%, Sn 10.2%, Pb 6.2%, Fe 0.04%	No As, no Hg
O-0180	Warring States	Cu 59.6%, Sn 17.1%, Pb 5.4%, As 0.7%, Fe 0.3%	No Hg
O-0279	Warring States		No Hg
O-0129	Warring States	Cu 59%, Sn 22.1%, Pb 10.1%, Fe 0.1%	No As, trace Hg Reproduction
O-0096	Warring States	Cu 62.1%, Sn 22.1%, Pb 8.4%, Fe 0.3%	Trace Hg Reproduction
O-0127	Warring States	Cu 63.6%, Sn 21.7%, Pb 6.5%, Fe 0.01%	Trace Hg Reproduction
O-0398	Warring States	Cu 60.6%, Sn 19.4%, Pb 2.2%, As 0.6%	Trace Ag, no Hg

O-0128	Warring States		No As, trace Hg Reproduction
O-0420	Warring States	High tin content surface layer	Trace As, no Hg
NO-1504	Warring States	Mirror very mineralized Cu 29.8%, Sn 22.3%, Pb 29.0%	No As, no Hg
NO-1506	Warring States	Mirror very mineralized Cu 16.9%, Sn 30.9%, Pb 34.1%	No As, no Hg
O-0646	Warring States	Mirror very mineralized Cu 3.4%, Sn 50.4%, Pb 31.6%	No As, no Hg
O-0457	Warring States	Cu 63.4%, Sn 24.1%, Pb 3.5%	No As, no Hg
O-0458	Warring States	Back: Cu 66.3%, Sn 17.9%, Pb 17.4%	
O-0131	Warring States	Mirror very mineralized. No precise data.	
O-0407	Warring States	Cu 72.8%, Sn 24.5%, Pb 8.6%	
O-0720	Warring States	Back: Cu 74.5%, Sn 15.4%, Pb 9.6%, As 0.4%. Front: Cu 74.5%, Sn 19%, Pb 3.3%, As 0.4%	Trace As, no Hg
O-0750	Warring States	Surface very mineralized Cu 49.3%, Sn 19.6%, Pb 25.8%	No As, no Hg
O-0293	Warring States	Cu 61.7%, Sn 19.1%, Pb 21.9%	No As, no Hg, highly leaded.
O-0800	Warring States	Front: Cu 48.2%, Sn 22.9%, Pb 27.2%, some Hg. Back: Cu 56.4%, Sn 16.5%, Pb 33.2%, no Hg detected.	Hg detected on front, none on back. No As.
O-0360	Warring States	Front: Cu 69.2%, Pb 3.7%, Sn 22.8%, As 0.4%. Back: Cu 25.6%, Pb 59.3%, Sn 13.2%, As 6.9%, Fe 1.0%	Front: Trace Hg. Back: High As
O-0423	Warring States	Mineralized	No Hg
O-0304	Warring States	Mineralized	No Hg
O-0295	Warring States	Mineralized	No Hg
O-0185	Warring States	Surfaces covered in lacquer	No Hg
O-0245	Warring States	Mineralized	No Hg
O-0179	Western Han	Mineralized	No Hg
O-0313	Western Han	Cu 69.7%, Sn 23.8%, Pb 3.1%, As 0.25%, Ni 0.06%, Fe 0.07%	Trace As, No Hg
O-0201	Western Han	Cu 59.7%, Sn 14.3%, Pb 18.9%, As 6.0%, Fe 0.1%	High As, No Hg
O-0779	Western Han	Cu 70.7%, Sn 21.9%, Pb 5.1%, As 0.5%, Fe 0.07%	No Hg, trace As
O-0422	Western Han	Cu 69.4%, Sn 22.9%, Pb 0.5%, As 0.5%, Fe 0.6%	Trace of Mn
O-0278	Western Han		No Hg
O-0856	Han	High tin content surface layer	Trace As, no Hg
O-0399a	Eastern Han	Cu 61.0%, Sn 23.9%, Pb 3.3%, As 1.2%, Fe 0.4%, Ni 0.05%	No Hg
O-0775a	Eastern Han		No Hg
O-0349	Eastern Han	High tin content surface layer	Trace As, Sb

