

Editor's Note: The following is part three, the conclusion, of Tong Kin-woon's work, Shang Musical Instruments. Parts one and two appeared in XIV-2 and XV-1 of Asian Music.

CHAPTER SEVEN STRINGED INSTRUMENTS AND OTHER WOODEN INSTRUMENTS

I. INTRODUCTION

In this chapter, the possibility that the Shang people had stringed instruments and other wooden instruments will be explored. Since no such instruments have been discovered in Shang sites, my study is based mainly on OBI and on inference.

The qin (), a fretless zither usually with seven strings, and the se (), a zither with one movable bridge under each of its twenty-five strings, are the only two stringed instruments mentioned in the earlier Zhou classics; they are believed to have existed before Shang times (Figure 96).

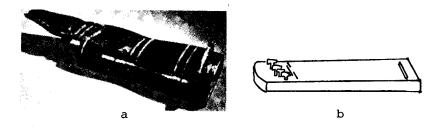


Figure 96 -- a. A ten-string qin-type zither found in the tomb of Marquis Yi of Zeng (ca. 433 B.C.).

Length: 67.3 c.m.

b. Drawing of a se from the same tomb. Length: 1.69 m.

(Based on <u>Sui Xian</u>, diagrams 32, 30)

Two other zithers, the zheng (), similar to the se but with fewer strings, and the zhu (), the strings of which were struck with a bamboo stick, were popular in the second half of the Zhou period; these instruments are generally believed to be later developments than the qin or the se. However, archaeology shows that there were more types of Zithers in Zhou times than are mentioned in the classics. It is possible that some unrecorded prototypes of Zhou zithers might have existed in Shang times.

No one has been able to point out any pictograph which represents Shang stringed instruments. There is a belief that the OBG (254 :yue, "music") shows

two pieces of twisted silk string ()) at the top of the graph (:mu, "tree"; evolved meanings: "wood," "wooden"). Thus the concept "music" or "stringed instrument" is expressed by a compound graph consisting of graphic components "silk string" and "wood." This interpretation is important because it would be evidence, if correct, of the existence of stringed instrument(s) in Shang times.

Owing to the lack of information, it is not possible to prove that Shang people did have stringed instruments. In this chapter, I intend to point out some previously neglected OBI and OBG which perhaps refer to stringed instruments. All my interpretations and translations of OBG and OBI are thus tentative.

There are many OBG that involve the radical (Shima: 471-473), traditionally interpreted as showing a twisted silk string with knots at each end. radical can be written 8 or 8, with one or both knots omitted. It might be argued that the graph merely shows two pieces of thread (hemp or fibers of other plants) or gut twosted together. It is true that not all graphs involving this racical are necessarily related to silk thread, but the fact that this radical traditionally meant "silk-thread" in the classics makes it very likely that it might have had the same semantic function in the Shang period. It has been proven that the Shang people were acquainted with silk; Shang bronzes decorated with the images of silkworms have been discovered (Du 1980:94). Jade silkworms were popular art objects in Shang tombs (WW 1972.11:3). Recently some Shang bronzes were found wrapped with pieces of cloth; laboratory reports show that the material is genuine silk (WW 1979.6:46-48; KG 1972.1:13).

Even if the above radical cannot be verified as meaning "silk string," it is obvious that it depicts some kind of twisted string. It is not vital to the argument to assert that Shang people must have had silk strings in order to have had stringed instruments, because musical strings can be made of many materials. In the following discussion, the term "string" will be used when referring to this graph, in order to avoid drawing wrong conclusions.

