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REVIEW ARTICLE

A STUDY OF PETROGLYPHS UNEARTHED AT THE ANCIENT CEMETERY SITES OF GARANGASH AND HABAIKHAN IN HABAHE COUNTY, XINJIANG[1]

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ABSTRACT

In 2012, eight petroglyphs were unearthed from the ancient cemetery sites of Garangash and Habaikhan in Habahe County, Xinjiang. These petroglyphs can be regarded as important materials for dating petroglyphs. By analysing these petroglyphs and general combing the dating research methods of petroglyphs, the excavators put forward the relative dating research method of standard petroglyphs, which is a beneficial exploration of dating petroglyphs.

KEYWORDS

Xinjiang, Galangash, Habaikhan, Unearthed Petroglyph, Age-Dating

From August to October 2012, the Xinjiang Institute of Cultural Heritage and Archaeology conducted a rescue excavation of the ancient cemetery sites of Garangash and Habaikhan in Habahe County, Altay Prefecture. These two cemeteries with tombs are distributed on the terraces on both sides of the Berezek River, surrounded by hills and small grasslands, and scattered with residential houses, growing poplars, birch trees, shrubs, and sparse grass on the surface of ground. Belonging to the winter pasture of the herdsmen of Garangas village, the place is mainly inhabited by the Kazakh ethnic group, and its economic form is based on animal husbandry. (Figure 1)

1. BURIAL TOMBS AND UNEARTHED PETROGLYPHS

The first Garangash cemetery is located near the dam of the reservoir and 16 tombs have been excavated. There are two types of tomb mounds: stone mounds and stone circle mounds, with the diameter of the mounds ranging from 3 to 12 metres. Some of the tombs have stone pillars on the mound. There are vertical pit tombs and stone outer coffin tombs with incomplete human bones, and no human bones were unearthed in some of the tombs. One sandwiched grey earthenware jar and one stone clapper were unearthed. A large number of petroglyphs were found on the north side of the cemetery, mainly with animal patterns such as sheep, cattle and horses, as well as archery and dance images (the Habahe County Cultural Relics Bureau has cut and transported the petroglyphs here to the museum for preservation).

The second Habaihan cemetery is located upstream of the reservoir dam and is mixed with modern cemeteries. According to the field investigation, a total of 73 tombs were confirmed and only 28 tombs were excavated this time. There are three types of tombs, including stone mound tombs, stone circle stone mound tombs, and stone coffin tombs. The sealing pile is 3 to 18 metres in diameter and 0.2 to 1 metre in height. There are types of burial chambers such as soil pits with vertical hole, stone outer coffin tombs, partial chamber tombs, and surface stone coffin tombs, etc. The burial has stone outer coffin, stone coffin, tree coffin, etc. The human bones are mostly incomplete, and the burial system includes upright limbs, side bending limbs, etc. The direction of the tombs is mainly from southeast to northwest. There are pottery pots, copper mirrors, copper knives, whetstones, gold foil, wooden dishes, birch bark boxes and other relics unearthed.

It is worth mentioning that during this excavation, eight petroglyphs were found in the stone circle on the original ground surface under the seal mound, the cover of the tomb entrance and the filling stones inside the tomb, with the contents of sheep, cattle, donkey, archery, figures, palms and other patterns. These petroglyphs were all made by using

