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Discovery and Research of the Jade Wares from the Lingjiatan Relics Site



Fig.1 Jade Tortoise (87M4: 29&35)

Abstract: After five archaeological excavations, a large number of exquisite jadewares have been unearthed at the Lingjiatan relics site which was thrived over 5000 years ago. These jadewares are unique in shape and rich in connotation, making themselves outstanding representatives of Chinese Neolithic jade articrafts. Among them, the jade turtle, jade plate, jade label, jade eagle, jade pig, jade statue, jade dragon, jade Huang, and other representative jade objects, in particular, are closely related to the ancient divination and cosmology. In this case, they possess high research values in the artistic, religious and scientific studies, and have thus attracted wide attention from the academic circles. Based on the discovery process and the general characteristics of the Lingjiatan jadewares, along with multiple research findings, this paper aims at providing a comprehensive interpretation of the cultural connotations of the representative jade objects from the Lingjiatan relics site, so as to pave the way for future research works.

Key words: Lingjiatan relics site; jadewares; divination; cosmology; cultural connotations

China has a long history of jade culture. Jade, in *Shuo Wen Jie Zi* (《说文解字》, *The Origin of Chinese Characters*), is interpreted as a beautiful stone. As is recorded in *Yuejue Shu* (《越绝书》, *History of the Yue State*¹) there was a Jade Age between the Stone Age and the Bronze Age in China, showing that the origin of making and using jadewares in China can be traced back to the very ancient times. A large number of exquisite jadewares unearthed from the Neolithic cultural sites widespread in China, such as Hongshan culture site, Shijiahe culture site and Liangzhu culture site, jointly reflect the brilliance of the Jade Age. In Anhui Province, the Neolithic Era

¹ Yuejue Shu, also known as Yuejue Ji(《越绝记》), is a miscellaneous history recording the local history of ancient Wu and Yue. The whole book consists of 15 volumes. This book is based on the historical facts of Wu and Yue's hegemony from the end of Spring and Autumn Period to the early Warring States Period. It traces back to Xia Yu, down to the Han Dynasty, and besides the princes and states. It has been related to the national politics, economy, military, astronomy, geography, calendar and language of Wu and Yue area in this historical period, and is known as the "originator of local chronicles."



Fig.2 Jade Plate (87M4: 30)

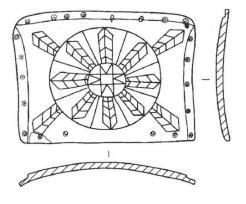


Fig.3 Jade Layout (87M4: 30)

jadewares are mainly unearthed from Xuejiagang in Qianshan County, Jinzhai in Xiaoxian County of Northern Anhui Province, and Lingjiatan in Hanshan County. Among them, the jadewares in Lingjiatan relics site, with their huge quantities, rich varieties and unique shapes, are absolutely of the most brilliant.

DISCOVERY OF THE JADEWARES FROM LINGJIATAN

RELICS SITE The Lingjiatan relics site is located in Tongzha Town, Hanshan County, Chaohu City, Anhui Province, about 10 kilometers southwest of Lingjiatan Village, about 20 kilometers west of Chaohu Lake (one of the five largest freshwater lakes in China), and 35 kilometers east of the Yangtze River. The relics site lies at the southern foot of the Taihu Mountains on a long hill extending to the North Bank of the Yuxi River (Houhe). With the presence of mountains and rivers nearby, the natural place provides good production and comfortable living conditions.

In 1985, while building graves, some local villagers found a few cultural relics. Later, the Anhui Institute of Cultural Relics and Archaeology has carried out five archaeological excavations at the Lingjiatan site, among which, the excavation in 1998 has been named one of the Top Ten National Archaeological Discoveries in P. R. of China.

Lingjiatan relics site has a total area of 1.6 million square meters. In the three excavations in June 1987, November 1987, and November 1998, a total area of 1775 square meters were exposed where 44 tombs, one altar, 3 sacrificial pits, 4 stone circles, and one house site were discovered. More than 1,500 pieces of relics were unearthed, of which nearly 800 were jadewares. The fourth excavation was carried out in October 2000. From May 7 to July 14 in 2007, the fifth excavation was carried out, covering an area of about 450 square meters. Four Neolithic tombs, three ash pits, one stone relic related to the altar were found, and altogether nearly 400 pieces of relics were unearthed. Among them, 330 objects were unearthed from Tomb 07M23.

According to the dating data, the origin of the Lingjiatan relics site can be traced back to 5300-5600 years ago, which was thriving at almost the same age as that of the Hongshan Culture, and earlier than that of the Liangzhu Culture. Among the funerary objects unearthed from the Lingjiatan relics site, the jadewares make up the largest majority, and the

¹ For the literature on the first four excavations, please see to Anhui Institute of Cultural Relics and Archaeology, Ed. *Lingjiatan: Field Archaeological Excavation Report I*. Beijing: Cultural Publishing House, 2006.