II. THE GRAPH

The late Zhou version of the graph meaning "music" and "to entertain," as given in the Shuo Wen dictionary, is \$ 98 (1994; it is explained as showing a large

drum () and small drums () mounted on a stand () --Shuo Wen, Juan 6.1:54). This shape and interpretation are not reliable. In the past hundred years, many Zhou bronzes have been found which are inscribed with this graph (), also written (), with the component " ()

omitted, or written as , with the addition of the radical "water" (;)-no change in meaning (Rong 1959: 316). We know that these different versions are the same graph because in the inscriptions they clearly mean "to entertain." These bronze graphs clearly show that the upper part of the graph, of the depict any drums; rather, it shows two twisted silk threads. Although drums were important for music in antiquity, it is doubtful that the meaning "music" should be represented merely by the drum. In fact the middle component " of thought to represent a drum) appears only in later Zhou bronze graphs; it is not seen in Shang or early Zhou graphs. The lower part " will " does not represent a real stand either. It is a semantic element employed to clarify the fact that the graph refers to a wooden object. Luo Zhen-yu, in 1940, was the first scholar to point out that the OBG shows

"silk-threads on the graph wood (米), implying zithers" (OBD:2003. "人 新竹木上琴瑟之象也") This reasonable interpretation is accepted by most scholars (Zhou 1975: 3773).

In the graph , no actual shape of any stringed instrument is depicted. However, some scholars are still misled by the Shuo Wen and interpret it otherwise. For example, in 1937, H.E. Gibson wrote, "The Shang pictographs represent forked wooden supports upon which bells were hung. It was therefore a musical instrument." As for the component " • " in later versions, he says that it is a drum (Gibson 1937:14). Bernhard Karlgren also takes the lower part " W " to be a real wooden stand. He said, "The graph shows, on a wooden stand some musical paraphernalia of uncertain interpretation (bells? silk thread=strings?)" (Karlgren 1957:no. 1125). This opinion was seriously criticized by Fritz A. Kuttner in 1969. He said that this was an example "in which even philologists of great and internationally acclaimed learning go far astray in their judgment of musicological questions," and which "created much confusion in Oriental music research."

However, Kuttner's interpretation seems to stray even more, since he thinks the archaic graph represents "a man beating a drum or a kettle drum with two drum sticks" (Kuttner 1969:13). He probably mistook the lower part of the graph, " ," for the image of a man. A Japanese scholar, Mizuhara Ikō, also mistook the graph for a pictograph, and suggested that it represents a prototype of the gin and the se.

To me, Luo Zhen-yu's interpretation is most acceptable. I can supply more eyidence to support his interpretation that the graph shows two strings and

strings () and "wood" (), indicating the materials of which the stringed instruments were made. These graphic structures seem to suggest that "a single sound from a qing stone is a sound; the prolonged sound from a flute is a note; the sounds from a stringed instrument, arranged in a melody, are called music." This perhaps explains why the graph "music" is represented by "silk strings" and "wood."

In OBI the graph is used only as a place name and is not seen relating to music. Such borrowing of meanings was common in Shang times and should not cause much doubt about the original meaning of the graph. For example, the graph showing the striking of a qing () is also used as a place name and is never seen in a context meaning the instrument. Moreover, the number of oracle bones destroyed might be much larger than the number of oracle bones preserved (see Chapter One, VII). It is difficult to conclude that the OBG never originally referred to "music" in OBI.

There is a bone fragment which seems to use the graph ; , adding the radical "water" (::) , perhaps to mean "musicians":

Traditionally the word yue (), besides meaning "music," "to entertain," and "musical instruments," also meant "musicians." In OBI the graph H (): duo, "many") is often used as a numerical adjective preceding categories of persons. For example, in OBI there are the terms H () The many officials"),

H () The many Qiang-slaves"), and H () The many dancers"; see Chapter Eight, section II, for interpretation of this term). Besides these, there are OBI which divine whether the king should bring the dancers () 1 = 17 = W () when he goes hunting (Shima: 458; see OBI 135 in Chapter Eight, section IV). Given these as evidence, my translation of OBI 118 seems acceptable.

The semantic function of the component " 4" which appears in the later bronze graphs-- 60 -- is not

yet known. People have suggested that it might show the thumb or a pick with which the strings are plucked (Zhou 1975:3773). In any case, it does not seem to represent a drum.