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O-0843	Eastern Han	High tin content surface layer	Trace As, no Hg
O-0233	Eastern Han	High tin content surface layer	No Hg
O-0744	Eastern Han	Cu 62.5%, Sn 13.9%, Pb 18.9%, Fe 0.3%	Gilded back, trace As, Zn
O-0133	Eastern Han/Jin	High tin content surface layer	No Hg
O-0246	Eastern Han	High tin content surface layer	Trace As, no Hg
O-0226	Eastern Han	High tin content surface layer	No Hg
O-0832	Northern-Southern Sui	Cu 79.0%, Sn 22.3%, Pb 0.5%, As 0.25%, Fe 0.05%	Trace As, no Hg
O-0815	Three Kingdoms: Northern & Southern	Cu 59.4%, Sn 22.7%, Pb 5.7%, As 1.2%, Fe 0.2%	Trace As, no Hg
O-0774	Sui	Cu 75.9%, Sn 21.4%, Pb 3.6%, As 0.2%, Fe 0.2%	Trace As, no Hg
O-0363	Sui/Early Tang	Cu 69.7%, Sn 24.8%, Pb 3.9%	No Hg
O-0232	Sui/Early Tang		No Hg
O-0231	Sui/Tang	Cu 70.1%, Sn 24.9%, Pb 3.5%, Fe 0.01%	No Hg
O-0857	Sui/Tang	Cu 70.8%, Sn 24.6%, Pb 2.3%, Fe 0.4%	No As, no Hg
O-0193	Sui/Tang	Cu 70.5%, Sn 23.4%, Pb 3.7%, As 0.5%, Fe 0.09%	No Hg
O-0426	Tang	Cu 69.0%, Sn 23.1%, Pb 2.3%, As 1.4%, Fe 0.05%	Mercury amalgam, gilded.
O-0308	Tang	Cu 61.7%, Sn 23.2%, Pb 3.0%, As 0.7%, Fe 0.6%	Silvered back. Ag, Pb, trace Fe, trace Cu
O-0792	Tang	Cu 66.4%, Sn 23.9%, Pb 1.8%, As 0.7%, Ni 0.01%, Fe 0.12%	Back: high Ag, Au, trace Cu, trace Pb, Hg
O-0321	Tang	Mineralized	
O-0647	Tang	Cu 68.2%, Sn 24.8%, Pb 2.9%, As 0.4%, Fe 0.1%	Back: high Ag, little Au, trace Pb, Fe, Cu
O-0234	Tang	Cu 67.5%, Sn 25%, Pb 2.7%, Fe 0.05%	No As, no Hg
O-0742	Tang	Cu 70.1%, Sn 25.2%, Pb 2.2%, As 0.6%, Fe 0.4%, Ni 0.01%	Trace As, no Hg
O-0753	Tang	Cu 76.6%, Sn 21%, Pb 3.6%, Fe 0.3%	No As, no Hg
O-0874	Tang	Cu 70.3%, Sn 25.3%, Pb 0.2%, Fe 0.04%	No Hg
O-0134	Tang	Mineralized	No Hg
O-0312	Tang	Cu 70.9%, Sn 20.9%, Pb 7.3%, As 1.4%, Fe 0.3%	No Hg
O-0418	Tang	Cu 65.6%, Sn 16.0%, Pb 18.5%, Fe 0.7%, As 2.4%	No Hg
O-0649	Tang	Cu 69.6%, Sn 20.2%, Pb 3.2%, Fe 2.4%, As 0.2%	Trace As, no Hg
O-0865	Tang	Cu 68.1%, Sn 19.1%, Pb 3.0%, Fe 3.6%, As 0.9%	Trace As, no Hg
O-0425	Tang	Cu 63.5%, Sn 23.9%, Pb 3.2%, Fe 0.4%	Trace As, no Hg

O-0305	Tang	Cu 71.7%, Sn 23.0%, Pb 4.9%, Fe 0.09%	No As, no Hg
O-0135	Tang	High tin content surface layer	No Hg
O-0782	Tang	Cu 66.7%, Sn 23.1%, Pb 3.2%, Fe 0.7%, As 1.2%	Trace As, no Hg
O-0752	Tang	Cu 64%, Sn 23.9%, Pb 3.6%, As 1%, Fe 0.2%	Trace Au
O-0255	Tang	Cu 70.9%, Sn 23.7%, Pb 3.6%, As 0.7%, Fe 0.4%	No Hg
O-0743	Tang	Cu 68.3%, Sn 22.8%, Pb 3.5%, As 0.4%, Fe 0.08%	Trace As, no Hg
O-0867	Tang	Cu 70.9%, Sn 23.5%, Pb 4.2%, As 0.7%, Fe 0.2%	Trace As, no Hg
O-0323	Liao	Cu 52.7%, Sn 12.9%, Pb 34.5%, Fe 0.13%	High Hg, no As
O-0751	Jin	Cu 74.8%, Sn 20.2%, Pb 1.5%, Fe 0.03%	Trace As, Hg
O-0885	Ordos	Cu 64.4%, Sn 19.6%, Pb 15.0%, As 2.4%, Fe 0.1%	High Pb, some As, No Hg.
O-0322	Unknown	Cu 69.4%, Sn 23.2%, Pb 3.7%, As 0.7%, Ni 0.01%, Fe 0.01%	No Hg; does have As
O-0804	Unknown	Cu 74.8%, Sn 25.6%, Pb 0.2%, As 0.4% Ni 0.03%, Fe 0.3%	Trace As, no Hg
NO-1505	Korean	Cu 55.8%, Sn 18.1%, Pb 17.8%, As 3.7%, Fe 0.1%	No Hg
O-0291	Korean	Cu 54.5%, Sn 18.9%, Pb 16.1%, As 2.4%, Fe 0.06%	Trace Hg
O-0292	Japanese	Cu 76.3%, Sn 2.5%, Pb 7.3%, Zn 7.6%, Ni 0.1%, Fe 0.9%	Contains Zn, no As, no Hg
O-0835	Cambodian: 11th–13th centuries CE	High tin content surface layer	Trace As, no Hg

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Mythical Animal and Grapevine Mirror (detail)

COTSEN COLLECTION NUMBER: O-0234

Tang dynasty (618–907 CE)

diameter: 14.50 cm

overall height (knob): 1.20 cm

overall height (rim): 1.40 cm

weight: 1600 g

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