Fig.4 Jade Tortoise and the Built-in Jade Label (07M23: 123&124)

stone and pottery crafts the second; there are both production tools and weapons among the jadewares and stone crafts, which contributes to the main difference between the high-level tombs in Lingjiatan Culture and those of the same level in Wenkou Culture, Qujialing Culture, and Liangzhu Culture.¹ Yan wenming, Doctoral supervisor of Archaeology from Peking University, divides the whole cemetery of 44 Neolithic tombs unearthed during the first four excavations into eight districts. Putting together Yan's research and the findings of the fifth excavation, the author of this report will briefly introduce the tombs from which the jadewares, especially those typical ones were discovered.²

The Southern Zone is located at the central part of the South side of the cemetery—a prominent position closing to the altar. There are six tombs (including Tomb 07M23 excavated in 2007) in this area, most of which are top-grade. The main funerary objects are jade, including many high-quality jade ritual articles. Among the 128 objects unearthed in Tomb 87M15, 94 are jadewares, including 30 jade Huang (standing for the political power), 3 crowns, and 49 luxurious jade tubes. The number, quality, and shape of the iade Huang unearthed from this tomb are all outstanding among those from the Neolithic tombs in China. Among the 145 pieces of relics unearthed from Tomb 87M4, 103 were jadewares, including jade tortoises (standing for the religious authority), jade plates, triangular jade carvings, jade spoons, jade inkstones and axes (standing for the military power), and 19 pieces of jade Huang. Only half of Tomb 87M8 remains, yet 64 pieces of artifacts have been unearthed from this remaining tomb, including 43 pieces of jade articles such as wide-body jade jewels and quite a few jade bracelets and rings. There are three jade statues unearthed in Tomb 87M1. In 2007, Tomb 07M23 was unearthed. From this tomb, 330 pieces of funeral jadewares, stone implements, and pottery were excavated, including a set of tortoiseshaped jade, jade labels and other divination tools. At the top of the tomb, a large pig-shaped jade has been found.

It is worth pointing out that the altar closely related to the high-grade tombs is located at the east-central part of the cemetery, with a length of about 40 meters from the east end to the west end, and about 30 meters from

¹ Zhang Zhongpei. A Brief Study of the Lingjiatan Tombs, from Anhui Institute of Cultural Relics and Archaeology, Ed. *Lingjiatan: Field Archaeological Excavation Report I.* Beijing: Cultural Publishing House, 2006, 40-49.

² Please see to Anhui Institute of Cultural Relics and Archaeology, Ed. *Lingjiatan: Field Archaeological Excavation Report I.* Beijing, Cultural Publishing House, 2006; and also, Zhang Jingguol New Findings from the Fifth Excavation at the Lingjiatan Relics Site of Hanshan Coutnty, Anhui Province, *Archaeology*, 2008 (3).



Fig.5 Jade Tortoise-shaped Flat Circular Craft and Its Built-in Jade Label (07M23: 125&126)

the north to the south, occupying an original area of about 1200 square meters, and an existing area of approximately 600 square meters. The altar has three layers made up of different soil and stone materials. There are four stone circles and three sacrificial pits connected with the altar. In the southeastern corner of the altar, there are traces of thick ash of vegetation, which should be the relics of fire used for sacrifice.

Three tombs were found in the Southwest of the cemetery. From Tomb 98M29, the relatively larger one of them, 52 pieces of jadewares were unearthed, including the jade eagles with unique forms, 3 jade statues, and 2 jade Ges (\not z, spears). The owner of the tomb should have been a wealthy wizard. Many stone tools were unearthed from Tomb 87M6, including a few large stone Bens (\not a). The owner of the tomb might be a full-time mason.

Two groups of tombs (13 in total) were found in the Northwest of the cemetery (including 3 tombs excavated in 2007). From most of them have been unearthed jade cores, raw jade materials, and raw stone materials. From Tomb 98M23, some stone drills (the stone drilling tools found for the first time in Chinese Neolithic archaeology) and stone cores were unearthed. Half of the owners of the tombs in this zone should have been jade craftsmen or jade carpenters, thus this zone must have been a family cemetery, and the family members, professional jade makers. From the most famous tomb 98m20 in this zone have been unearthed 12 pieces of jadewares (including the Jade Axe), 45 pieces of stoneware, 4 pieces of pottery, 111 pieces of jade core and 4 pieces of grinding stone. It can be seen that the owner of the tomb must have been a full-time jade mason with much wealth and higher social status. From Tomb 07M19 and 07M20 excavated in 2007, one ritual jade axe and many smaller jade ornaments, broken jade materials, and processed edge materials were unearthed, which again shows that the zone should be a family cemetery whose members must have been jade craftsmen.

Four tombs were found in the Eastern Zone. The size of them is in the middle among all the cemetery. From Tomb 98M16, a relatively large one in this zone, 42 pieces of jade objects were unearthed. Among them, there are the Jade Dragon with a unique form and the exquisite jadewares such as the Jade Ear Horn and the Jade Trumpet. As much as 22 pieces of earthenwares have been unearthed from this tomb, making it the most productive in earthenwares among all the tombs of this relics site.