III. OTHER GRAPHS THAT MAY REFER TO STRINGED INSTRUMENTS

My research shows that besides the graph which depicts an instrument, there is usually another graph to signify the playing of the instrument, for example:

(qing), 7 -- 1 (clapper drum), 7 -- 1 (bells). Therefore, it is reasonable to infer that if there were stringed instruments in Shang times, there might also be some graphs for the playing of those instruments, which have either been neglected or misinterpreted. Furthermore, since the graph does not show the actual shape

of an instrument, it is possible that there are other pictographs which do. Based on this reasoning, I re-examined some problematic OBG and OBI which involve the radicals "string" (),) and "action" ()). I find that some graphs make good sense if they are interpreted

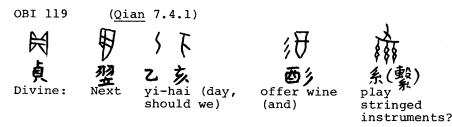
as referring to stringed instruments. These graphs and OBI are discussed and translated tentatively below, in hopes that they will be studied further.

A. This graph, also written and (Shima: 472), basically shows a hand (A) and

two or three strings. In OBI it is used as a verb. Scholars believe that it means "to perform a kind of ritual or sacrifice." Traditionally it has been equated with the modern word (= 12 :xi), meaning "to

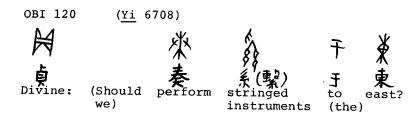
suspend," "to link things together," "to tie" (OBD:3863). Instead of translating it as "to sacrifice by suspending things," scholars have roughly translated it as "to sacrifice," but no one in fact explained what was done in this "sacrifice." Recently Yu Xing-wu suggests that it means to link human beings with gods by means of offering things, in order that they can communicate (Yu 1979:28). This interpretation is interesting, but hard to verify. In fact, all sacrifices were meant to link humans with spirits; it is unlikely that there would have been one sacrifice, represented by this graph, to emphasize this concept.

I believe that the equation of the graph to the modern word (:xi) is perhaps correct, but its meaning should be "to tie strings on the zither and play." In Zhou classics, this word xi sometimes means to "tie strings on zithers and produce music" (Guo Yu, sect. "Zhou," part 3. 图 话意下: "文文 "). In some cases, this OBG makes better sense if it is understood as a hand plucking a stringed instrument. For example:



The traditional translation for the above OBI-"... offer wine and things"--makes sense. However, wine offerings were often associated with the performance of instruments, thus it is possible to refer the above graph to stringed instruments. Another OBI, which seems to mention wine offerings together with the playing of

ocarinas and stringed instruments (translated in Chapter Six, OBI 101), is similar in syntax. The following OBI which clearly mentions "to perform" is especially interesting:



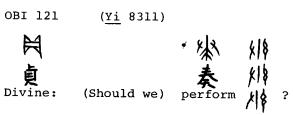
There are OBI showing that the Shang people sacrificed to the gods of the four directions. For example, one OBI says: "played bells to the west" ("工程中有意子医; see OBI 22 in Chapter Two), and another saying "offer wine (and) play bells to the east" (是文本 是《新文文》 Shima :94). These

examples seem to support my translation of OBI 120.

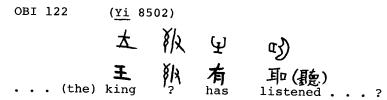
Another OBG, \$\frac{1}{8}\$, showing a hand (\$\frac{1}{8}\$) and one string, is also often connected with a wine offering. Perhaps this is a different version of the same graph or at least has a similar meaning.

There is no direct equivalent for the graph (also written), or (); Shima:473), in modern Chinese.