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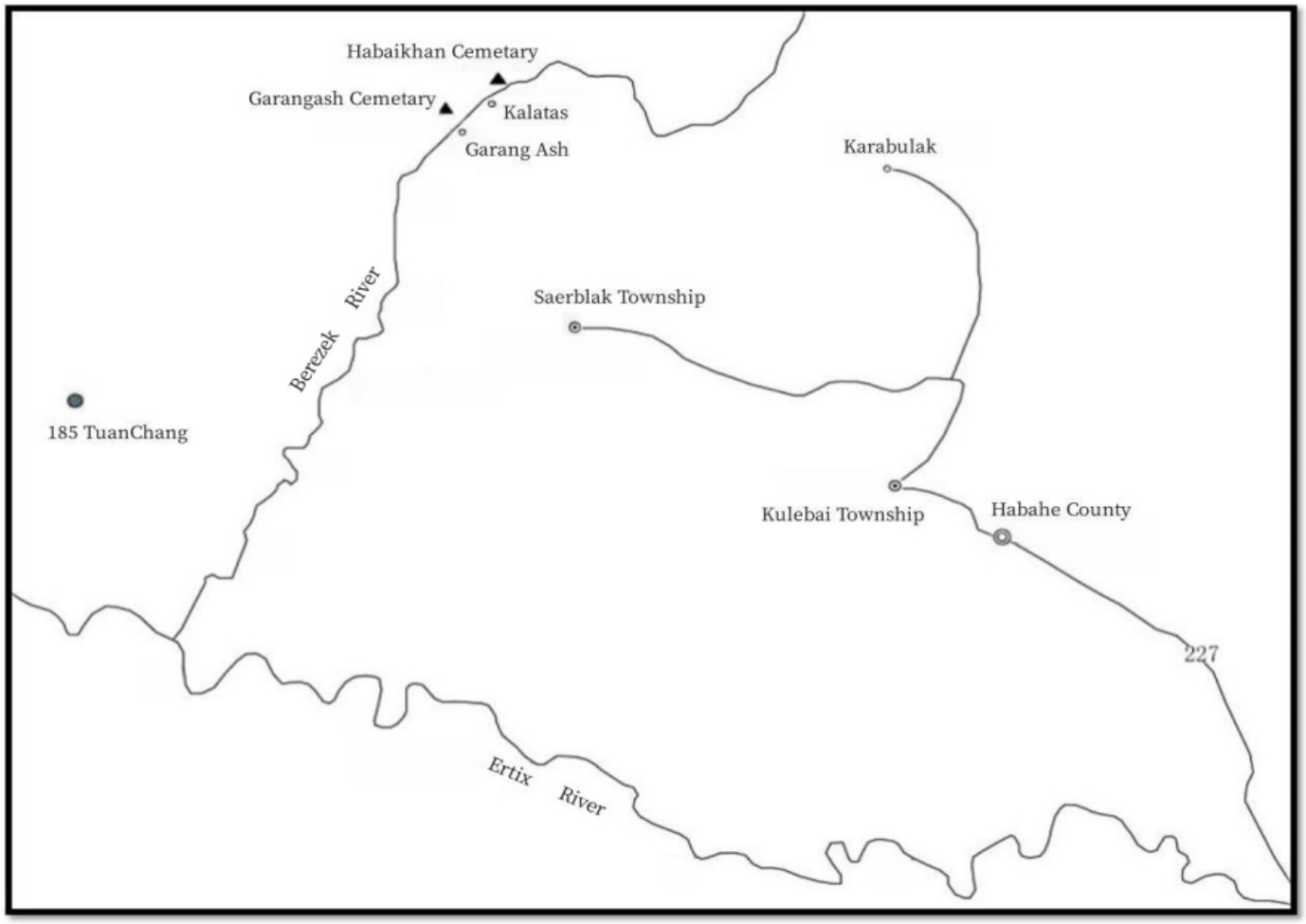