Four tombs were found in the central part of the cemetery, which are not as important as other tombs. Many stone tools have been unearthed from



Fig.6 Jade Label (07M23: 140)

Tomb 98M30, the owner of which might have been a mason.

Eight tombs were found in the Northern Zone. They are small in scale. The total number of the unearthed objects and the jade articles are also very small. It can be inferred that they must have belonged to some poor owners. GENERAL CHARACTERISTICS OF THE JADEWARES FROM THE LINGJIATAN RELICS SITE Jadewares unearthed from Lingjiatan, with their large quantities, rich varieties, exquisite craftsmanship, and unique shapes, fully demonstrate that the Lingjiatan relics site is one of the jade cultural centers in the middle and lower reaches of the Yangtze River in the Neolithic Age in China.

Statistics show that more than 1000 jade objects with dozens of varieties have been excavated from the Lingjiatan tombs. These jade objects take up the forms such as the statue, dragon, dragon-phoenix Huang, eagle, pig, rabbit, plate (or chip), label, Huang, Yue, axe, spoon, disk, ring, Jue, bracelet, tube, bead, earring, Heng, crown decoration, buckle decoration, fungus decoration, trumpet decoration (or trumpet), pagoda-shaped ornaments, triangular inscriptions, Ya, tooth ring, and double link. Besides, a large number of raw jade materials, processed and discarded jade materials, drilled cores, as well as some jade cutting tools like masonry drills have been unearthed.

Through testing, tremolite nephrite accounts for a large proportion of the raw materials among the jadewares from Lingjiatan relics site (others include actinolite, serpentine, crystal, agate, chalcedony, quartz, turquoise, and so on). According to the research findings, most of the raw jade materials are scattered with different amount in the area centered upon Lingjiatan and radiated around 100 kilometers. Jade mineral resources in this area are abundant. In addition, as Yuxi River connects Chaohu Lake with Yangtze River and Chaohu Lake are connected with Huaihe River, the water transportation in this area is convenient. All these are important factors for Lingjiatan to become a developed jade cultural center.

Jadewares unearthed from the Lingjiatan relics site were made by various and exquisite techniques, including wire cutting, slice cutting, ground reduction, shallow relief, semi-circular carving, engraving, solid core drilling, hollow pipe drilling, and polishing. Among these techniques, the drilling technology was particularly developed. More significantly, study on the curved dents on the surface of jade *Dangs*, jade trumpets, and jade statues suggests these jade articles should have been cut and polished



Fig.7 Jade Pig in the Filling Soil above Tomb 07M23

by using a disc-shaped jade cutting tool in processing, which is still rendered as very skillful.

Among the jadewares unearthed from the Lingjiatan relics site, there are some composite ornaments such as jade *Huangs*, jade bracelets, jade crowns, jade rings, and jade tubes. Meanwhile, many new types of jadewares such as the jade statue, jade turtle, jade dragon, jade eagle, jade tiger, jade rabbit, and the early forms of jade *Heng* and jade *Dang* are also found from this site. The jadewares from the individual tombs of this site, however, when studied separately, are characterized differently in terms of the quantities and types, reflecting the distinctive disparities between the tombs' owners so far as their power, wealth, status and identity were concerned.

Archaeologically, jade articles from Lingijatan can be divided into two categories, the common jadewares and those relatively special types.¹ The common jadewares are rather "common" in shape as they have also been found in other archaeological sites. Yet even these jadewares still bear some uncommon features as far as the combination methods and quantities of different types of jadewares are concerned. Thus, certain typological analysis can still be carried out concerning this category. For example, a large number of jade Huangs, jade rings, jade Jues, jade bracelets and jade tube-pearls were found in the Lingjiatan relics site, which is different from the quantity distribution of the jadewares unearthed from the Banpo relics site (tool-oriented) of the earlier Yangshao Culture and that of the later Liangzhu Culture (ritual-ware-oriented), while similar to that of the Northern Yinyang Ying Culture, Xue Jiagang Culture, and the late period of the Daxi Culture. The other category includes those jade articles that are in relatively special forms, including ceremonial jadewares representing theocracy or used for witchcraft rituals such as jade tortoises, jade plates, jade labels, jade statues, jade dragons, jade eagles, jade inkstones, and jade axes and those jadewares representing political etiquette system or used in alliance activities like the jade Huang and Huang-shaped articles. These jade articles with their religious or political significance have attracted wide attention among academic circles because of their unique artistic images and rich cultural connotations. Based on the correspondent research findings, next part this report will draw a conclusion to the present studies on the

¹ Yan Wenming. A Brief Introduction to the Jadewares from Lingjiatan, from Anhui Institute of Cultural Relics and Archaeology, Ed. *Research on the Lingjiatan Culture* [M]. Beijing: Cultural Publishing House, 2006, 50-52.



Fig.8 Jade Eagle (98M29: 6)

representative jade articles from the Lingjiatan relics site.