Li Xiao-ding listed this graph in his dictionary, but gave no explanation (OBD:3898). Rao Zhong-yi equated it with another graph (:yin), meaning "people who work in the government," "officials" (Rao 1959:307). There were many kinds of officials in the court; it is possible that the additional component signified their job. If this is correct, the addition of the component "string" might refer to the music officials or, simply, "the musicians." There is one OBI which connects this graph with the one meaning "to perform":



Another OBI contains this graph and the graph "to listen" (α), showing a mouth and an ear):



The meaning of this OBI is unclear, but the following OBI, which also contains the graphs "to listen" and " (stringed instruments?), merits attention:



There is also the term "BK" (34); "the many "), which refers to a category of people,

perhaps musicians. There are several OBI which divine whether these people should accompany the army in an attack on an enemy tribe (Shima:473). For example:



If this translation is correct, then it shows that there were musicians in the Shang army. Traditionally, the presence of music in an army signified that the participants are on the right side of a "just war." A Zhou text says: "If there are bells and drums in an army, it is called an attack. If there are no (bells and drums), it is an invasion" (Zuo Zhuan, 25th year of Duke Zhuang; 左律法公司等: "人行有重 表 写代. 無 写作。").

c. 🕺

Whether this graph represents the idea of striking a string with a " \(\) " is not certain. In some cases, it is seen along with other graphs referring to music:

Since the graph " () is preceded by the graph "don't" ()), it must be a verb and cannot be taken as "Shang people" or "Shang city." This is why I have translated it as "perform shang-bells." If this translation is correct, then the problematic graph " " might perhaps be taken as "playing the ocarina," because it seems to show a mouth and a " ." The real meaning of this and other similar OBI (listed in Shima: 473) is still to be found.

I have not found any OBG which clearly depicts a stringed instrument. However, it would not be surprising if one day the pictograph for qin (zither) would be found. The presently available oracle bones represent only a small portion of all the Shang oracle bones which ever existed. What is not seen in the available OBI need not be something which did not exist in Shang times. In addition to the graphs above, there is one more graph which I have tentatively translated as "stringed"

instrument performance" in Chapter Two (II.B, OBI 55-56). However, its graphic structure is not fully understood.

IV. OTHER WOODEN INSTRUMENTS

It is possible that there were some wooden instruments in Shang times which are not recorded. In this section, I would like to talk about two wooden instruments which existed in the Zhou period and their possible prototypes; these are the \underline{zhu} (大人) and the \underline{yu} (古人), instruments stuck to mark the beginning and ending of a piece of ensemble music.

A. The zhu (权)

This is a square wooden box with a pole running through a hole in the center of the cover. The bottom and inner sides of the box were pounded with the pole to signify the start of a piece of music. Guo Pu's annotation to the Er Ya says: "The zhu is like a lacquered bucket () 24 inches square and 18 inches deep. In the center there is a pole with which the bottom and sides are struck. The pole is called zhi () " (Er Ya, ch. "Instruments").



Figure 97 -- The zhu 大元

(From Korean Musical Instruments Exhibition, Hong Kong. 1978: Figure 64)

The origin of the instrument is not mentioned. I believe it could have been derived from the wooden stand in which the pole drum or the shang-bells were mounted in Shang times.

In Chapter Four, I explained that the OBG (事: yong, "pole drum") shows the pole drum mounted on a pole which is fitted in a stand (section V.B). This pole and stand (出) is what is depicted in the OBG 出(用: yong, "to use instruments"), as explained in Chapter Two (I.I). They also occur in another OBG, "to set up instruments," (胃:zhi). In this graph, two hands ())

are fitting a pole into the stand (), and the component (:zhi) in the upper part is the phonetic element (see Chapter Two, I.2). It should be pointed out that this phonetic element (:zhi) is exactly the same word as the name of the pole, (:zhi), in the instrument zhu, as seen in the previous citation.

