Evidence of Old World Travelers in Colorado: The Sun Temple and Crack Cave

By Carl Lehrburger and Scott Monahan

Evidence of pre-Columbian European contact with the New World may be observed at several important sites in southeastern Colorado. While most of the rock art found in this area is indigenous, compelling evidence of Old World travelers in the New World more than a thousand years old is found, including the Sun Temple and Crack Cave sites explored in this article.

The southeast section of Colorado south of the Arkansas River borders Kansas, Oklahoma and New Mexico. The area is considered part of the central Great Plains encompassing many river canyons and side canyons, the largest being the Purgatory River (a.k.a. the Purgatoire or Picket Wire), which flows northeasterly into the Arkansas River. The land provided protective canyons in the winter seasons and abundant year round game. Evidence of habitation extends back over 4,000 years ago.

While the term “rock art” may be objectionable to some, it covers a wide range of archaeological evidence in the region. The oldest rock art in the region created during the so-called Archaic and Middle Archaic Period is a style called Pecked Abstract. Pecked Abstract, named after the pecking technique used to carve an impression on a rock surface, is typically composed of abstract and geometric signs, wavy lines and parallel lines.

Following and overlapping the Pecked Abstract period were the Late Archaic Period people who created what has been called Pecked Pictorial rock art beginning around 1,350 BCE (McGlone et al. 1999). This representational style depicts animals and anthropomorphic figures, either alone or in large panels. While primarily showing pictorial figures, sophisticated solar alignments occurring on equinoxes and solstices have been observed and documented in association with this style or time period (Lehrburger AA #65, #66).

Later peoples inhabiting the region include the Apishapa Focus people (800 - 1,200 CE). After 1,200 CE various Plains Indian groups (Comanche, Cheyenne, Arapahoe, Ute, etc.) inhabited the area as evidenced by what is called Plains Bibliographic rock art, often featuring life-like depictions of battles and hunting. Finally, many modern-era Europeans including Spanish conquistadors, Mexican shepherders, American cowboys and homesteaders also left their names on the rocks, often vandalizing older engravings.

Habitation sites of older peoples in the region and their rock art styles have been studied extensively by archaeologists at the U.S. Army’s Piñon Canyon Maneuver Site in this area (Loendorf, 1991).

Sun Temple

Amidst the many different styles of rock engravings across the region there is convincing evidence of an Old World presence at some sites. Previous articles documented the Anubis Caves, a site in the Oklahoma Panhandle with sophisticated equinox solar alignments, Libyan writing, Gaelic inscriptions and links to Mithras worship and Egyptian deities (Lehrburger, AA #68, #69). At the Anubis Caves site, sunlight and shadows slide across engraved targets on sandstone walls only on the spring and fall equinoxes. The Sun Temple site north of the Anubis Caves and south of the Arkansas River in southeastern Colorado also has Old World inscriptions and reveals a sunrise alignment on the May and August cross-quarter days.

While searching for suspected Old World inscriptions in 1982 Bill McGlone and Phil Leonard discovered the Sun Temple. The site is located amid some five-story-tall, wind-sculpted hoodoos, standing as sandstone sentries above a wide and shallow canyon. In addition to what was instantly recognized as an ancient Celtic alphabet, the explorers also found the engraved profile of a human head, featureless except for an upturned, button nose. Some 40 feet away, an isolated, east-facing 14-inch diameter circle was found inscribed at the back of the amphitheater-like cove. McGlone and Leonard determined then and there to name the place the Sun Temple.
The bulk of the Sun Temple’s alphabetic grooves appear on the ceiling of a small, shallow cave approximately seven feet above the amphitheater floor, itself elevated well above the canyon floor. Protected somewhat by the ceiling’s overhang, a bold but short inscription with several criss-cross carvings on a panel tilted skyward on the lower lip of the wedge-like cave. Just above the amphitheater’s floor and farther to the right next to the profiled head are long vertical grooves that remain untranslated to this day. About 20 feet above is a nearby signpost that nearly escaped the explorers’ notice at first. The cliff face’s splotchy black patina camouflaged the grooves. What initially appeared to be a crudely etched tree trunk and branches later was understood to be the Sun Temple’s keynote Ogam inscription, underscoring the ancient author’s intent to memorialize a date-specific sunrise alignment.

