Armenian Stonehenge Confounds Scholars

SPRAWLING OVER MORE THAN 17 ACRES ATOP A ROCKY PROMONTORY overlooking the arid, sparsely populated landscape of southern Armenia is the very ancient site known as Karahunj. Hundreds of configured stones towering six to nine feet tall have been thrust into the flinty earth. Forming an immense, oval configuration, they average 10 tons apiece; but the largest of their number is five times heavier. All were excavated from basalt quarries several miles away.

BY FRANK JOSEPH

Curiously, 84 of the 223 monoliths at Karahunj, Armenia, feature a cleanly carved, 1.9- to 2.7-inch diameter hole drilled with modern-day industrial precision at about eye level (circa five feet, eight inches from the ground). A short wall of rocks mixed with compacted loam has been packed around the base of each massive stone, heavily eroded by millennia of wind and rain.

This stark and lonely place near the Vorotan River lies not far from the city of Sisian, in Syunik province, 135 miles from the current national capital at Yerevan. Known for time out of mind to generations of local residents as Karahunj, the great stone circle is sometimes also called Zorats Karer—the “Stones of Zorats,” a neighboring hamlet—although its antiquity escaped the attention of scholars until as recently as the early 1990s. Only then did they notice the obscure location’s obvious physical resemblance to megalithic sites in Western Europe, and soon talk spread of an “Armenian Stonehenge.” Word eventually reached Germany, where a team of professional investigators from the University of Munich’s Institut für Vorderasiatische Archäologie was dispatched to survey, partially excavate and date Karahunj. After nearly five years collecting relevant data and physical material, the archeologists published their findings during 2000.

“In contrast to the opinion that Zorats Karer may be called an ‘Armenian Stonehenge’,” their findings indicated that it “was mainly a necropolis from the Middle Bronze Age to the Iron Age” (about 1500 B.C. to 700 B.C.), and may have served “as a place of refuge in times of war,” possibly from the Hellenistic period to Rome’s Late Imperial Era, circa 300 B.C. to A.D. 300.1 As such, the place was interesting, but nothing out of the ordinary. While their assessment was correct, it would prove to be far from complete or comprehensive.

In 1994, shortly before the Germans arrived, lingering conjecture regarding possible celestial alignments at Karahunj prompted other investigators to reconsider the site in terms of archeoastronomy. Their suspicions were gratified on dawn of Midsummer’s Day, when the Sun rose perfectly into the holes of four standing stones, signifying the four cardinal directions. Subsequent examination of the monoliths revealed their additional orientations to the solstices, equinoxes and lunar phases. “The necropolis thesis is certainly true,” conceded Vachagan Vahradyan, an Armenian biologist, who joined other scientists at Karahunj, “but after our initial investigations of the central circle, it is clear the site was aligned to the Sun, most likely aligned to the Moon and—what is really exciting—even some stars or planets.”

His pronouncement was met with skepticism, even adamant denial by European and American archeologists. They argued that a Neolithic observatory in so extremely remote a location, cut off from the centers of megalithic activity in the British Isles by more than 2,000 miles, was too isolated for credibility.3 In response, Elma Parsamyan, chief astronomer at Armenia’s Biurakan Observatory, made a close study of Karahunj’s attributed celestial orientations, and
About 84 of the standing stones of Karahunj once featured a circular hole, although only about 50 of these stones survive, several of them clearly visible in the above photo. Russian and Armenian archeoastronomists have suggested the stones may have been used for astronomical observations. In particular, four stone holes, seem to be sighted at a point on the horizon where the Sun rises on Midsummer Day. Four others standing stones display holes that, observers claim, point to where the Sun sets on the same day. In the nearby city of Sisian there is a museum dedicated to findings, including Paleolithic petroglyphs found on area mountaintops. Researcher Paris Herouni has hypothesized that some of the stones mirror the supergiant star of the Cygnus constellation Deneb (estimated luminosity nearly 60,000 times that of the Sun). To the ancient astronomers, Cygnus may have represented a vulture rather than a swan as we now imagine it. A map of the night sky featuring Cygnus was found on a stone at Gobekli Tepe in modern-day Turkey, mirroring the Karahunj site (see TBR November/December 2009). Says Oxford astrophysicist Mihran Vardanyan: “The most commonly accepted theory about the meaning of Karahunj is that it is an ancient burial ground or necropolis—a place to act as a bridge between the earth and the heavens in the cyclical journey of the soul involving life, death and rebirth. The necropolis thesis is certainly true, but after our initial investigations of the central circle, it is clear the site was aligned to the Sun, most likely aligned to the Moon and possibly even some stars or planets.”
thereafter sent her calculations to Mihran Vardanyan, Ph.D., a specialist in the interpretation of cosmological data at Oxford’s Astrophysics Department, in England. Vardanyan was so impressed with Parsanyan’s computations, he organized “Stars and Stones 2010, Oxford University Expedition to Karahunj, Armenia.” The venture was officially approved and supported by the Oxford University Expedition Council and Royal Geographical Society.