Many of the Zhou court musicians were blind. It might have been necessary to make a sound to signal the beginning so that the musicians could start the music

correctly. In later generations, the wooden clapper was made for this purpose. Before the clapper was invented, it is possible that there was a time when another object was used; it is natural that the stand of some instrument would be stuck for such a purpose, because it does not interfere with the pitch of other instruments and because there would be no need to make an extra instrument

The inference above, though it cannot be definitely verified, seems reasonable, because there are examples of musicians striking the sides of their instruments as a starting signal. I have seen the leader of the percussionists in Cantonese opera patting the side or the edge of his drum or wood blocks so that his gong- and cymbal-playing colleagues can start in unison. Similar habits are not uncommon in other music cultures. This possibility, besides explaining the similarity between the side-view of the zhu () and the graph (), also explains why the instrument was struck on the inside.

B. The yu (春文)

The yu () is a wooden tiger on the back of which is a dentated strip with 27 "teeth." A wooden stick was scraped along this strip, causing a rattling sound marking the end of an orchestra piece (Er Ya, ch. "Instruments," Guo's annotation). Since an unspecified time, a brush of split bamboo has been used instead of a wooden stick, as can be seen in the Confucian music ceremony still performed in Taipei and Korea.

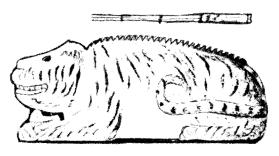


Figure 98 -- The yu 吾女

(From Korean Musical Instruments Exhibition, Hong Kong. 1978: Figure 65)

The origin of this instrument is not known. I believe that it might have come from the denticulation carved on the edge of some Shang qing. If people need a percussive or rattling sound to signify the beginnings and endings of pieces of music, it is natural to utilize some instrument or object already present. Possibly this is the reason why the drum (or bell) stand was struck to mark the beginnings (see last section on the "zhu"), and the edge of the qing was scraped to mark the ending. This design did not cause the trouble of having to make and carry two extra instruments (until the Zhou people decided to make them as separate instruments).

The right part of the word yu (美) shows a hand holding a stick (文), indicating the scraping. The left part (妻) is the phonetic element. The Zhou version of this left part in the classics and on bronzes is often written (Rong 1959:591), the top part of

which means "tiger." Obviously the "tiger" was essential, both for the graphic structure and the actual instrument. Correspondingly, one of the three Shang qing having such a dentated edge is decorated with the image of a tiger (Gao 1962:pl.99.1, qing from Large Tomb No. 1001). The other two, depicted in Chapter Three of this work, are partially disintegrated (Figure 23) and broken (Figure 28). But the shapes and remaining decorations show that these too might have been tiger qing. Even if they were not, they might have been used like the later yu, because the denticulations are smooth, probably due to frequent scraping.

V. CONCLUSION

In this chapter I have attempted to clarify the structure of the graph meaning "music" and, in general, "to entertain"-- (452 : "ue). It seems to convey

the meaning of "music" with the combination of the components "silk string" () and "wood" (). Perhaps the Shang people had the concept that "music" is that which is produced on wooden stringed instruments. There are other graphs, namely () () = 1:xi, "to

tie strings"), (= :yin, "musicians"?), and which also seem to refer to stringed instruments. However, the interpretations of these graphs are tentative, and there are as yet no recovered stringed instruments from Shang sites. Thus it has not been proved that the Shang people had stringed instruments, though the possibility is great.

The two Zhou wooden instruments, the zhu (大人, a wooden box) and the yu (五人, a wooden tiger), the sounds of which marked the beginnings and endings respectively of orchestra pieces, might, in my opinion, have developed from the Shang drum or bell stand and the denticulation on the edges of some Shang qing. This is not verified by strong evidence, but there is graphic background which makes this opinion worthy of consideration.

