A T'ang Dynasty (A.D. 618-906) gnomon is preserved at Gao cheng zhen, a place where astronomical observations were carried out for at least 1,500 years. (Robin Rector Krupp)

was regarded as the center of the world. It acquired this reputation because either the sun's shadow was measured there, or the gnomon was installed there because it was considered the center. In either case, the association between the order of time and the order of the world is expressed in the gnomon at the "world's center."

By A.D. 725 a series of field stations—each equipped with an 8-foot gnomon and all strung out like widely separated beads on a single meridian longitude over a span of nearly 2,200 miles—was set up by a Chinese Buddhist monk, I Hsing. He, too, was one of the great astronomers in China's antiquity. (One of his surviving writings is called Mnemonic Rhyme of the Seven Stars of the Big Dipper and Their Tracks.) His gnomon installations were intended to determine the dates of summer and winter solstice. Of course, one of the stations was set up at Yang-chhêng. Several stations were built at widely separated locations because the difference in the length of the solstice shadow from one gnomon to another could be used to estimate geographical distances with greater accuracy.

Eight-foot gnomons were adequate for normal calendar calibrations, but Chinese astronomers working at the frontier of knowledge built them even larger. In 1279,