CASE STUDIES OF THE JADEWARES UNEARTHED FROM

THE LINGJIATAN RELICS SITE Because of their unique shapes, rich connotations, and involvement of divination and cosmology, the jade turtles, jade plates, and jade labels unearthed from the Lingjiatan relics site have attracted wide attention in the academic circle.

Jade tortoise and jade plate are the two most important pieces among the piles of burial jadewares found in Tomb 87M4. They are located at the chest of the tomb's occupant, a conspicuous position facing the big stone axe in the earth filled above the entrance of the tomb. The jade tortoise consists of a belly shell (87M4:29) and a back shell (87M4:35), with an engraved jade plate, which has a rectangular front and a slightly concave reverse, in the middle.

The jade tortoise is hollow. On the back of the jade tortoise drilled four holes, each of which is arranged in the opposite position of one of the four holes drilled on the belly of the jade tortoise. There are also corresponding grooves between the holes. The edge of the jade plate is polished into narrow strips (tenon edge) with the width of 0.4 cm, which are slightly thinner than the middle. On the strips, there are 23 holes, 9 on the top, 4 at the bottom, 5 on each of the left and the right side. The engraved pattern on the jade plate is made up of a small circle (with a picture of an octagonal star inside) in the middle and a big circle outside. The area between the two circles is divided into eight equal parts by straight lines. Each part is carved with a *Gui-shaped* (董形) decoration (at times called vein sagittal marker, arrow marker, or pointer marker), thus there are eight such markers altogether. Outside the big circle, starting from the circular arc and pointing at each of the four corners of the jade plate is carved a *Gui-shaped* decoration, thus there are 4 such markers in total.

The jade tortoise unearthed from the Lingjiatan relics site, the tortoise bells from the early Neolithic ruins of Jiahu Lake in Wuyang, Henan Province, as well as the common phenomenon of burying with tortoise shells in the southern part of the Dawenkou relics site are all manifestations of the belief in tortoise spirit among ancient ancestors. What is special for the tortoise from Lingjiatan is that the holes and grooves on the belly and the back shell are arranged in the pairwise opposition, which indicates that this jade tortoise might be freely separated and reset, enabling it to perform the function of shaking the hexagram. The case that the jade plate is



Fig.9 Jade Figure (87M1: 1)

sandwiched between the belly shell and the back shell of the jade tortoise seems to corroborate the absurd and unconventional records in the ancient Chinese literature, such as "a big tortoise holding runes in the mouth," "a big tortoise carrying a book on the back and coming out," and "a big tortoise bearing a picture on the back." In addition, the distribution of the boreholes around the jade plate also shows a certain mathematical relationship. The octagonal star on the jade plate is also seen on the jade eagle discussed in the following part of this report. This decorative pattern was popular among many Neolithic cultures thrived in the middle and lower reaches of the Yangtze River and the Eastern Chinese coastal areas such as Majiabang Culture, Daxi Culture, Songze Culture, Dawenkou Culture, and Liangzhu Culture. It is generally considered as a manifestation of the sun worship. The inner and outer layers of Gui-shaped ornaments on the jade plate seem to indicate the orientation, relating themselves to the ancient dishes and sundials. The function of the jade tortoise and its connection with the belief of tortoise spirit, the boreholes around the jade plate and their relationship with the location of the tortoise, the octagonal star and Gui-shaped patterns on the jade plate are all within the focus of the academic attention. Scholars have made a thorough study of the jade tortoise and the jade plate unearthed from Lingjiatan by comprehensive application of the theories concerning orientation, calendar, divination, Eight Diagrams, Book of Changes, Luoshu, Style Plate, Sundial, Yin and Yang and Five Elements to disclose the early Chinese cosmology and the cultural connotation of this articraft.

Yu Weichao has put forward the idea in earlier time that these jade articles are divination utensils, which has been widely accepted by the academic circles.¹ Many scholars believe that the boreholes and engravings on the jade plate were related to the determination of the location and season by the contemporary people. They have also given it a thorough research by a comprehensive method mixing up the theories concerning the Eight Diagrams introduced in *The Book of Changes*, Luoshu Diagrams, and ancient dials and sundials. Chen Jiujin and Zhang Jingguo, for example, suggest that the octahedral circle on the jade plate might have connection with the sun's position and the change of seasons, while the jade tortoise and the jade plate might serve as the ancient version of Luoshu and Eight

¹ Yu Weichao. Jadewares from Lingjiatan of Hanshan and the Spiritual Field of Archaeology. *Research on Cultural Relics* (5), Huangshan Publishing House, 1989, 57-63.



