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Perspective

An Extremely Long Span of the Sun-Earth Pattern in the History of China

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ABSTRACT: Chinese people believe that they are descendants of the prehistory Emperors Yan and Huang, while Yan (hot/red) and Huang (yellow) are the colors of the sun and earth. In the Dahecun style of Yangshao Culture archaeological culture of the legendary Yan and Huang's period, the patterns of the sun and earth were frequently painted on the religious potteries, implying that the paired symbols might refer to the two emperors. However, the same paired pattern appeared in Shangshan Culture much earlier than Yangshao, indicating that the worship of Sun-Earth might have a quite long history prior to the two emperors. The pattern was inherited in the populations of China till today. The Jade Bi-Cong group of late Neolithic and early Bronze Age China also showed the same meanings and shapes. We found that the Sun-Earth pattern was quite common on the traditional brocade belts woven in the countryside around Shanghai. The origin of the sun shape was easy to understand, while that of the earth shape, a cross with or without an outline square, was hard to trace. Recent archaeological discovery in Shangshan Culture of a kind of yellow pyramid stone provided a new clue to the origin of earth symbol.

Keywords: Sun-Earth pattern; Shangshan culture; Yangshao culture; Acupuncture needle; Brocade belt

The legendary ancestors of Chinese people, Emperors Yan and Huang, were supposed to live more than 5,000 years ago [1]. Since around 5,300 years ago, a special pattern of sun-earth paired symbol emerged on painted potteries (Figure 1C,D) in two most important settlements in central China, Shuanghuaishu and Dahecun. These paired symbols were hypothesized to be the symbols of the coalition of Yan and Huang, and showed an important role in Dahecun style of Yangshao Culture. Some of the patterns included a round sun and several continuous rhombuses (Figure 1C), and others simplified the sun into an "∽" with or without two dots, and the rhombuses into a cross [2]. These patterns did not appear in early period of Yangshao Culture, while pottery paintings of early Shangshao might have supplied an origin of the sun-earth pattern. The rhombuses and cross symbols were inferred to evolve from the fish pattern in early Yangshao. However, there might be multiple origins for one artistic form. Almost the same pattern of sun-earth was found in Shangshan Culture of around 9,000 years ago in Zhejiang Province.

The earliest painted potteries were discovered in Shangshan Culture from Jinhua Basin in central Zhejiang. There have excavated may pieces of potteries painted sun symbols [3]. One of the pieces from Qiaotou site contained symbols of a sun and an hourglass shape which was quite similar to a cross (Figure 1A). The subsequent archaeological culture, Kuahuqiao Culture of around 8,000 years ago in northern Zhejiang, exhibited even more symbols of the sun and earth [4]. On one of the pottery pieces from Kuahuqiao, the sun was painted on the upside and a line of crosses on the lower side, showing a picture of the sun above the ground (Figure 1B) [5]. These findings confirmed the authenticity of meaning of the sun-earth pattern. Interestingly, these patterns appeared much earlier than Emperor Yan and Huang's period, indicating a worship of sun-earth have been practiced for a quite long history in China before it was borrowed to honor the two emperors.

The worship of sun-earth was practiced continuously in the history of China. In Liangzhu Culture, round jade plates (*Bi*) were symbol of sky and square jade tubes (*Cong*) were symbol of earth. This religious tradition was inherited by most dynasties of China, and round for sky and square (cross) for earth became a common idea of Chinese culture. Interestingly, the original pattern of sun-earth, symbols of sunshine and cross, was frequently discovered in the traditional brocade belts (Figure 1E) woven by females in Fengxian District, Shanghai. These brocade belts recoded a special female writing system which might originate in Liangzhu Culture or even earlier [6]. This finding implied that the sun-earth pattern has been used from 9,000 year ago to the present day.

