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## AN ANCIENT CHINESE STAR MAP

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This is a note of parts of two articles on a recently discovered star map painted on the ceiling of the tomb of a Chinese gentleman who was buried at Hsuan-hua in Hopei Province, China, in AD 1116, under the Liao Dynasty. The tomb was discovered in 1971; excavation began in 1974 and was finished in March 1975. The articles, issued under semi-official auspices, appeared in the report of the Hopei Provincial Museum. They appeared as "Excavation of the Wall Painting Tomb of the Liao Dynasty in Hsuan-hua, Hopei Province", *Wen wu* [Cultural Relics], no. 8, 31, 1975, and "The Star Map of the Liao Dynasty, an Important Discovery in the History of Chinese Astronomy", *ibid.*, 40.

The map is painted in a circle of 2.17 metres diameter, at the centre of a domed ceiling 3.1 metres in diameter and 4.4 metres high, in the inner chamber of a two-chambered tomb. The walls of the chamber are decorated with figure paintings in red, yellow and blue, and a central bronze disk occupies the summit of the dome. It is surrounded by two sets of red lotus petals, presumably symbolizing the traditional nine domains of the sky. Close against this design, in the north, is a representation of the Great Bear, shown as seven red spots connected by lines. The celestial flower is surrounded by a series of nine small disks, five of them red and four of them blue, which may represent the Sun, Moon, five naked-eye planets, and the two invisible planets at the equinoctial nodes, Rahu and Ketu. The Sun, at least, is immediately recognizable as a red disk containing the traditional emblem of a golden crow. In a larger ring enclosing all these figures the 28 "lunar mansions" are displayed. These represent the small constellations through which the Moon passes each night in the course of a full lunation. They were very important in medieval religion and astrology. Like the Bear, each of them is shown as a pattern of red dots and connecting lines. Finally, making up an outermost ring, the 12 signs of the western zodiac are shown, presented as naturalistic representations each enclosed in a circle. These are a novel feature in Chinese star-maps, although the western zodiac seems to have been known in China at least by early T'ang times—that is, by about the seventh century. Some of the pictured figures have features that are unfamiliar to us; Gemini, for instance, consists of a man and woman in ancient Chinese costume.

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