Vardanyan and his colleagues no sooner arrived at Karahunj than they realized: “It is clearly pointing to the Sun on the summer solstice day. Karahunj is unique, as it is very well preserved; the stones have never been moved, preserving all the archeological information.” Expedition members made three-dimensional maps based on stellar, lunar and solar positions indicated by the megaliths, confirming their validity and surprising variety.

An important part of their agenda was to either confirm or discredit conclusions made just before the turn of the 21st century, when a prominent scholar declared that Karahunj was built about 7,500 years ago, making it not only 2,500 years older than Britain’s Stonehenge and Egypt’s Great Pyramid [as traditionally dated—Ed.] but many centuries older than even the earliest known astronomical observatories.

Had this announcement been made by anyone less distinguished than Paris M. Herouni, it would have doubtless excited far less controversy. He was among the most renowned scientists of his time: inventor of the first radio-optical telescope and of the Herouni Mirror Radio Telescope, the largest and most efficient antenna array of its kind; author of 346 published scientific papers, and holder of 21 international patents; the recipient of numerous awards for scientific excellence, including the French Foreign Ministry’s Bronze Medal, the Gold Medal of Moscow’s All-Union Industrial Exhibition, the Catholic Silver Medal of Greater Armenia and others.

But Prof. Herouni’s extraordinary scientific credentials were not alone responsible for the excitement generated by his statement concerning Karahunj. No one had devoted as much time, expertise or intensity to the site, qualifying him as its chief expert. During five years of meticulously surveying the entire archeological zone and recording every alleged alignment, he used four independent methods to cross-reference Karahunj’s megalithic orientations with the paths of the Sun, Moon, stars and planets, their declination and precession; this is the apparently backward motion of the vernal equinox, which marks zero degrees Aries, against a backdrop of fixed stars. A complete cycle takes about 25,800 years.

When factored into this vast, cosmic scheme, Karahunj yielded an operational date of circa 5500 B.C.

Before releasing his findings, he shared them with another world-class authority, the English astronomer who discovered Stonehenge’s identity as a celestial observatory, Gerald S. Hawkins. Hawkins confirmed his Armenian colleague’s conclusions, adding, “I admire the precise calculations you have made [and] with the careful work you have done.”

Herouni continued to research Karahunj, and, before his death in 2008 at 75 years of age, he found that some of its stones were oriented to Deneb, the brightest star in the constellation of Cygnus (it is a blue-white supergiant star). This was an intriguing discovery, because the same alignment occurred at Göbekli Tepe, the earliest manmade place of worship yet discovered, older even than Karahunj by 40 centuries, and dated to circa 11,500 years before present. Whether this southeastern Turkish site and the Armenian location were directly related somehow, despite their vast separation in time, or coincidentally shared a common astronomical alignment, has not been established.

But this parallel is not the only connection Karahunj appears to have made with the outside world. Its very name echoes as far away as Britain’s Salisbury Plain, where “Stonehenge” is a close linguistic variant of “Karahunj”—in Armenian, kar is “stone,” hunj, “voice, sound.” A proper rendering of Karahunj is “The Speaking Stones.” The earliest recorded name for England’s Stonehenge was Stanenges, literally, “stone gallows,” from the formation’s resemblance to an old-style gallows.

