

Karaunj: World's ancient observatory

Karaunj is a prehistoric stone monument located in the Armenian Highlands, in particular, in the Republic of Armenia, located in today's South Caucasus, near the city of Sisian. It consists of hundreds of standing stones, of which 223 were numbered by researchers. 84 stones of these have precisely made holes with a diameter of 4-5 cm, which look in different directions. Basalt stones, whose height ranges from 0.5 to 3 m, and weight-up to 10 tons. Most of the stones have been preserved, although due to erosion they are covered with lichens. The holes are better preserved. The stones of Karaunj were brought from the quarry to the gorge of the river Dar, lifted and transported with woven ropes and with the help of animals. And in the observatory, holes of stones were opened and astronomical instruments were prepared. Karaunj consists of several groups of structures and individual stones, which together make up a megalithic monument. The central circle consists of 40 stones. It has an oval appearance and is directed to the west with a sharp end, researchers who used sensitive magnetometers found that the natural magnetic force inside the Central District of Karaunj looks like a spiral. In the middle of the monument, the stones make up the Central Area measuring 35x45 m, from which stone wings 110-150 m long stretch in the direction of the north and south, as well as a short north-eastern stone. The area of the monument is 7¹ hectares.

¹ Paris Heruni Armenians and Ancient Armenia p. 87



It should be noted that Karaunj is also called "Zorats Karer" or Karenish. Numerous archaeological excavations have been carried out on the territory of the historical and cultural reserve "Zorats Karer", since 2013 the excavations have been conducted under the guidance of archaeologist Ashot Piliposyan. The latter notes in his research that this is one of the unique archaeological monuments of the Caucasus, the only megalithic monument in the Caucasus that has been preserved²: in such a volume and over this area. It should also be noted that, according to archaeologists, there was also a tomb on this territory.

We were also informed about Karaunj by historians, in particular, the Armenian historian of the XII century Stepanos Orbelian, who described the monument in detail and provided information about its location³.

The Karaunj Observatory had a highly developed scientific level and operated more than 7,500 years ago, and continued to function for more than 5,500 years. The Armenian civilization is considered one of the oldest civilizations in the world. Karaunj proves that 7500 years ago there was a developed mathematics and technology in Armenia.

² Ashot Piliposyan "Zorats Karer" 2019.

³ Stepanos Orbelyan " The history of Syunik"

Karaunj is the oldest and largest observatory in the world. It is older than Stonehenge by 3,500 years, by 3,000 years from the great pyramids and by 2,500 years from the appearance of the Sumerians and the ancient civilizations of Egypt.



The word "Stonehenge" is the same as "Karaunj" because "stone" and "Stone" mean the same thing, and what does "henge" mean (there is no such thing in English) this is similar to the Armenian "khunj", in the Armenian language the name Karaunj means talking stones⁴.⁵ Stonehenge is the same "talking stones", and in ancient times, in all probability, it was called Karaunj.

It should be noted that in Europe there are other coincidences associated with the Armenian karaunj, there is also a monument consisting of stones on one of the Hebridean Islands in Northwestern Scotland, which is called Kalenish (2000 BC) - This is the same Armenian word "stone", the word "nish" (which is also absent in English) is the Armenian word "sign", that is, "Kalenish" in Armenian and means "stone sign". In Ireland, there is such a monument, which dates back to 2500 BC, called the New Grange, which is similar to the "henge" ("hunj")⁶. There are many "hangs" in Europe. Karaunj, Stonehenge and Kalenish also have many structural similarities, Stonehenge and Kalenish have central areas, routes to the northeast and wings (Kalenish) just like

⁴ Paris Heruni: Armenians and Ancient Armenia pp. 87-90

⁵ Paris Heruni: Armenians and Ancient Armenia pp. 87-90

⁶ In the same place page 72

the Armenian Karaunj. It is also very important that on the solstice day Stonehenge and Karaunj look at the sun in the same position⁷.



Dr. H. P. Kleiner studied the territory of Karaunj. He drew attention to the stone N68 made of stones, into the dug depth of which water is poured. The sun's ray with the top of the stone N69 is reflected from the water surface and forms a certain angle. He stated that the free-standing stone N200 played the same role as the famous Heelstone⁸, stone of Stonehenge. Kleiner also discovered a number of ancient instruments related to astronomy.

Karaunj stones with special holes are a unique phenomenon in ancient observatories, holes made in giant stones provide high accuracy and stability of orientation to the destination. The weight and strength of the stone make it a very strong and reliable tool for viewing celestial objects for centuries. Most of the holes are directed at different points of the horizon, some holes are directed up the horizon and look at the sky. Pipes were also used at the Karaunj Observatory, and this is evidenced by the important fact that the conical edges of all the holes expand⁹. The researchers state that astronomers from Karaunj showed a special interest in the stars of the constellations of Orion (its zone) and Sirius and conducted long-term observations using many

⁷ Vachagan Vardanyan Head of the Research Group “Stones and Stars” at the University of Oxford.

⁸ Swiss scientist, Doctor of Sciences K. P. Kleiner 1995 Researches

⁹ Paris Heruni :Armenians and Ancient Armenia, pp. 27-28

special stone tools, the holes of which were directed at the points of origin, approach to the mother and culmination of the above-mentioned stars 7500-4500 years ago, thanks to which they fully revealed the cycle of Sirius.



Russian astronomer Professor N. G. Bochkarev and his scientific group also conducted research on the territory of Karaunj, and it was they who discovered the N90a periscope-a stone that lay near the N90 stone near the southern wing. After completing the research, Bochkarev states that Karaunj is a fairly serious observatory. In the future, he applied various research methods here. In 2003, he also concluded that Karaunj is more than 7,500 years old, mentioning that it is the oldest observatory in the world¹⁰.

¹⁰ Research of the Chairman of the Eurasian Astronomical Union, Professor Bochkarev, in 2003 .



Thus, we can clearly state that Karaunj is the oldest observatory in the world. The main research of Armenian astronomers about Karaunj was conducted by Paris Heruni, but we also see that international researchers also share Heruni's approaches. The study of Karaunj and Stonehenge also shows cultural similarities between Armenians and the British.

Karaunj belongs to all mankind as a testimony of its high knowledge, coming from very ancient times.