The Sun Temple inscriptions resemble a variant of Ogam (sometimes spelled Ogham and pronounced “Omn” in Ireland), a vowel-less writing system. Most of the world’s surviving examples of Ogam script are preserved on stone pillars in Ireland. Ogam writing can also be found in the British Isles, Iberia and elsewhere. The fourteenth century Book of Ballymote contains the Ogam tract which illustrates over a hundred variations of the alphabetic script. Ogam letters are composed of from one to five vertical strokes on either side of a stem line or transecting it. Diphthongs, or vowel combinations, are represented by more elaborate symbols. While rare, Ogam inscriptions which lack the vowels typically found in Europe but which include occasional diphthongs have been documented in North America as well (McGlone et. al. 1993).

Unlike most Ogam inscriptions found in North America which are etched horizontally, the “Tree Ogam” at the Sun Temple was inscribed vertically like nearly all Irish monuments. The Tree Ogam along with some grooves to the left, translate in Gaelic as, THE RING ALONG WITH THE SHOULDER BY MEANS OF SUN AND HILL. Because of the site’s orientation, McGlone and Leonard guessed the Sun Temple might have an alignment at dawn on summer solstice. But sunrise vigils on June 21 yielded no obvious solar alignments or astronomical phenomena, particularly any involving the conspicuous inscribed ring.

Enter Rollin Gillespie, the mathematician and Saturn V rocket engineer who was primarily responsible for the calculus calculations that got NASA astronauts to the moon and back. Leonard had translated the bold Ogam on the lower lip of the cave to read NOBLE TWINS, an Old World synonym for the Gemini Constellation. It didn’t take a rocket scientist to figure out the accom-

Figure 2: Pecked Abstract Panel Section

Figure 3: Pecked Pictorial Image

Figure 4: The Hoodoos Near the Sun Temple
panying criss-crossed marks on the panel might very well be representations of heavenly bodies, but Rollin was on board just in case.

The pattern of the one-inch plus marks, slightly elongated for the two lead stars, Castor and Pollux, unmistakably resembled the Gemini Constellation. Rollin postulated that the three-inch plus marks were intended to represent even brighter objects, most likely planets. It turns out an extremely rare triple planetary alignment within Gemini involving Venus, Jupiter and Saturn was visible in the pre-dawn eastern skies at the Sun Temple in August 471 CE. This alignment happened to coincide with Lughnasadh (pronounced “lu-na-sa”), the 8th of August, one of four Celtic cross quarter days, the midpoints between the solstices and equinoxes celebrated by the Celts. Such a coincidence would undoubtedly have struck a posterity-conscious Celt as worthy of memorializing in rock.

Rollin noted that while the Gemini constellation and planets as inscribed are not as perfectly positioned and scaled as one would expect in a modern replica, the artist’s mind likely stored the ensemble. An impossible task in the dark of night, the celestial etching was probably transferred from memory during daylight hours. Furthermore, an apparent stretching of the pattern might well have resulted from our common illusory distortion of objects close to the horizon, such as the full moon, appearing to be larger than when viewed overhead. Since Gemini was rising when the artist took a mental snapshot, that distortion very well might have been part of the recalled image set to stone. And the distortion might yield a psychological insight or two into the ancient mind, if studied further, according to Rollin (Monahan 2005).