The English henge’s philological resemblance to Armenia’s hunj suggests a relationship born from the megalith-builders’ own language, as they carried their applied astronomy from the construction of one observatory to another, from Armenia as far as the British Isles. If so, then the celestially aligned standing stones were raised between the southern Caucasus and the Atlantic Ocean by a single people, or, rather the astronomers of a single people. Henge derived from hunj to become a technological term defining a particular construction technique.

But this circa A.D. 1130 version was preceded by Stonehenge’s pre-Christian appellation, “the Giant’s Dance,” as
The Karahunj stone circle (also known as Zorac’ K’aror, Zorac Qarer, Zorakaror, Zorakar, Zorats Karer or Carahunge) is an archaeological site located on a rocky promontory near Sisian, in Armenia’s southernmost province. About 223 large stone tombs can also be found in the area. Evidently the site was started sometime around 5500 B.C. much a reference to its monumental construction, as to an immigrant race of giants believed to have governed Britain after a catastrophic deluge engulfed their Atlantic Ocean homeland. Their leader was a brother of Atlas, called Albion—literally, the “White Giant”—who gave his name to Britain. The country’s foremost megalithic structure has only been known as “Stonehenge” since 1932, when Thomas Kendrick, later the keeper of British antiquities at the British Museum, so designated it, even though the site is not, properly speaking, a henge.

The term refers to an earthwork typically consisting of a roughly circular or oval-shaped bank with an internal ditch surrounding a central, flat area of 60 feet or more diameter. The three largest stone circles in Britain—Avebury, the Great Circle at Stanton Drew and the Ring of Brodgar—are each configured into a henge, but not Stonehenge, because its ditch is outside the main earthwork bank. Neither is Karahunj a true henge. But more important than these linguistic parallels is the fact that the Armenian “monument has the same orientation as Stonehenge . . . the latitude difference between Karahunj and Stonehenge is about +10°; Karahunj and the Great Pyramid is about –10°.”

Tantalizing as these facts may be, they cannot explain why the world’s earliest known observatory was set up in Armenia, of all places, nor identify its builders. And there the enigma stood, until THE BARNES REVIEW assistant editor, John Tiffany, asked me to investigate it. I am especially grateful to him, because his challenge affords an opportunity to probe a seminal vital period of the deep past previously unknown to me. It is important for them to understand that the conclusions I reached regarding this site comprise a fundamentally different approach to prehistory from mainstream researchers, who examine each fragment of archeological minutiae. While such cataloging is undoubtedly helpful, significance is often lost in a confusion of details.

Cultural diffusionists—believers in the effects of far-ranging influences—strive instead for objectivity, putting a problem into clear focus by standing back from it at a proper distance, allowing an overall picture to emerge in the broader context of other human or natural activity taking place at the same time, regardless how far removed from the center of interest. We are less concerned with the individual pieces of a mosaic,
A number of the megaliths at Karahunj have holes carved in them, for observing planets, stars etc. Apparently the stones to carve these holes were brought from Iran, as the stones in Armenia weren’t hard enough to do this. The holes in the stones are for peering at heavenly bodies, but nowadays, the holes aren’t lined up with the same stars they used to be. The stars move; our Solar System moves; and the Earth moves (particularly in Armenia, where earthquakes occur every few years).

The Karahunj Holes

than of the greater image they combine to create. Since nothing in Armenia seems able to tell us anything further about its standing stones, we should expand our search beyond that country for background information. Answers may lie in what else was going on in the outside world at the time.

We learn, for example, that the inexplicable appearance of Karahunj in Syunik province was preceded by and related to a critical phase in the Neolithic development about 1,000 years earlier of the Fertile Crescent, a region comprising Iraq, Syria, Lebanon, Jordan, Palestine and Israel, besides the southeastern fringe of Turkey and the western fringe of Iran. Beginning around 6500 B.C., New Stone Age farmers were using pottery for the first time throughout Mesopotamia. This useful innovation improved agricultural efficiency, with consequent increases in crop yield and regional human population, resulting in village growth and hitherto unprecedented levels of material prosperity.

