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Early Shang Bronze Art and High Radiogenic Lead

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Large-scale tripod *ding* viewed by x-radiograph (above), showing ancient repair of the vessel’s basin, and by ultraviolet fluorescence (below), showing repairs that fluoresce white. Photographs: W.T. Chase
in aristocratic sensibility. Similar artistic themes involving the position of Zhou kings and ancestors is evident in these "common" works produced in places far away from the court's influence. Because the preserved in places far away from the court's influence. Because the bronze in places far away from the court's influence. Because the bronze in places far away from the court's influence.

In China, it is evident that Zhou kings and ancestors are prominent in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. This is evident in the production of bronze artifacts. 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religious symbol of the large-scale ding were evidently enacted at metropolitan centers in the Yellow river valley and contemporaneously in the centers of Panlongcheng and Xingan. Clearly, the Shang had influence in the southern Yangtze river valley during the dynasty’s formative era.

The large tripod ding was not cast for use at the southwestern Sichuan Yangtze river valley site of Sanxingdui. Nonetheless, the bronze alloy of Sanxingdui vessels, represented by zun container types of metropolitan Shang style and by their indigenous casts of bronze masks, appears to be from the same ore source in Yunnan, as are other early Shang bronzes, including, as anticipated, those from the Royal Ontario Museum. Thus far we have assembled a novel combination of illuminating data that underscores a much more profound interaction between northern and southern early Shang cultures than previously understood by archaeologists and art historians. Questions still loom: Did the Sanxingdui culture arise owing to contact with the northern Shang Chinese? Did the Shang expand south to control the rich source of bronze alloys, or is the question more complex? Finally, we hope to answer remaining questions about the relatively unknown Yangtze culture by continuing to quantify art-historical and scientific data from ritual bronzes. We plan in the future to examine more early Shang bronzes at excavated sites, particularly at Panlongcheng and Xingan, but also from tomb finds of other regional sites elsewhere in Shang China.

New York/Chinese Academy of Social Sciences

Elizabeth Childs-Johnson will continue research on the Shang bronze age as a recipient of an American Council of Learned Societies/Social Science Research Council/National Endowment for the Humanities fellowship. For the remainder of 2003 she will return to China as a research fellow at Nanjing University and the International Center for Liaochou Culture Studies in Hangzhou, Zhejiang.

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