Returning to the Tree Ogam’s mysterious message, the RING obviously meant the inscribed circle and the HILL clearly referred to the topology on the opposing side of the canyon, a mesa in today’s terminology. But one of this site’s most remarkable features is a massive rock overhang that juts out from the northern cliff wall, parallel to and just above the horizon from the northern cliff wall as viewed from the front of the inscribed ring 43 feet away. Only on Lughnasadh, and its springtime cross quarter mirror, Beltaine, does the rising solar disc perfectly frame up within the gap formed by the shelf, the cliff face and the distant hill. The jutting overhang is the SHELF to which the Tree Ogam inscription refers.

In this type of solar alignment, the sun is observed from a target or, in this case, the circle glyph at a specific time. The fit of the rising sun in the notch created by the rock overhang and the horizon when observed from the RING only occurs on the two cross-quarter days. This demonstrated intentionality confirms the translation of the Ogam inscription and calibration of the site of an Old World cross-quarter day event.

In addition to the Tree Ogam message there is another Ogam inscription on the roof of the wedge cave. A small circle within which appears two bold Ogam consonants, S L, dominates the ceiling, announcing in Celtic and many other languages that this place is a SolArn observatory. Next to it is an inscription translated as “SEASON FOR..."
REAPING." A herringbone pattern of grooves nearby contains the Ogam sequence L G N S. It must have been an extraordinary Lughnasad. August 8, 471 (McGlone et al. 1999).

In August 1987, Ron Dorn brought his experimental technique for chemically dating rock art to sample grains of patina embedded in the grooves of the Noble Twins and Tree Ogam from the Sun Temple (Dorn 1990). Now a Professor of Geography at Arizona State University, Tempe, Dr. Dorn is still seeking research grant money that can help perfect the calibration used for the nuclear analysis work upon which his research was based. However, he is confident the Sun Temple has pre-Columbian origins. In fact, if his CATION ratio analysis is correct, the age of the inscriptions is double what the archaeoastronomical dating suggests, that is 1000 to 900 BCE ± 250 years (McGlone et al. 1993, Appendix B).

No other comparably specific and visible triple planetary alignments in the vicinity of the Gemini constellation can be established by using stellar charts dating back to 1000 BCE or in the immediate centuries preceding Dorn’s estimated age for the inscriptions at the Sun Temple. This quandary leaves three possibilities: (A) the Before Present (BP) dates yielded by Dorn’s methodology are double what they should be and an eventual re-calibration will halve the interval to more or less match the planetary-cluster-in-Gemini date of 471 CE, (B) this archaeoastronomical correspondence scenario proposed by Rollin Gillespie is faulty, or (C) the site was visited by Celts 3000 years ago and revisited by Celts 1500 years ago, both expeditions having exhibited literacy in Ogam.

Dr. Barry Fell suggests the Encyclopedia Britannica is mistaken about the origins of Ogam dating back to only the 4th century CE. He cites the example of an amulet begging the protection of the mother goddess Byamn made by the Windmill Hill people about 2200 BCE in the vicinity of Stonehenge (Fell 1982).

If scholars can simply agree that the Sun Temple is pre-Columbian, then the next hurdle is the Lughnasad aspect. Did someone with a European celestial perspective that associated the term Noble Twins with Castor and Pollux commemorate a triple planetary event in the sacred Gemini constellation concurrent with Lughnasad, a cross quarter celestial marker in which Native Americans had no apparent interest? The evidence seems to suggest so.

The observation of the sun disc filling the specified notch on the cross quarter day Lughnasad, as instructed in the Sun Temple’s Gaelic Ogam inscription, makes a compelling case for the Old World origins of the site.

**Crack Cave**

To the south of the Sun Temple, just north of the Colorado Oklahoma border in Comanche National Grasslands is a prolific rock art site known as Picture Canyon. Around the canyon walls are abundant rock engravings of many styles and ages. Inside an east-facing sandstone cave Ogam is observable that references an equinox solar occurrence. The cave is now known as Crack Cave, named after
Three sets of inscriptions inside Crack Cave are described below. At the back of the cave on a curved rock face is a grouping of lines which have been interpreted to read GRIAN, the Celtic name of the sun god. The lines have an individual stemline, characteristic of Irish Ogam, separated by several inches. The lines are translated as the letters G R N with the IA diphthong or angled line followed by the R to clearly spell out the word GRIAN or SUN (McGlone et. al. 1993, page 187).