Not surprisingly, the dominant religious conception that emerged from these flourishing rural communities was the Earth Mother goddess, the great nurturer, from whom natural abundance flowed in such profusion. Overproduction allowed for expansion of trade with other communities along the shores of the Black Sea, beyond to the northern steppes, regarded by a growing number of anthropologists and paleolinguists as the original homeland of progenitors of the Indo-European language-speaking peoples. The region is known as Transcaucasia, from the Russian zakavkazie for “the area beyond the Caucasus Mountains”—a broad swath of grasslands ideal for cattle herding, extending into Georgia and Armenia, the southern Caucasus. It would appear then, that referring to white people as “Caucasians” is prehistorically accurate and appropriate. This vast expanse was well known and to some degree occupied by our Neolithic ancestors during their golden age. It was not to last.

In searching for a cause that might explain what happened, I studied environmental conditions, as they existed across the Near East and Transcaucasia around the time in question. I began this line of inquiry, because, over the last 30 years devoted to investigating human antiquity, the determining factor in its development, repeated invariably by one historical example after another, is race in relation to population density and natural environment. Here, too, this supremely decisive factor was to elucidate the enigma of Karahunj.

I learned from paleoclimatologists about something they call “the 8.2-kiloyear event.” Its name derives from a natural catastrophe that occurred 8,200 years ago, when an abrupt decrease in global temperatures ushered in prolonged drought and caused a widespread plant die-off. The natural
catastrophe had been centuries in the making. Since the end of the last glacial epoch (commonly, if incorrectly, known as the “ice age”), gradually warming temperatures finally melted North America’s Laurentide ice sheet. Covering hundreds of thousands of square miles, including most of Canada and a large portion of the northern United States, it had locked up many billions of gallons of fresh water. When they were suddenly released into the salty North Atlantic Ocean, the thermohaline circulation—a conveyor-belt of warm water carried toward North Africa and Europe—collapsed.

The initial melt-water surge from a disintegrating Laurentide ice sheet produced tsunami-like flooding that instantaneously drove up worldwide sea levels by 12 feet, drowning all human coastal settlements. Northward heat transport ceased, dropping temperatures by as much as 11 degrees Fahrenheit around the planet, and causing a global CO₂ decline of minus-25 parts per million for the next 300 years. Mesopotamia was especially hard hit.

The Fertile Crescent could no longer live up to its name, as Neolithic farmers there struggled to survive by inventing irrigation and food storage. But the 8.2-kiloyear event was no passing phase. It would persist for the next three centuries after its sudden onset around 6200 B.C. This date coincided with the precipitous decline of the New Stone Age in Mesopotamia, followed soon after by its Armenian revival, referred to by archeologists as the Shulaveri-Shomu. The Central Transcaucasian culture produced the same, decorated pottery; circular, mud-brick architecture; long, prismatic, obsidian blades; and anthropomorphic, female figurines diagnostic of Neolithic Mesopotamia. Clearly, the New Stone Age agriculturalists, after surviving on the knife edge of adverse conditions there for 200 years, migrated en masse across the Caucasus Mountains into southern Armenia, where deteriorating conditions were less severe.

What the otherwise identical Shulaveri-Shomu Culture did not share with its Near Eastern predecessor, however, was Karahunj. Nothing like it had ever been built before. Why did the same Neolithic farmers, who never set up any astronomically aligned standing stones, decide to do so after leaving Mesopotamia? In other words, why did they build the world’s first observatory in Armenia? In the absence of any credible interpretation, I turned to Opening the Ark of the Covenant co-author, Laura Beaudoin, without whose input, our 130,000-word investigation of yet another ancient puzzle, would not have been possible. Her insightful grasp of human nature had often illuminated otherwise impenetrable enigmas, regardless how deeply steeped in time, and she would not disappoint me now.
“For 4,500 years,” she explained, “beginning around 10,700 B.C., with their first settlement at Tell Qaramel, in Syria, people of the New Stone Age lived off the unchanging bounty of the soil. During the course of that prolonged period, they understandably developed an agricultural religion centered on Mother Earth and her continuous abundance. Then came the 8.2-kiloyear event in 6200 B.C. The habitual cycles of four and a half millennia were abruptly overthrown. Suddenly, without either warning or precedent, Mother Earth, on whom so many generations had based their existence, could no longer be trusted. Out of this psychospiritual trauma arose a desperate need, in the midst of an ongoing environmental catastrophe, to find something more permanent on which they could depend for natural stability.