Figure 1: Diagrammatic Drawing of the Ancient Cemetery Sites

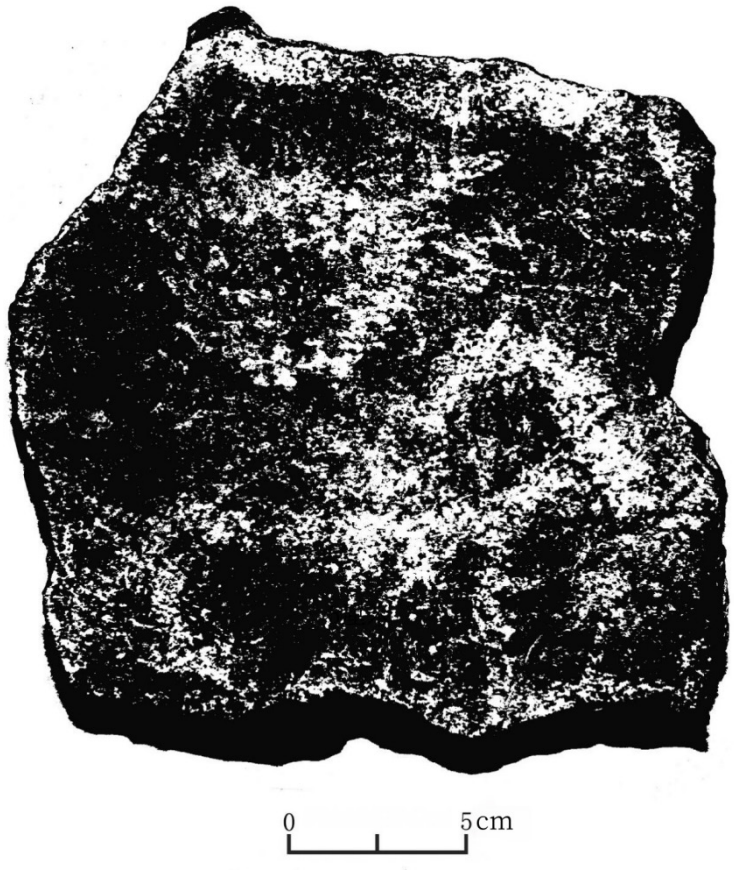

Figure 2: Petroglyphs of Sheep Unearthed in Tomb 3

Figure 3: Petroglyphs of Cattle Unearthed in Tomb 10

Figure 4: Petroglyphs of the Siberian Ibexes Unearthed in Tomb 10

close-pointed chiselling technique and line-carving technique. There are clear excavation sites and layers, and according to the age of the tombs can provide a more reliable basis for dating the petroglyphs. There are also a large number of petroglyphs on the rocks around the cemetery, with animal patterns such as sheep, cattle and horses as the main themes. The following is a special introduction to these unearthed petroglyphs:

HM3:1 Unearthed in the surface stone enclosure of Tomb No.3, and the sheep patterns are carved on the gray surface of the black rock with close-pointed chiselling technique, but the carving is shallow and the patterns are not very clear. The dimensions of the rock face are 20 cm in length, 20 cm in width, and 9 cm in thickness. (Figure 2)

HM10:1 Unearthed in the chamber of the tomb No. 10, on the gray and black rock face of the black rock, there are cattle, palms and other patterns with close-pointed chiselling technique, among which three cattle patterns are meticulously and vividly. The dimensions of the rock face are 60 cm in length, 40 cm in width, and 20 cm in thickness. (Figure 3)

HM10:2 Unearthed in the chamber of the tomb No. 10, the black rock,

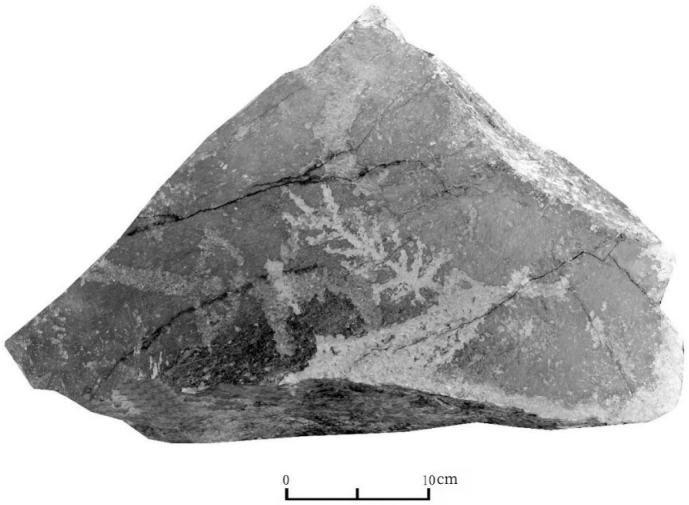

Figure 6: Petroglyph of Deer Excavated from Tomb 10

Figure 5: Petroglyph of Archer Unearthed in Tomb 10

the content is mainly Siberian ibexes, the patterns' rock varnish are different, and there are obvious differences in times. The dimensions of the rock face are 39 cm in height, 42 cm in width, and 32 cm in thickness. (Figure 4).