Fig.10 Jade Figure (87M1: 2)

Diagrams.¹ Liu Zhengying believes that the four *Gui-shaped* arrows in the outer four corners points at the position of the sunrise and the sunset on the day of the Summer Solstice and the Winter Solstice.² Lu Sixian and Li Di also believe that patterns on the jade plate must have something to do the Summer Solstice and the Winter Solstice, the sunrise and the sunset, as well as the change of the seasons.³

Rao Zongyi assumes that the layout of drilling holes on the jade plate shows that the ancestors in Lingjiatan attached great importance to the number Five. The arrangement of 9 holes on the top and 4 at the bottom seems correspondent to the concept that "four on the ground and nine in the sky match each other" (Kong Yingda, *The Rectifications of Meanings of Zhouyi*), which should be a different mathematical system from that of Hetu and Luoshu. The *Gui-shaped* ornaments pointing in different directions at any rate demonstrate that people at that time already had the special concept about eight directions and four dimensions.⁴

Based on an investigation of the drawing method and some related archaeological materials, Fang Xiangming assumes that the original shape of the octagonal star should be that of the sun, but the geometrization of the octagonal star must have been endowed with deeper connotation. Wang Yucheng insists that it was the small circle on the jade plate and the eight *Gui-shaped* patterns on its outer edge that were designed to represent the sun. Feng Shi, though admits that it is easy for people to associate the star pattern with the shape of the sun, points out the problem lying in the difference between the star pattern and the realistic image of the sun. With relevant archaeological materials about the octagonal star, documents on the Dot Map of Luoshu, and knowledge of astronomy and archaeology, Feng Shi suggests that the octagonal pattern should be the reflection of the ancient people's activities of using the sun to recognize position. From its compatibility with the Four-Square-Five-Bit Map and the Eight-Square-

¹ Chen Jiujin & Zhang Jingguo. A Textual Research on the Forms of the Jade Articles Unearthed from Hanshan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 75-78.

² Liu Zhengying. A New Interpretation of the Jadewares Unearthed from Hanshan. *Journal of Huaiyin Teachers College*, 1997.

³ Lu Sixian & Li Di. General Introduction to Astronomy and Archaeology. Beijing: Forbidden City Press, 2000, 122-123.

⁴ Rao Zongyi. Jade Plates Expressing "Positions or Directions" and "Mathematical Relations" Prior to the Creation of Words: A Brief Analysis of the Jade Plates Unearthed from Hanshan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 18-21.

⁵ Fang Xiangming. Analyses on the Issues Concerning the Forms and Decorations of the Jadewares Unearthed from the Lingjiatan Relics Site. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 190-202. Fang Xiangming. *A General History of Chinese Jadewares Southern China at the Neolithic Age*. Shenzhen: Haitian Press, 2014, 38-39.

⁶ Wang Yucheng. A Supplementary Study of the Jade Pieces and the Jade Turtle Unearthed from Hanshan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 95-102.



Fig.11 Jade Figure (87M1: 3)

Nine-Palace Map, this pattern should have been the origin of Luoshu.¹

Li Ling asserts that the pattern of the jade plate was very similar to the later diagrams.² Qian Boquan also thinks that the jade plate is a jade diagram.³ Li Bin believes that the jade plate was the original sundial.⁴ By comparing the pattern of the jade plate with that of the sundial, Wu Jiabi further proves that the two patterns are similar in structure and same in basic data. Although the numbers of the equal parts of circumference are different, they are identical in the horizon data when showing the position of sun in winter and summer, which indicates that the ancient people in Lingjiatan had already mastered the way of observational timing method through the position of sunrise and sunset.⁵

Li Xueqin, a history professor of Tsinghua University, holds the opinion that the pattern of the jade plat and the so-called "Regular Pattern" had come down in one continuous line. Li Xueqin suggests that it reflects the cosmological view of the ancient people ("round sky and square earth), while the star pattern at the center of the jade plate might be related to the original word "witch," revealing the importance of the witchcraft in the budding period of civilization.⁶

Xing Wen, from the perspective of the "figure schema" in prehistoric art, gives a comparative study of the jade tortoise and the jade plate unearthed from Lingjiatan with the tortoise bells in the early Neolithic ruins of Jiahu Lake in Wuyang, Henan Province as well as the Dot Map in in Hetu and Luoshu, and puts forward the idea that "the jade tortoise and jade plate from Lingjiatan, with their round-sky-and-square-earth forms and visualized drill holes, reveal inheritance of the spirit of the tortoise bells from Jiahu Lake and influence upon the later Hetu and Luoshu, seeming to contain the whole universe and all its Ying and Yang aspects."

In addition, Xia baoguo, based on the previous researches, concludes that the tortoise divination revealed through the jade plate was related to the primitive religious reform conducted by Emperor Zhuan Xu (Grandson of

¹ Feng Shi. Chinese Astronomical Archaeology, Beijing: China Social Science Press, 2010, 500-520.

² Li Ling. A Positive Examination of Chinese Divination. Beijing: Zhonghua Publishing House, 2006.

³ Qian Boquan. The Jade Plates of the Neolithic Age Unearthed from Lingjiatan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 84-88.

⁴ Li Bin. A Preliminary Study of Prehistoric Sundial: The Astronomical Significance of the Pictures on the Jade Pieces Unearthed from Hanshan, Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 103-109.

⁵ Wu Jiabi. The Astronomical Alignment of the Jade Plates Unearthed from Hanshan. Southeast Culture, 2006 (2).

⁶ Li Xueqin. On the Jade Tortoise and Jade Plate Unearthed from Lingjiatan of Hanshan County. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 32-37.