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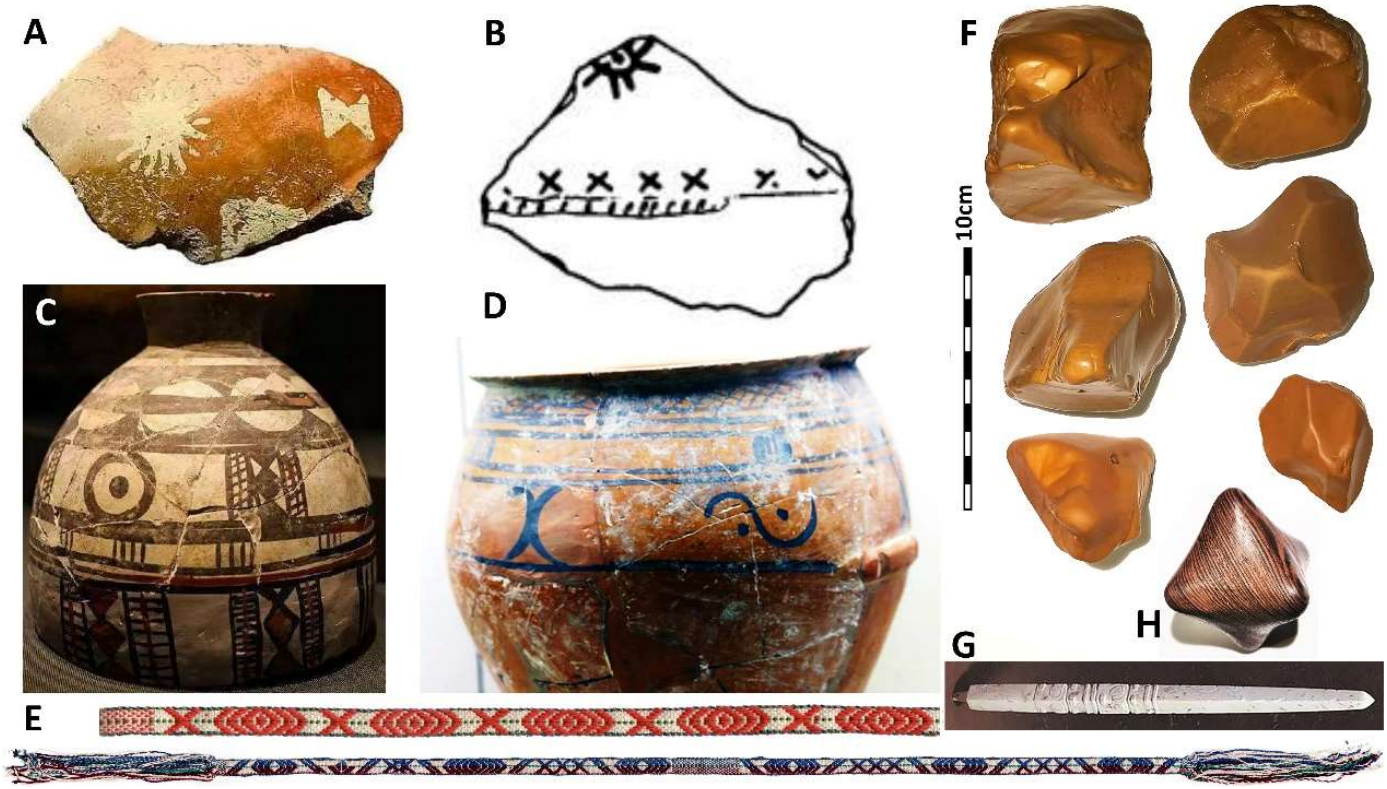

Figure 1. The spread and possible origin of the Sun-Earth pattern. (**A**) Shangshan Culture (Qiaotou site); (**B**) Kuahuqiao Culture; (**C**,**D**) Yangshao Culture Dahecun Style; (**E**) Brocade belts from Fengxian, Shanghai; (**F**) Pyramid stones of Shangshan Culture; (**G**) A Liangzhu Jade Corn from Fanshan M20, H. Modern wooden needle.

Although the shape of the sun was easy to recognize, that of the earth remained confusing. A recent finding of Shangshan Culture provided a clue to the origin of the earth symbol. Some strange yellow chrismatite pyramid stones of gripping size were discovered in Miaoshan site, etc. in Yongkang, Jinhua. These stone tools were polished well, with four slopes shaping a cross from the top view (Figure 1F). This shape was quite similar to that of the tip of jade corns (Cleopatra's Needles) in Liangzhu Culture and related cultures (Figure 1G). The jade corns were most probably used as acupuncture needles [7], and were inferred to be the "Zhongkui" [8] which was an ancient tool of religion and medicine. The Shangshan pyramids were also probably acupuncture needles, as their shapes were most similar to present wooden needles (Figure 1H) for self-acupuncture. The curative effect made ancient people believe these were power of the earth and draw the shape of pyramid on potteries. Therefore, Shangshan Culture might also serve as one of the origins of Chinese Medicine.

In sum, we demonstrated that the sun-earth pattern represented one of the most important cultures of China and may have an extremely long span of around 9,000 years.

Author Contributions

Conceptualization: W.J.; Investigation: W.J. and H.X.; Writing: W.J.; Visualization: H.X.

Ethics Statement

Not applicable.

Informed Consent Statement

Not applicable.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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