Figure 7: Petroglyphs of Argali Sheep Unearthed in Tomb 10

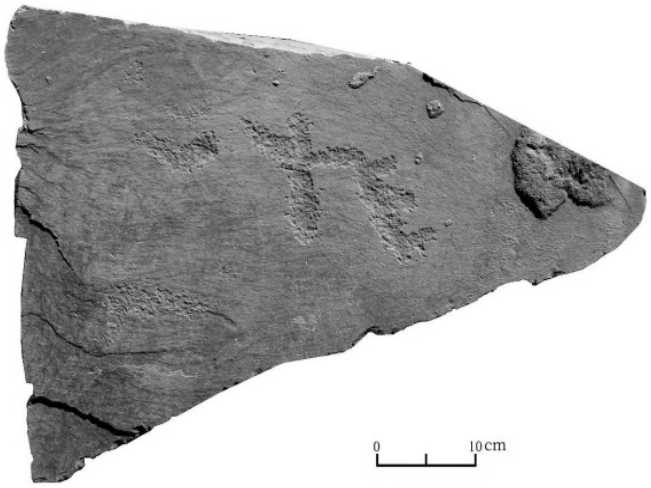

Figure 8: Unfinished Petroglyphs from Tomb 10

HM10:3 Unearthed in the chamber of the tomb No. 10, the grey-black rock face is carved with an archer pattern, with the edges of the pattern using the line-carving technique, and the body part of the figure is filled with close-pointed chiselling technique. The dimensions of the rock face are 15 cm in length, 10 cm in width, and 9 cm in thickness. (Figure 5)

HM10:4 Unearthed in the chamber of the tomb No. 10, black rock, gray black rock surface engraved with sheep, arrows, deer, etc. All are made by close-pointed chiselling technique, but there are obvious differences in the rock varnish. Sheep and bow with the same rock varnish and have the same color and are darker, while deer rock sunning is lighter, and the body part of the sheep is broken by the superposition of the antler part, so the petroglyph is a work of different periods. The dimensions of the rock face are 47 cm in length, 25 cm in width, and 26 cm in thickness. (Figure 6)

HM10:5 Unearthed in the chamber of tomb No. 10, black rock, with two prostrate argali sheep are carved with close-pointed chiselling technique on the grey-black rock face. The dimensions of the rock face are 34.5 cm in length, 18 cm in width, and 11 cm in thickness. (Figure 7)

HM12:1 Unearthed in the chamber cover of tomb No.12. It is a cyan-colored rock with geometric patterns chiseled on the surface. The dimensions of the rock face are 60 cm in length and 23 cm in thickness. (Figure 8)

HM25:1 Unearthed in the chamber of tomb No. 25, greyish-black rock, is in the form of a long strip, with animal patterns carved on both sides using close-pointed chiselling technique. One side is richly carved with a number of northern goats and donkeys,and the other side is carved with sheep and cattle. The dimensions of the rock face are 115 cm in length, 32 cm in width, and 10-14.5 cm in thickness. (Figure 9)

It can be seen that most of the eight unearthed petroglyphs are located in the filled soil of tomb chamber, and a few are in the mound or stone circle, which determines the relative age of the petroglyphs, indicating that they are not later than the age of the tombs. The structure of the tombs and the unearthed relics determine that these tombs are all in the early Iron Age.

The petroglyphs unearthed in the tombs may also indicate that there is a certain connection between the tombs and the petroglyphs. The dead in the tombs may be the creators of some of the petroglyphs. In the field archaeological excavations, the tombs unearthed petroglyphs were also occasionally found, but not as many as the number of unearthed petroglyphs and the number of tombs involved in this discovery. Is this intentional or is it accidental? It is a noteworthy problem.

2. COMMONLY USED METHODS FOR DATING PETROGLYPHS

The judgement of the age of petroglyphs has always been a very puzzling problem for academics, and many scholars at home and abroad have made a lot of attempts. In recent years, there has been a gradual increase in the number of studies on the determination of the age of petroglyphs. For example, Wang Jianxin and He Junfeng attempted to use archaeological research methods, especially archaeological typology methods and archaeological stratigraphy methods, to carry out a relatively comprehensive study of the Jongkek petroglyphs in Ili Kazak Autonomous Prefecture, Xinjiang(Wang & He, 2006).Xi Lin conducted a specific study of in the Mazongshan area of Gansu province by using a trinity of integrated studies of petroglyphs, their associated sites, and tombs (Xi, 2009).

In addition, researcher Lv Enguo of Xinjiang Institute of Cultural Heritage and Archaeology has also obtained good results through typological comparative analysis of the patterns engraved on the wooden vessels excavated from the Turpan Yanghai Cemetery and the petroglyphs of Xinjiang. This archaeological excavation, HM10, HM25 and other tombs unearthed this batch of petroglyphs, carved patterns are mostly cattle, sheep and other animal images, but also archery, palms, and other images. The consistency of these petroglyphs with the surrounding petroglyphic features, coupled with the determination of carbon 14 data from the associated tombs, undoubtedly provides reliable evidence for the relative dating of the petroglyphs with the same pattern features or similar petroglyphic features.