⁷ Xing Wen. The Figure Schema: The Jade Plate and Hetu and Luoshu. *Ethnic Arts*, 2011 (2).



Fig.12 Jade Figure (98M29: 14

the Yellow Emperor) through "the disconnection of heaven from earth" that is recorded in the literature.¹ Fang Xiangming, however, thinks that jade plate from Lingjiatan could be used alone, that is, not necessarily with the jade tortoise. It shows the concept of the North, the South, the East, the West, and all other directions. It is similar to the jade *Cong* from the Liangzhu Culture in shape and was the earliest "God's Face" in the Neolithic Age.²

The unearthing of the jade tortoise was not unique. In the fifth excavation, one jade turtle (07M23:123) with a built-in jade tag (07M23:124) and two flat circular jade turtle-shaped articles were discovered in Tomb 07M23. Both articles had built-in turtle-shaped jade tags: one was 07M23:127 (the built-in jade tags were 07M23:128 & 129) and the other was 07M23:125 (the built-in jade tag was 07M23:126). There was also a jade stick (07M23:140) that had slipped out. The upper abdominal armor of the jade tortoise-shaped ware is thicker, the lower one is thinner and flat, and the inner cavity is oval and more regular. Like other high-grade jade articles, this jadeware was made up of higher-quality jade material. The jade label looks like Gui-shaped object, with one end triangular, the other slightly circular, and a pile of drilling holes in the middle. Obviously, these three pieces of jade tortoise-shaped articles, along with the jade labels, served as divination tools, which proves archaeologically that the records about the use of tortoises and Eight Diagrams for divination in ancient documents had actually happened. Meanwhile, it also shows that the speculation mentioned earlier about the use of jade tortoises for divination is reliable. A reexamination may get us reclassify the jade hairpin unearthed from Tomb 87M4 (87M4:36) as a jade label.

As for the original religious significance of the jade turtle, jade plate, and jade label, Zhang Zhongpei believes that there were three kinds of religions in the prehistoric period of China, which were characterized by Huangju, bone divination, and tortoise divination respectively, while the Lingjiatan Culture is characterized by its tortoise divination. ³ Zhang Jingguo holds that it is shown by the archaeological materials that there were two systems in the early divination methods: one was the system (Lingjiatan as the representative) in which people used jade tortoises and jade labels to shake hexagrams; the other was the system (Yin Dynasty Ruins as the

¹ Xia Baoguo. Zhuan Xu's "Disconnection of Heaven from Earth" and the Tortoise Divination in Lingjiatan. Southeast Culture, 2012 (3).

² Fang Xiangming. The Earliest Jade "God's Face": A Study of the Jade Plates Unearthed from Lingjiatan. Southeast Culture, 2012 (2).

³ Zhang Zhongpei. A Glimpse of the Lingjiatan Cemetery. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 40-49.

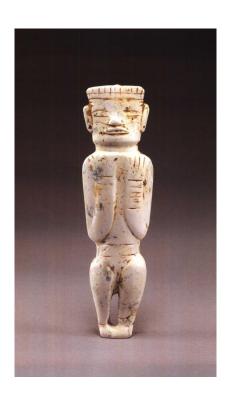


Fig.13 Jade Figure (98M29: 15)

representative) in which people would burn the Oxen shoulders and tortoise shells. From the analogy of the divination methods and the gesture of the jade statues, Zhang Jingguo also suggests that there should be certain connection between the Lingjiatan Culture and the Hongshan Culture.¹ Xing Wen believes that the cultural connotation of the divination and the artistic image in ancient China can be sorted out through the relationship between men and animals from the perspective of tortoise spiritual belief. The wizard can communicate with heaven and god by tortoise divination and jade plate or jade label divination. Besides, the tomb-guarding super jade pig and ascending bird to heaven (jade eagle) to be mentioned below are also of the same connotation, which can be regarded as the reflection of the human and animal relationship in the history of art though the man is absent. The orientational significance and the relationship between man and God contained in these artifacts embodied the cosmological view of the people at that time and highlighted the role of Chinese art as part of its cosmology.2

The Jade eagle, jade pig, jade statue, jade dragon, and jade *Huang* unearthed from the Lingjiatan relics site are also widely discussed for their involvement in the spiritual, cultural, social and political issues.

The jade eagle (98M29: 6) is a compound jade carving object with the eagle as its main body and the pig head as its two wings.³ The jade eagle is proud and winged, and the head is side-looking. Its wings are symmetrical, and the chest and abdomen are mainly decorated with octagonal stars, with a circle respectively inside and outside. The hawk eyes, pig eyes, pig nostrils, and the central point of octagonal stars are made up of penetrating boreholes. The nose and the mouth of the beasts at both ends are separated by two jade gourds (98M29: 7&8), which seem to be a pair of compatibility components. The pattern of the decorative octagonal star on the eagle is the same as that of the octagonal star on the previously mentioned jade plate, yet it does not point in the normal direction but corresponds with the hawk beak. The shape and decoration of the jade eagle embody the aesthetic consciousness of symmetry, mystery, and solemnity. On the whole, the eagle's head, the pighead wings, and the decorative octagonal stars are three outstanding

¹ Zhang Jingguo. New Discoveries in the Fifth Excavation at the Lingjiatan Relics Site of Hanshan County, Anhui Province. *Archaeology*, 2008 (3).

