An Ancient Sino-American Solstice Marker

by

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High upon a cliff overlooking the Little Colorado River in Arizona, on a narrow ledge facing the sky, a shadow moves across three petroglyphs on the date of the summer solstice. And these are not simple glyphs. Rather, the first is a four-ring spiral, the second employs the ancient Bronze Age written Chinese symbols for the Sun (Ri4) and Moon (Yue4) enclosed in a cartouche, and the third is the equally ancient Chinese script for a ritual cauldron, Ding3 (Image 1).

Image 1
Original photo with Chinese Bronze script insert by Richard Gonsalves

First noted by David Lehan, this panel of rock writing was shown to Richard Gonsalves, the former President of the Agave House Chapter of the Arizona Archaeological Society. Richard immediately realized the importance of the ancient Chinese scripts on this narrow upwardly directed ledge, as he watched the active solstice shadow eclipse them and align with the center of the spiral petroglyph (Image 2).

Image 2

As the point of the shadow develops it moves to touch the very center of the spiral while splitting the cartouche containing the scripts of Ri4 and Yue4 exactly in half. Appearing together as they do in this depiction (Image 3) these Sun and Moon scripts encode the meaning of the Chinese word Ming2, meaning “bright.” This is an apt description of this solstice event because at this time of the year the Sun is at its highest and brightest point in the sky.

Image 3

Moon = Yue4 Sun = Ri4

Chinese Bronze Age scripts

As Chinese writing evolved most of its characters morphed into altered forms with stylistic patterns that are associated with specific historical eras. The oldest fully readable Chinese script, Oracle Bone, is dated to the time of the Shang dynasty (1700 - 1045 BC). Following the overthrow of the Shang by the Zhou dynasty, the use of Oracle Bone writing was outlawed and supplanted by what is today referred to as Bronze script. Consequently, knowledge of Oracle Bone script was totally lost to mankind from this time forward, until it was accidentally rediscovered and interpreted in AD 1899. Hence, when complex Oracle Bone characters, along with some early Bronze scripts, are found pecked into the rocks and boulders of North America, the age of these writings can with considerable certainty be assigned to around 3000 YBP (years before present).

During the Bronze Age in China, writing continued to evolve; and, by the close of the Zhou dynasty (1046 – 256 BC) it had grown into what we know today as Seal script. Seal script was adopted across all of China during the Qin dynasty (221–206 BC) in the first attempt to standardize Chinese writing. Prior to this time writing in China was so unstructured that even Confucius, with all his understanding, frequently had trouble deciphering earlier writings. The noted Chinese historian Endymion Wilkinson informs us that “the different scripts did not follow one after the other in orderly fashion, each growing from the previous one in a linear progression. They evolved over several centuries and often overlapped” (Wilkinson 2000, p.409).

As mentioned above, during the Zhou dynasty Chinese writing matured into what today is referred to as Bronze script, for many of these writings are found cast into the bronze vessels that were manufactured at that time. Significantly, the style of script used for writing the Sun and Moon within this petroglyph cartouche match the style of writing employed during the Bronze Age in China (Hanziyuan 2026). Importantly, this is the same era ascribed to the readable set of Chinese cartouches previously identified upstream from this location along the Little Colorado River near Springerville, Arizona (Ruskamp 2016).

In addition, each of the petroglyphs at this site exhibit considerable repatination indicating that they are of significant age. Plus, the third petroglyph at this location matches, with a high degree of certainty, the equally old Bronze Age script of Ding3, representing a cauldron frequently used for ceremonial purposes. Therefore, on this single panel we are presented with not only an active summer solstice marker but one augmented with the Bronze Age symbols for this “bright” time of the year and for a ritual sacrifice.

The employment of Bronze script for embellishing this solstice marker confirms that literate Asiatic people were in the Americas approximately three thousand years ago, for: “There is little doubt that Chinese writing was entirely indigenous.” (Keightley 1989, p.187). Thus, as no written language has been invented more than one time, and these scripts display considerable weathering and repatination in a location that is invisible to the casual pedestrian, ascribing them to literate Chinese authorship is strongly supported. For, as with many ancient Chinese writings, they conform to the Chinese objective to record an event rather than to display it (Stark 2005, p.189).

It is known that sometimes the ancient Chinese made use of written subdivisions when recording their messages (Keightley 1978, fig.7). Therefore, the employment of an outline or “cartouche” for grouping the two written scripts of Ri4 and Yue4 together at this site points to Asiatic authorship. Such a practice is not commonly associated with Native American rock writings.

Considered as a solstice marker alone, the site certainly provides another meaningful example of the variety of markers found across many parts of the southwest region. However, when viewed as a cohesive panel, it provides clear evidence of deliberate written communication by a people with ancient Chinese connections around 3000 YBP.

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