Figure 9: Petroglyphs of Sheep Unearthed in Tomb 10

In addition, some scholars also try to use scientific dating methods. The Microerosion Dating jointly promoted by Professor Tang Huisheng and Robert G. Bednarik, President of the International Federation of Rock Art Organizations, has been more widely used and promoted in China, and has made some progress (Tang et al., 2017; Tang et al., 2018; Tang et al., 2020). However, this method requires a long time period, and some scholars are still sceptical about its accuracy. The Uranium Series Dating is one of the more rapidly developing methods in recent years, and in 2014, the Australian scholar Maxime Aubert used the uranium dating method on cave petroglyphs in Sulawesi, Indonesia, and concluded that they were dated to around 40,000 years before present (Aubert et al., 2014). This result was named one of the top ten scientific breakthroughs of the year by Science in the U.S. In 2015, Robert G. Bednarik, President of the International Federation of Rock Art Organizations, Giriraj Kumar, President of Rock Art Society of India, Paul Tarsen and Maxime Aubert of Australia's Griffith University all came to the Altay Prefecture to investigate Altai Mountain petroglyphs, and they also discussed the dating of the petroglyphs in the Dundebrak Cave in Altay city, and concluded that it might require a relatively large number of tests of the uranium dating method before a more scientific result could be obtained, which would require a relatively large amount of funding and time.

3. RESEARCH ON ORIGINAL PETROGLYPHS

In addition to these research methods, there is a need to concentrate on the study of original petroglyphs. Why propose original petroglyphs? Because from the second day of the creation of petroglyphs, there is a great possibility of imitations appearing, and when people see the patterns on the rocks, it is easy to arouse the impulse to carve and paint them with their own hands, and the petroglyphs that imitate the previous ones will naturally become the objects of imitation. So what kind of petroglyphs are original petroglyphs?

Original petroglyphs are a direct reflection of the spiritual world of the ancients. Various images in the petroglyphs in the prehistoric period constituted the earliest 'documents' of the primitive human beings before the invention of the written language, which not only involved the economy, society and life of the primitive human beings, but also served as the spiritual products of human beings, which touched the hearts of human beings with the language of art, and even could be said to be the most direct language for the future generations. It can even be said to be the most direct language left to future generations. From the point of view of the origin of art, as well as from psychological studies, the urge to express is an important reason for the origin of petroglyphs. Ancient people were given the urge to express the various emotions triggered by the projection of nature and its surrounding human activities in their hearts, and chiselling or depicting the various animals or natural phenomena they saw and the scenes of their lives on the rocks was one of the ways to relieve this urge, so the original petroglyphs had a strong sense of realism, and even had a general sense of amusement. There are also petroglyphs created out of witchcraft and other primitive religious beliefs, which should belong to the original petroglyphs. It is also a good attempt to distinguish the original petroglyphs from the many petroglyphs, conduct a comprehensive study, and then take them as the standard petroglyphs for comparing and researching other petroglyphs related to these petroglyphs (petroglyphs in the same area or in similar areas).

The age of petroglyphs is the basic key to solving the mystery of petroglyphs, which is of great significance to the deep understanding and research of ancient cultures.

ANNOTATION

Note 1: Xinjiang Institute of Cultural Heritage and Archaeology, 2015. Report on the excavation of the Garangash and Habaikhan cemeteries in Habahe County, Xinjiang Altay Prefecture Archaeological and Historical Anthology, Cultural Relics Press, Pp.177-197.

REFRENCES

Aubert, M., Brumm, A., Ramli, M., et al., 2014. Pleistocene cave art from Sulawesi, Indonesia., Nature, (514), Pp.223-227.

Tang, H.S., Jin, A, N., Li, M., et al., 2020. The 2017 rock art mission in Hubei Province, China., Rock Art Research, (1), Pp. 67-73.

Tang, H.S., Kumar,G., Jin, A, N., et al., 2018. The 2015 rock art missions in China., Rock Art Research, (1), Pp. 25-34.

Tang, H.S., Kumar, G., Liu, W, Y., et al., 2017. The 2014 microerosion dating project in China, Rock Art Research, (1), Pp. 1-16.

Wang, J. X., He, J. F., 2006. the studies on the classification and dating methods for the petroglyphs in jongkek, Archaeology and antiquities, (5), Pp. 49-59.

Xi, L., 2009. A Test of the Cultural Factors of Petroglyphs in Mazongshan area of Gansu, Archaeology and antiquities, (4), Pp. 96-102.