



SESSION IV: SHANG DIVINATION

12. CHANG KWANG-YUAN (National Place Museum, Taipei)
AN EXPERIMENT IN MAKING LATE SHANG ORACLE BONES

ABSTRACT:

This paper presents the results of a series of experiments attempting to determine the methods of selection, preparation, and use of turtle shell and cattle bone materials for divination during the Late Shang period. Specific topics covered include selection, preparation, drilling of burning-pits and application of heat, the reading by the diviners of the resulting cracks, the function of the historian's first writing the divination data on the bone before it was inscribed, the reason the cracks and divination data were carved into the bone and why pigment was applied to them, the actual inscription-carving technique, the result of experiments on methods of softening bones and shells, and preparing bronze and jade inscription-carving knives. I have examined excavation reports and earlier publications by scholars in the field and compared them with my own results in order to gain more complete understanding of the actual process of Late Shang oracle-bone divination. In the course of carrying out these experiments, I have made a number of discoveries which I hope may fill in some of the gaps that still exist in oracle-bone studies after eighty-three years.

DISCUSSION:

Chang Kwang-yuan presented a long series of slides along with an outline of his paper. He emphasized that since he had spent over \$5000.00 on his experiments, he now hoped that they might be of some use to the scholarly community.

Concerning the Taiwanese turtles Chang Kwang-yuan had used in his experiments, Hu Houxuan doubted that they were in every way equivalent to those known from Anyang. He granted, however, that many of the larger turtles found at Yinxi were probably imported from South China. Chang Kwang-yuan replied that he was satisfied that the specimens he had used were similar to those from Anyang, although most Southern Chinese turtles are admittedly quite different from Anyang species. Those he had, of course, discarded from his sample.

Were the characters on the oracle bones first written with a brush and later carved? Chang Ping-ch'üan thought this might have been true in some, but by no means in all, cases. Hu added that on some bones he had seen, only part of the inscription had been pre-drafted. Possibly, this phenomenon reflects the growing experience of an apprentice carver, who, after some time no longer needed a blueprint. On the other hand, the fact that inscriptions were generally not pre-drafted in Period V oracle bones is the cause of a large number of miswritten characters and gaps in the inscriptions from that period.

Did the plastrons/bones undergo a softening process? Chou Hung-hsiang said he continued to believe that they did, even though he had qualified his position after becoming aware of the recent experiments performed by Chang Kwang-yuan and in Mainland China. He pointed out several reasons for a softening process of this sort: (1) No saws for cutting away disturbing protrusions from the scapulae have as yet been excavated, making it probable that the bones were somehow softened and the protrusions then easily cleared off with a simple knife (incidentally, the cutting process demonstrated by Chang should have proceeded in the opposite direction); (2) Chou was not convinced that Chang's zao holes looked like the ones on the original plastrons -- the reason being that such holes should have been carved into pre-softened plastrons. Chou suggested plum vinegar, ashes from huagulong 化骨龍 (a certain kind of wood, the name of which is suggestive), or olives (mentioned for a similar purpose in Bencao gangmu) as solvents that could have been used by the Shang diviners. Chang Kwang-yuan replied that he had used all these and had not obtained satisfactory results. Besides, he found nothing to be desired in the quality of his zao holes. Chang Ping-ch'üan declared himself noncommittal on whether the bones had been soaked or not, but he said he had often noted strokes that had been carved repeatedly and in several directions, which would indicate a certain hardness of the writing surface.

As to the tools used in carving the inscriptions, Hsü Chin-hsiung insisted that no V-shaped knives were so far known from archaeological excavations, declaring himself ready to include them in his experiments as soon as there was proof of their availability in Shang times. He added that even modern steel tools were not significantly more convenient to use than the bronze types known to have been used by the Shang Chinese, and which he had himself used in his experiments.

The fact that parallel experiments had been conducted independently in Mainland China and on Taiwan prompted Kao Ch'ü-hsün to express his wish for more cooperation and exchange of information. Given the cost of such experiments, it would be advisable to avoid such duplication of effort. Kao Ch'ü-hsün also solicited more information from Xia Nai about the Mainland Chinese experiments and their

results, but Xia regretted that he was not informed about this research. Chang Kwang-yuan made it clear that he had been aware of the article in Kaogu (1982.1) and had, in fact, quoted it in his paper (footnote 44).

As to the crack produced by Chang Kwang-yuan on the plastron and read by him as auspicious, Chang Ping-ch'üan expressed his disagreement with such an interpretation. According to his investigations, based on ethnographic evidence from Yunnan and on ancient texts, the reading of a crack was contracted anew between the diviner and the supernatural powers every time a charge was made. We do not and cannot know how the Shang diviners arrived at their reading of any particular oracle bone, Chang insisted.

Lastly, Hu Houxuan called into question the merely utilitarian interpretation of each feature of the oracle inscriptions. He believed that several aspects of the oracle bones, at the very least their calligraphy, marked them as works of art, made with the conscious will to express aesthetic beauty. Other such aspects may be the arrangement of the inscription on the writing surface and the coloring of the characters (not all characters on a single bone or plastron are always colored the same way; some are not colored at all, whereas those characters most visibly colored are frequently the most calligraphically attractive ones). Hu ended by pointing out several examples of splendid, and artistically conceived, plastrons and oracle bones. Without calling into question the validity of Hu's assertions, Chang Kwang-yuan nevertheless maintained that these aesthetic qualities had developed out of functional requirements.

13. DAVID S. NIVISON (Stanford University)
THE "QUESTION" QUESTION

ABSTRACT:

This paper takes issue with the widely prevailing assumption that the "charge" (ming ci 命辭) in a Shang oracle inscription must always be understood as a question. I hold that we must distinguish between what the diviner is saying in the charge, and what he is doing in the whole divination rite. What he is doing is not always seeking information; and even when he is doing this, what he says is usually not a question. I present various arguments and examples to show this, e.g.:

(1) Li Hsüeh-ch'in's research proves that the oracle language possessed grammatical forms, such as final particles and final negatives, for marking a sentence as a question. Therefore, I hold, our first assumption should be that when a diviner does not use these forms, he does not intend his sentence to be understood as a question.