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THE RESULTS OF THE STUDY OF GOL MOD-2 SITE BY THE MONGOLIAN-CHINESE JOINT ARCHAEOLOGICAL RESEARCH TEAM

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Abstract. As part of the Mongolian-Chinese joint archaeological project ‘Exploring Ancient Nomadic Culture in the North’, archaeological surveys, excavations and research activities were conducted in the Hanui River valley in the Arkhangai aimag of Mongolia from July 2017 to August 2019. Three field seasons at the Gol Mod-2 necropolis yielded rich results, which were partly published in Mongolian and Chinese scientific journals. In December 2019, one of the major discoveries of this collaborative project (the excavation of the Gol Mod 2 burial ground) was honoured as one of the ‘Top Ten Discoveries of 2019’ by American Archaeology Magazine. Thanks to the efforts of Chinese and Mongolian scientists, the joint project successfully achieved its research goals. New material has been obtained to study the history of the interaction between agricultural and nomadic civilizations.

Key words: Xiongnu, unicorn, golden crown, bronze cauldron, elite tomb, satellite burial, gold and silver artifacts, Gol mod-2, Hanui Valley, xiongnu ritual

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РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ ПАМЯТНИКА ГОЛ МОД-2 МОНГОЛО-КИТАЙСКОЙ СОВМЕСТНОЙ АРХЕОЛОГИЧЕСКОЙ ЭКСПЕДИЦИЕЙ

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Резюме. В рамках монголо-китайского совместного археологического проекта «Исследование древней кочевой культуры на Севере» с июля 2017 г. по август 2019 г. проводились археологические изыскания, раскопки и исследовательские работы в долине р. Хануй в Архангайском аймаке Монголии. Три полевых сезона на некрополе Гол мод-2 дали богатые результаты, которые были частично опубликованы в монгольских и китайских научных журналах. В декабре 2019 г. одно из главных открытий этого совместного проекта (раскопки могильника Гол мод-2) было отмечено как одно из «Десяти лучших открытий 2019 года» журналом American Archaeology Magazine. Благодаря усилиям китайских и монгольских ученых совместный проект успешно достиг поставленных исследовательских целей. Получен новый материал для изучения истории взаимодействия между земледельческой и кочевой цивилизациями.

Ключевые слова: хунну, единорог, золотая корона, бронзовый котел, элитная гробница, сопроводительное захоронение, золотые и серебряные артефакты, Гол мод-2, долина Хануй, хуннуский ритуал

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Introduction

The project process started on July 20, 2017, when four Chinese participants of the China-Mongolia joint archaeological project arrived in Ulaanbaatar. On 22, both Chinese and Mongolian teams headed to the Arkhangai Province and officially started the fieldwork. Surveying Gol Mod-2, they completed excavations of twelve satellite burials of tomb No.189

at the Gol Mod-2 cemetery, and cleared the turf of the main burial of tomb No. 189. In 2018, the investigation and mapping of the Gol Mod-2 was completed, and the clearing work of the main burial of the tomb No.189 was carried out to a depth of 6 meters from the surface. The Gol Mod-2 Cemetery is located in the Undur Ulaan county, the Arkhangai Province, Mongolia. It is about 12 km away from the Khanuy River in the west. Its geographical coordinates are N48°, E101°the13', and the altitude is around 1800 meters. The cemetery is 2.2 km from the east to west and 1.3 km from the north to south. It is surrounded by the mountains on three sides from the east to the south and opens up with a river on the north. The terrain is high in the south and low in the north. After several surveys, it was estimated that 571 different types of stone tombs were scattered in the cemetery. Among them, there are 104 square stone tombs with a passage (named as terrace tomb by some scholars), 326 circular stone tombs accompanying the square one (satellite tomb), and 141 independent circular stone tombs (Fig. 1).