² Xing Wen. Human and Animal Relationship: Categories of the Relations between Men and Animals Seen in the Pottery, Jade, and Metal Crafts, and Textile Goods from the Prehistoric Time to the Han Dynasty. *Ethnic Arts*, 2011 (4).

³ There is another compound craft combining the beast and the bird, that is, the Dragon-Phoenix *Huang*. One end of this *Huang* is a pig-head dragon, while the other a phoenix.



Fig.14 Jade Figure (98M29: 16)

elements of the eagle's figure.

It's generally believed among the academic circle that eagles are the symbol of birds and the decorative octagonal star is that of the Sun. The connotations of the bird-worship and the sun-worship are the same, which have a certain universal significance. Bird-worship, phoenix-worship, and sun-worship had already prevailed in ancient Eastern China. Pig, one of the earliest domesticated animals, was a symbol of wealth in the primitive time, and also an important traditional sacrificial animal. Zhang Jingguo thus puts forward that the importance of the jade eagle lies in that the ancient people could offer sacrificial pigs to God of the Sun through the flying eagle. Li Xiusong thinks that the jade eagle from Lingjiatan reflects the combination of the sun-worship, bird-worship, and pig-worship, and it was, to a great extent, influenced by the southward radiation of the Dawenkou Culture.

It is worth noting that there are also independent jade pigs or pigshaped jadewares among the jade articles from Lingjiatan, including a small-sized jade pig unearthed from Tomb 87M13 (NO. 87M13: 1) and a large jade pig (or a pig-shaped jade object) weighing 88 kilograms unearthed from Tomb 07M23. It fully demonstrates the importance of pig-worship among the ancient people of Lingjiatan. The large jade pig is located on the top of the made ground of Tomb 07M23. It might possess the same tomb-guarding function as the stone axe (or the jade axe or jade **Yue** \(\overline{\pi}\)) excavated from the made ground of Tomb 87M4. The jade pig is made from a large piece of natural jade material and is the earliest, largest, and heaviest pigshaped jadeware among Chinese archaeological findings. It is as vivid as a real one, with its foreface sticking out, its mouth and nose clearly engraved, a pair of upward curved tusks on both sides of the mouth, and its eyes and ears represented by subtraction. The neck of the pig is semicircular and the abdomen is curved to resemble curled legs or wings.\(^3\)

Six jade figures were unearthed from Lingjiatan site, of which three were standing postures (87M1: 1&2&3), the other three sitting postures (98M29: 14&15&16). The jade figure has a rectangular face with a square-shaped crown on his head. In the middle of the crown there is an ostracod (triangle) spire, and on the top, there are three small round holes. It has

¹ Zhang Jingguo. New Discoveries in the Fifth Excavation at the Lingjiatan Relics Site of Hanshan County, Anhui Province. *Archaeology*, 2008 (3).

² Li Xiusong. On the Culture Connotation of the Jade Dragon, Jade Eagle, Jade Tortoise, and Jade Plate from Lingjiatan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 1-7.

³ Zhang Jingguo. New Discoveries in the Fifth Excavation at the Lingjiatan Relics Site of Hanshan County, Anhui Province. *Archaeology*, 2008 (3).







Fig.17 Jade Double-Tiger-Head Huang (87M8: 26)

double eyelids, a garlic nose, two ears. In the lower ear is drilled a hole. It has a big mouth with decorative moustache on the upper lip. The arms are placed upward, with all the fingers open and close to the chest. The arms are decorated with rings, and the waist oblique striped belts. The number of the rings on the arms and the belts on the waist of different jade figures varies. The three jade figures unearthed from Tomb 98M29 have no legs and show a positive sitting posture. Behind the jade figure there are hotels for interlacing, which makes it easy to hang.

These six jade figures, standing and sitting, have different shapes, but the body proportions of these figures are very symmetrical as their eyes, ears, nose, mouth, teeth, beard, crown, necklace, hands, ten fingers, clothing, legs, and toes are all delicately carved, showing rather high artistic achievements.

The shapes of the six jade figures are slightly different. They may represent different gods and have some religious significance. Wang Renxiang holds that the crown style of the Lingjiatan jade figure was quite popular in the late Neolithic culture in the middle and lower reaches of the Yangtze River and the Yellow River, which was a standard crown style of the personalized god in the prehistoric times. Some scholars have also compared the jade figures from Lingjiatan with those from the Hongshan Culture, Majiayao Culture, and Sanxingdui Culture, concluding that all the six jade figures are male. In addition, the decorative crown worn by the jade figure is similar to the feather crown from the Liangzhu Culture, and should also be made up of feathers, turning itself into a representative of the bird worship. Like the bracelet and the belt, the crown should also be a decoration to attract opposite sex and must have something to do with the reproductive worship.