NOTES

1. The Shi Jing is one of the earliest classics to mention the qin and the se. The se was said to have fifty strings originally, but the legendary pre-Xia Yellow Emperor ordered it reduced to twenty-five strings. For more information, see Er Ya (section "Instruments") and Shuo Wen (Juan 12.2:44). In this century more than thirty late Zhou se have been unearthed. Most of them have twenty-five strings (WW 1979.7:6); one has twenty-three strings; and one in bad condition (perhaps a burial property) has twenty-four strings (KGXB 1973.1). No se with fifty strings has ever been found. The Lü Shi Chun Qiu gives a different and more reasonable story concerning the evolution of the se, though it may not be historically accurate either. It says that originally the se had five strings, and the father of the legendary pre-Xia emperor Shun (🚜) changed it to fifteen strings. Emperor Shun in turn ordered

his subjects to make it a zither with twenty-three strings (Lü Shi Chun Qiu, Juan 5, ch. "Ancient Music").

It is possible that the qin and se had a common prototype without many strings, and with or without bridges. The body may have been simply a piece of wood. The fact that the words "qin" () and "se" () share the same upper part seems to be a clue that originally they were the same or similar instruments. In my opinion, the upper part of these two words represents two mushroom-shaped "pillars" built at the end of the instrument, around which the extra length of the strings was tied (see Figure 96). The upper part of the words perhaps shows the cross-section of the zither looking from the end:

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2. The <u>zhu</u> (弦) is mentioned in the Zhou text <u>Zhan</u> <u>Guo Ce</u> (section "Qi Ce" 野 國策齊策). Thus

the zhu was popular not later than the 4th century B.C. Its exact number of strings is not clear. Although some zhu were made in later generations, the Zhou type zhu became extinct soon after the Zhou period.

The earliest mention of the zheng (爭) is in the Shi Ji (Juan 87, "Biography of Li Si"史記。李斯列傳).

It is generally believed that the instruments had five strings originally (Shuo Wen, Juan 5.1:19).

- 3. For instance, the ten-string zither of the qin type and the five-string zither with a narrow body found in the 5th century B.C. tomb of Marquis Yi of Zeng (WW 1979.7:6) are not mentioned in any classic.

zither, and equated it with the later graph :qin, "zither") in the Shuo Wen dictionary (OBD:4235). The interpretation is not impossible; however, my study shows that this OBG is a different version of another OBG (), and shows two bells mounted on a stand (see Chapter Five, section IV.C).

5. In archaic graphs, dots, short strokes, or the radical "water" (:) were sometimes added for no semantic function, perhaps merely to decorate the graphs. For example, on the unearthed silk manuscript of the Chu

state, the two graphs meaning "ten thousand valleys" (萬谷)were written " 連合," with the

added radical "water" but with no change of meaning (see ZGWZ 1968:12, Tong Kin-woon, "Some Graphs on the Chu Silk Manuscript:唐健垣:楚繪書文字拾還).

- 6. Mizuhara Iko, "Chugoku kodai ongaku shiso kenkyu" (A study of musical thought in ancient China), in Toyo ongaku kenkyu 1965.10:207-231. 水原识:
 - 中國古代音樂思想和第.
 Other incorrect interpretations of this graph (and of other music-related words) are seen in articles by several scholars, and especially in the article by Gene J. Cho ("The Chinese Conception of Music: An Etymological Consideration," in Chinese Music II/4 (1979):52-54). Cho, not satisfied with the "partial or faulty understanding of Chinese etymology on the part of Western writers" whose interpretations "are misleading or erroneous," interpreted many Chinese words related to music in this article. However, his knowledge of Chinese etymology is limited and thus he made misleading interpretations, which cannot be discussed one by one in this work.
- 7. In these three OBI, the graph " T " (T :yu) can be translated as "on" or "for," thus causing a slight change in meaning. For example, to perform "on the east" might perhaps mean playing the instruments on the eastern side of the temple or city. However, the particular choice of direction still suggests a religious motive.
- 8. The right part of this OBG " " is the graph "music" (). However, the rubbings containing

this OBG do not clearly show whether the left part depicts a hand holding a crooked stick (), or whether it represents a hand () and a person () Shima, therefore, copied it freely as 1 and 1 in his concordance of oracle records (Shima: 240 and 471).

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