

and the day divided into two-hour units were mutually exclusive or whether xi included part of the evening.

Some participants denied that the inscriptions analyzed by Hu had anything whatever to do with eclipses. Chang Tsung-tung suggested the reading "日夕侑食" -- "Sacrificing food to the sun in the evening?" Hu Houxuan said he had never heard of such an interpretation and did not believe it; after all, the expression rishi 日食, "eclipse," persists even in the modern Chinese.

On a written handout distributed to all the participants, Akatsuka Kiyoshi had elaborately substantiated an interpretation of the inscriptions in question which was similar in principle to that proposed by Chang Tsung-tung reading, however, 禴 instead of 侑. He thought 食 should be equivalent to 戩 in the expression 日出戩; 戩 is a ritual to stop rain. The translation would thus run: "Offering to the sun the rain-stopping sacrifice in the evening?" Itō Michiharu further elaborated this interpretation, quoting the inscription "又戩于祖辛" as an example of the use of 戩. But according to him, ri 日, too, was a kind of sacrifice, as is suggested by the two parallel inscriptions "小乙祭亡芒 / 小乙日亡芒." Here, 祭, "to sacrifice," corresponds to 日, which has an obviously verbal function. Taking xi to mean "moon," Itō arrived at the following translation: "In performing the ri sacrifice to the moon, offer foodstuffs (or: the rain-stopping sacrifice)?"

17. AKATSUKA KIYOSHI (Nisho-gakusha University)
THE COSMOLOGICAL MEANING OF THE TEN GAN AND TWELVE ZHI IN SHANG CIVILIZATION

ABSTRACT:

In the Shang, time was represented by a system of combining shi gan 十干 (ten stem signs) and shi-er zhi 十二支 (twelve branch signs), a complete cycle taking sixty days.

Many interpretations, some dating back to the Han period, have been made as to the meaning of the signs. I question the suitability of these theories and, using the original meaning of the characters together with different words of similar sound, propose the possibility of a systematic interpretation. Shi gan symbolize stages in the development of a barley seed from germination in the earth to fruition, while shi-er zhi are taken to be stages from the conception of a child up to acceptance into the family. The cycle of the two sets of signs represents the idea of the diffusion of two forces within the cosmos: that which gives life to plants and all living

things and that which gives them form and substance. Attention is also drawn to the relationship of the former with sun-worship and to that of the latter with moon-worship.

In addition I discuss the interpretations which could be put upon the connection of shi gan and shi-er zhi with the ancient Shang dynasty kings, the system of ancestral rites, and the worship of the wind gods of the four directions.

Lastly, I suggest that shi gan and shi-er zhi are creations of the Shang dynasty and that, in the state religion which revered Shang Di as the highest deity, the signs represent cosmological concepts. Further, they harmonize with the characteristics of nature-based Chinese religions and form the foundation of the later theories of Yin-Yang and the five natural periodic elements.

DISCUSSION:

Chang Tsung-tung made a remark on the earliest form of the first of the Earthly Branches: according to him, the wet hair on the head of a new-born child symbolized birth, not the transfusion of the life-spirit. Akatsuka accepted this individual reading as a possibility, but noted that, nevertheless, the whole cycle of Earthly Branches illustrated the life spirit's entrance into the child's body.

Chang Tsung-tung further suggested that the character zi 子 might have symbolized the unborn foetus, so that there was no need to posit a later reversal of the first and the sixth of the Earthly Branches. He further made remarks on some individual characters, such as jia 甲, which he thought was related to jie 結, because in the Taiwanese dialect, both have the same pronunciation ga. Furthermore, he asserted, the shape of the character ji 己 was adapted from the motion of the planet Jupiter; and the character wu 午 should mean a pestle (wu 杵), or stick used as a time-measuring device -- some kind of a primitive sundial.

Hsü Chin-hsiung supported Akatsuka on the grounds that primitive conceptions of the life cycle do derive from the notion of the developing foetus, as is abundantly confirmed by ethnographic evidence. Virginia Kane countered that Hsü was mixing up the Heavenly and the Earthly cycle in this argument, which Hsü realized, his remark being of a more general nature.

Tu Cheng-sheng said he appreciated Akatsuka's holistic approach to the study of the two cycles. Rampant disagreement on the exact original meaning of individual elements of the cycle could be resolved, he hoped, by a systemic study of the elements within their respective cycles, extrapolating from the meanings of neighboring

elements. Akatsuka replied that in fact he was discussing the meaning of the cyclical elements only within their contexts in the cycles; he was more than willing to admit that the same graphs might have quite different meanings, and developments of meanings, when not used as cyclical elements in the oracular texts.

Virginia Kane supported Akatsuka's observation that bronze casting took place on ding days. Seventy percent of all Eastern Zhou inscribed bronzes were, in fact, cast on the day ding hai, she said. Akatsuka replied by pointing to a locus classicus in Li ji: "Yue ling" about "spreading" on a ding day. By analogy, bronze was "spreading" out into a mold. In fact, the hai 亥 element in the ding hai date perhaps signified these molds, as words like ke 殼 (nutshell), ge 骼 (skeleton), and he 盒 (box) are all related to hai 亥.