The independent jade dragon (98M16: 2) unearthed from Lingjiatan has also aroused much academic interest. Dragon is the symbol of Chinese culture. The decorative patterns and froms of dragon are popular among the Neolithic relics in China and often possess some local characteristics. These patterns and forms include the dragon-shaped pattern with the pig-like head and snake-like body on the earthenwares excavated from the Xinglongwa Culture, the long fish-like dragon pattern on the garlic-head vase unearthed from the Banpo relics site of the Yangshao Culture, the mussel sculpture

¹ Wang Renxiang. The Rail Crown in the Prehistoric Times of China: regarding the Jade Figures Unearthed from Lingjiatan. *Cultural Relics of Central China*, 2007 (3).

² Zhang Jie. Artistic Decoding of the Jade Figure Unearthed from Lingjiatan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 181-185.





Fig.20 Jade Spoon (87M4: 26)

dragon shaped like the crocodile from the Xishuipo relics site of Puyang, Henan Province, the jade pig-dragon with a pig-like head and a dragon body from the Hongshan Culture, many jade dragons unearthed from the Liangzhu Culture, the jade pig-dragon from the Shijiahe Culture, and the dragon-shaped pattern on the painted pottery dishes unearthed from the Taosi relics site of Xiangfen County, Shanxi Province.

The jade dragon unearthed from Lingjiatan relics site (98M16: 2) appears flat and circular, with a curved body, the head and tail hooked with each other, a prominent foreface, two horns on the head, and wrinkles on the forehead made by incised carving. The whiskers, mouth, nose, and eyes of the dragon are all clearly distinguishable, and there are 17 lines made by the incised carving on the back of the dragon to stand for its scales. This jade dragon has horns, which should be the image of Qilong recorded in later literature. The image of the dragon unearthed from Lingjiatan, along with the images of the dragons excavated from the other Neolithic cultural relics sites of China proves that the origin of the Chinese dragon image can be traced back to the very ancient time.

Jade *Huang* represents the identity, status, and power of the commander. The number of the jade *Huang*s unearthed from Lingjiatan is large, the category many, and the texture variable. Some of them are carved with dragons, phoenixes and tigers at both ends. Some have a variety of teeth shapes polished on the outer arc edge. Some are carved into teeth or umbrellas at the top. Some have two curved holes drilled at the top of both ends. The holes run through the inside and surface of the circular arc of the *Huang*, while no holes are left on the front. All these manifest the aesthetic appeal of the ancient people in Lingjiatan.

These jade *Huang*s can be divided into two categories: one used for accessories like the double-head tiger *Huang* (87M8:26)—the earliest jade *Huang* with a tiger head on both ends; the other (in Yu Weichao's words, the *Huang*-shaped articles) similar to the common jade *Huang* in that both ends are curved upward and drilled with small holes for the convenience of wearing but different from the common type in that the body is straight rather than semi-circular. The most important difference between these *Huang*-shaped articles and the common jade *Huang*s is that these articles are divided into two parts from the middle point, and the two halves are

¹ Li Xiusong. On the Culture Connotation of the Jade Dragon, Jade Eagle, Jade Tortoise, and Jade Plate from Lingjiatan. Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*. Beijing: Cultural Publishing House, 2006, 1-7.

similar to the mortise and tenon structure that can be separated and rivetted, exactly like the "rivetable" tiger-shaped tally of the later generations. This kind of *Huang*-shaped articles can be further divided into two sub-categories. One is the tiger-head *Huang*, many of which have been "half-cut unearthed"—only the end decorated with the tiger head is preserved, and in many cases the other end damaged (87M15: 109, in a rare case, is relatively complete)—and might have been used as a token in the military alliance. The other sub-category is the bird-head *Huang*-shaped object, whose two ends are unearthed in pair (like the dragon-phoenix *Huang* 87M9: 17&18 and 87M15: 40&106), with a bird's head at one end and a pig-head dragon at the other, possibly serving as a token in the marriage relationship.

From what has been discussed above, it can be seen that in the era of Lingjiatan culture, all kinds of arts were integrated and the art creation was placed within a broad knowledge and religious scope. The study of Lingjiatan jadewares is of great academic significance for us to study the early religion, science, art, and custom of China as well as the divination, *The Book of Changes*, the Eight Diagrams and the Five Elements of Yin and Yang with far-reaching influence on Chinese culture.

Note: Source of the figures: Fig.3 is from Anhui Institute of Cultural Relics and Archaeology, Ed. *Researches on Lingjiatan Culture*, Cultural Publishing House, 2006, 5. Fig.4-7 are from Zhang Jingguo. New Discoveries in the Fifth Excavation at the Lingjiatan Relics Site of Hanshan County, Anhui Province. *Archaeology*, 2008 (3). The others are from Anhui Institute of Cultural Relics and Archaeology, Ed. *Jadewares Unearthed at Lingjiatan*, Cultural Relics Publishing House, 2000.

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