SESSION V: NATURE AND COSMOLOGY

15. CHOU HUNG-HSIANG, SHEN JIANHUA, AND LISA HEYES (University of California, Los Angeles)
STATISTICAL ANALYSIS OF SHANG METEOROLOGY

ABSTRACT:

The authors see their paper as an attempt to analyze Shang meteorology through statistics, but explicitly not to reconstruct Shang weather. It is essentially an amplified study of the oracle-bone record along the lines pioneered by Wittfogel in his "Meteorological Records from the Divination Inscriptions of Shang" (1940), which has been followed up by contributions from Chinese scholars, notably Hu Houxuan. Compiling the data into a graph, the authors, whose research is still preliminary, conclude that during Shang times, there was more rainfall, that it took place during every month of the year, and that the weather was warmer.

DISCUSSION:

Noel Barnard (Australian National University) suggested that it might be interesting to differentiate the weather records according to their periods; this method could indicate meteorological developments in Late Shang. Chou Hung-hsiang replied that such a periodization would be very difficult due to the nature of the evidence, and he did not think it feasible at this point. Also, he found it hardly likely that meteorological changes should be observable over as short a period as 273 years.

Barnard further inquired about the relation of the epigraphic research of Chou and his colleagues to the findings of dendrochronology. Chou referred the question to Xia Nai, because of his profound interest in dendrochronology. Xia remarked that any dendrochronological research was valid only for a narrow geographical area, and that no dendrochronological sequence had so far been established for the Anyang region.

Jao Tsung-yi made a note on the character gou 好 , which should indeed mean "to meet, to encounter," without any semantic problem occurring in such a phrase as 好雨 (meeting rain). Also, he
asserted, in the recently published *Xiaotun nandi jiaju* (2 volumes; Peking, 1981), there was evidence for an additional two-hour period in the Shang division of the day, over and beyond those mentioned by Chou and his colleagues, namely *dan 旦*.

16. HU HOUXUAN (Institute of History, Peking)

**AN INTERPRETATION OF THE ORACLE-BONE INSCRIPTION PHRASE: "THE SUN AND MOON ECLIPSED"

**ABSTRACT:**

This paper assembles three oracle-bone inscriptions divined at the same time from the Wu Yi-Wen Ding period. Two are identical, being a paired divination inquiring into whether the event *ri yue you shi 日月又食* was or was not auspicious. The third asks whether, in light of this *ri yue you shi*, it would be auspicious to sacrifice to Shang Jia.

Since 1925, when Wang Xiang 王襄 first proposed that the character *yue 月* should be read as *xi 日*, his position has been accepted by Liu Chaoyang 劉朝陽, De Xiaoqian 德效善, Chen Mengjia 陳夢家, Zhang Peiyi 张培瑜, Xu Zhentao 徐振韬, the Zhongguo Tianwenxue jianshi bianxiezu 中國天文學簡史編寫組, and the Zhongguo tianwenxueshi zhengli yenjiu xiaozu 中國天文學史整理研究組. *Yue* was first interpreted as *yue 月* in 1933 by Shang Chengzuo 商承祖. Those subscribing to this reading include Dong Zuobin 董作賓, Chen Zungui 陳遵妫, Yu Xingwu 于省吾, Liu Chaoyang 劉朝陽, Chen Mengjia 陳夢家, Joseph Needham, Zhao Quemin 趙頒民, and Chen Banghuai 陳邦懷.

Among these scholars Liu Chaoyang holds that "there is no distinction between *xi 日* and *yue 月*", while Chen Mengjia believes that the phrase "*ri yue you shi 日月又食*" can also be read "*ri xi you shi 夕月又食*" hence they accept both interpretations.

Those who have accepted the reading *yue 月* all take it to be an actual record of a *gui-you 禳酉* day. Those reading *xi 日* have taken the phrase to refer to a solar eclipse at dusk; based on their calculations it may have occurred on 25 May 1917, 9 February 1129, or 9 August 1186 B.C. The interpretation of *yue 月* as *xi 日* is clearly inappropriate, because the Wu Yi-Wen Ding period inscriptions regularly write ☼ for *yue 月*, not for *xi 日*; further, the meaning of *xi 日* is "night," and a solar eclipse that occurs at night cannot be seen.