“They found it in the rotation of the heavens, that clockwork cosmos of unerring regularity by which humans could reorder their lives and bond again with the perennial forces of life. Accordingly, the first few generations of Mesopotamian immigrants in Armenia studied the sky, preserving everything they learned, until their accumulated knowledge went into the construction of an astronomically aligned megalithic center. For them, such a place was at once an observatory for mundane, agricultural purposes, and a temple celebrating their new spiritual concept. It represented a fundamental shift from worshipping Mother Earth to Father Sky. For that major transformation of folkish consciousness, a structure oriented to the heavens was needed. Hence, the original creation of Karahunj.”

Laura’s interpretation of the evidence is borne out by a comparison of religious artifacts found at Late Neolithic sites in the Near East with others belonging to the successive Shulaveri-Shomu Culture responsible for Armenia’s ancient standing stones. The former set lacks any reference to the heavens, and is composed almost entirely of anthropomorphic, female figurines depicting a Mother Earth fertility goddess, with characteristic Neolithic emphasis on oversized thighs and breasts. Little of such imagery lingered into Shulaveri-Shomu times. Instead, overwhelming attention was lavished on male sky-deities, particularly solar figures.

The chief divinity was Aramazd. The first two letters in his name formed the root for “Sun,” “light” and “life.” His son, Mihr, was another Sun god, as was Hayk, the legendary forefather of the Armenian people. Aragil was a mythical stork that personified the Sun, and Akahi was a rooster identified with dawn. Among mortals, the most powerful oaths were sworn by the Sun, to which the ancient Armenians sacr-
rificed horses. Fifth-century scholar Movses Khorenatsi compiled the earliest known historiographical work about Armenia, a series of volumes rooted in very deep antiquity, when the Sun, Moon, stars and planets were worshiped at sacred sites such as Karahunj.

Although these deities were revered throughout the Classical Period, their origins are steeped in a post-Neolithic age. They were celestial replacements for the still vital and honored, but less dependable, now secondary-in-importance Earth Mother. From those first standing stones erected in the southern Caucasus, their megalithic technology spread westward to Europe and North Africa. The hitherto earliest known celestial observatories were simultaneously established at two locations in Germany and Egypt, separated from each other by 2,300 miles.

That both the Goseck Circle in the Burgenlandkreis district of Saxony-Anhalt and the standing stones of Nafta Playa, in the Nubian Desert, 500 miles south of Cairo, were built at the same time—circa 4900 B.C.—suggests both locations were independently influenced by a common influence, arriving from outside their respective cultural orbits.

The six centuries separating them from Karahunj further implies that other, similarly oriented, extremely old sites may remain to be discovered radiating outward from the Armenian birthplace of megalithic astronomy.

ENDNOTES:
4. Vardanyan, Ph.D., Mihran, http://qarahunge.icosmos.co.uk
7. Vahradyan, op. cit.


Armenian Petroglyphs

The ancient standing stones are not alone at Karahunj. Its hilltop (and much of the Armenian region) is littered with prehistoric petroglyphs—images created by removing part of a rock surface by incising, picking, carving or abrading it. The term derives from the Greek petros for “stone” and glyphein, “to carve.” Numerous examples throughout Armenia are known locally as itsagir, or “goat letters,” because many appear in virtually inaccessible locations high in the mountains, such as those found at Ughtasar, or “Camel Back Mountain.” Its more than 2,000 petroglyphs are contemporaneous with Karahunj, 90 minutes away by car, and connected by the Voroton River. Both sites were likely created by the same Caucasian megalith builders. Above, a petroglyph from Ughtasar. Below, a petroglyph from Qobustan—dated to 10,000 B.C.