On the south wall of the cave there is another Ogam inscription on two rows. The top row is made up of four lines, interpreted as the letter S. Below are the letters for Grian G-R-NG(N) already referenced on the back wall. Leonard and McGlone interpreted this to be aois GRIAN or in English PEOPLE OF THE SUN. Because Ogam is vowel-less, the four strokes above, interpreted as S or aoIS for PEOPLE could have multiple interpretations, and this translation remains less sure than the GRIAN for SUN rendering (McGlone et. al. 1993).

On the north wall of Crack Cave is the most significant inscription which references a solar occurrence on a specific day. The incised strokes of Ogam are engraved on a rounded smooth surface. The Ogam stem line follows the curvature of the rocks and has been interpreted to read THE SUN STRIKES (HERE) ON THE DAY OF BEL (McGlone et. al. 1993). Bel is a shortened version of the Celtic sun god Belenus. Above the inscription are

(continued on page 16)
two rows of parallel vertical lines.

Based on the translation of the inscription and the placement of the narrow cave opening it was possible to predict a sunrise equinox display on the north wall of the cave where the sunlight could strike the wall. McGlone and Leonard anticipated the sunlight would illuminate the words SUN STRIKES and confirmed a spectacular solar alignment on the September equinox of 1984.

The vertical lines above the inscription are count marks representing the days before and after equinox. As Figure 15A shows, two days before the equinox two strokes remain in shadow as sunlight illuminates SUN STRIKES. On equinox, all of the vertical lines are illuminated Figure 15B.

The specificity of the Gaelic inscriptions that reference the Celtic sun deities Grian and Bel and the precise equinox sunrise solar alignment offer overwhelming evidence of an Old World presence at Crack Cave. We can speculate that a group of Celtic travelers, originating in Iberia or around the Mediterranean region, traveled across the Atlantic to the Gulf of Mexico, where they headed up the Mississippi, the Arkansas and into the region by way of the Cimarron and Purgatory rivers. But what were they doing in southeastern Colorado and the Oklahoma Panhandle? Perhaps they were exploring and mapping North America, seeking minerals or travel routes? The natural springs and protection provided by Picture Canyon would have offered a relatively safe settlement site. Based on the abundance of different styles of rock inscriptions, the site has been used for thousands of years. A party of Old World travelers would have found their way by following trails and/or communications with the natives.

Remarkably, the Crack Cave equinox solar alignment may be observed by the public today. Thanks to the preservation efforts of public agencies and private citizens, the Crack Cave entrance is protected by a metal gate, preventing destruction and modern graffiti which is widely seen in Picture Canyon. The nearby town of Springfield, Colorado hosts an Equinox Festival twice a year, which features a pre-sunrise expedition to Picture Canyon. On the spring and fall equinoxes, staff from the Comanche National Grasslands opens the gate at sunrise, allowing onlookers...
the opportunity to enter the cave and observe the sunrise equinox occurrence. Educational and preservation efforts such as those employed at Picture Canyon are an important model for preservation of other historical sites.

While no portable archaeological artifacts have been identified at Sun Temple or Crack Cave proving an Old World connection, the inscriptions and calendrical alignments are evidence of an Old World presence at both southeastern Colorado locations.

Video of the unique calendrical events at the Sun Temple and Crack Cave are featured in the 2005 documentary DVD “Old News.” For details visit http://onter.net.

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References


Monahan, Scott, director of “Old News”, 2005. Documentary film of the solar phenomena at the Sun Temple and Crack Cave is included on the hour and a half DVD, from which many of the graphics appearing in this article and credited to TransVision were adapted. See http://onter.net for complete information and supplemental web video clips.