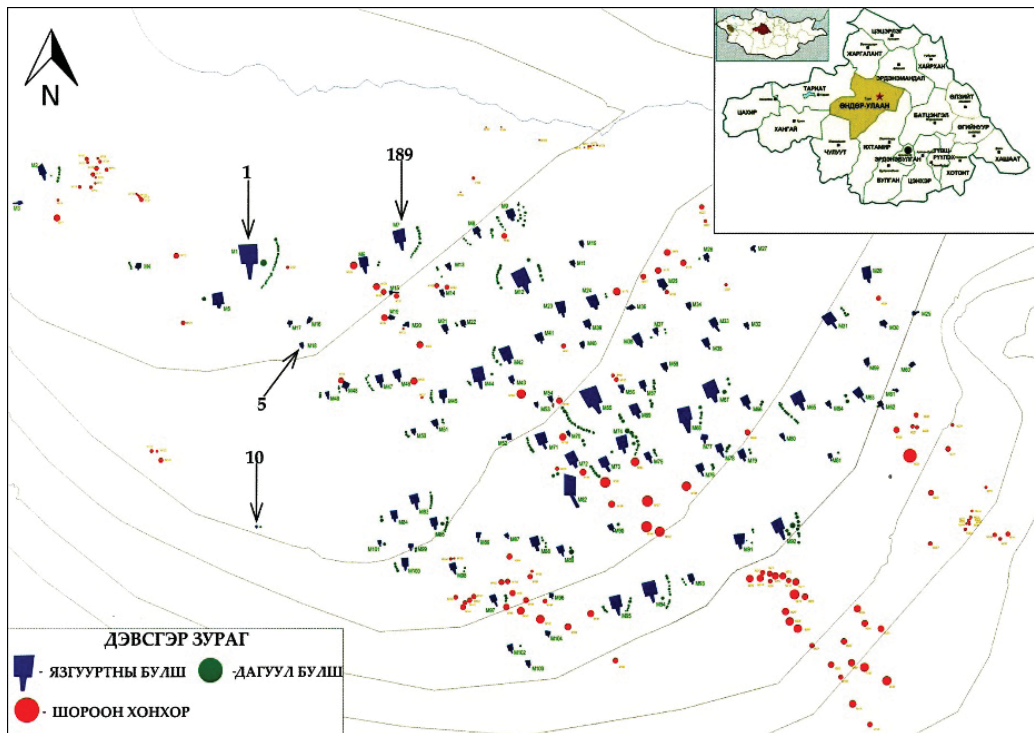


Fig. 1. Schematic map of the Gol mod-2 sites and its plan

Рис. 1. Карта-схема расположения памятника Гол мод-2 и его план

Because smaller tombs are usually covered with turf to varying degrees, it is difficult to confirm if all tombs are accounted. Among the cemeteries of the Xiongnu nobles that have been found in Mongolia, the area of Gol Mod 2 is smaller than that of Noyon Uul and Gol Mod-1. The number of tombs in these cemeteries is not directly related to the area of the cemetery.

For example, the Noyon Uul Cemetery has the largest area (17.5 km²), and a total of about 212 burials of various types (inconclusive because of dense forest), among which are 29 terrace tombs (Erdenebaatar et al., 2015). The area of Gol Mod-1 cemetery is 7.56 km² the latest survey result from 2014 show that there are 483 tombs in total, 214 of which are terrace tombs (Polosimak, Bogdanov, Tseveendorj, 2011). The latest survey results of Gol Mod-2 Cemetery (2.86 km²) reveals a total number of 571 tombs. Among them, there are 104 terrace tombs. Although the area of Gol Mod-2 is the smallest among the three, the total number of tombs is the largest and the distribution density is the highest. The Khanuy River basin where the Gol Mod-2 Cemetery located is one of the regions with the richest historical remains in Mongolia.

No.189. Between June 12 and August 7, the Chinese team divided into two groups and participated in the excavation in sequence. The excavation of the main burial of tomb No.189 was completed on July 4. The excavation of tomb No.10 was finished on July 27. As of August 3, 2019, the fieldwork of China-Mongolia Joint Archaeological Project completed successfully, and the project entered the stage of laboratory analysis and research.

Preliminary Results The three-year China-Mongolia joint archaeological project completed the surveying the excavation of tomb No.189 and No.10 at Gol Mod-2 cemetery 100 pieces of precious artifacts and produced more than 10 radiocarbon dates. The findings provide reliable evidence to date the tombs and address questions like the interactions between the steppe civilization and the agricultural civilization. Chinese scholars also conducted stable isotopic analysis and radiocarbon analysis on excavated human skeletons from the “Bayanbulag” site of South Gobi Province of Mongolia, which should be the Shouxiangcheng fortress erected by the Western Han government. The work acquired 15 effective carbon and nitrogen isotope samples and 2 radiocarbon samples, which further enriched the content of joint archaeological work.

The main tomb №189 is a terrace tomb that faces south in an orientation of 178°. The burial chamber is wide in the north and narrow in the south, 29 meters long in the east, west, and north, and 26 meters long in the south; the dromos or tomb passage is 20 meters long and 11 meters wide in the north, and 5 meters wide in the south. Stone walls were laid at the edges of the burial chamber and dromos, with a maximum height of 1.5 meters at the northern end and a minimum of 0.1 meters at the southern end. The area enclosed by the stone walls was filled with sand and gravels. The twelve satellite tombs are all circular stone tombs, which are lined in an arc shape on the east side of the main tomb, and are numbered PM1- PM12 from the south to north. The north end of the PM12 is close to the east-west line where the north wall of the main tomb is located, and the west end of the PM1 is close to the north-south line where the east wall of the main tomb is located. The centers of the PM1 and PM12 stone tombs are 40 meters and 41meters from the southeast corner of the main tomb. All other tombs are less than 40 meters away from the center of the main tomb. The ceremonial features are located at the north of the main tomb. About 20 meters north of the northern wall of the main tomb, there is a pile of stones distributed in a circle. To the north of this stone circle, three stone lines were arranged in the east-west direction. Each line is composed of 5–7 pairs of stones with a length of 23–27 meters. These stones and stone lines are still remained on surface, with ashes and burned animal bone debris between the stones. Thus the stone lines could be the ceremonial remains in relation to the main tomb (Fig. 2).

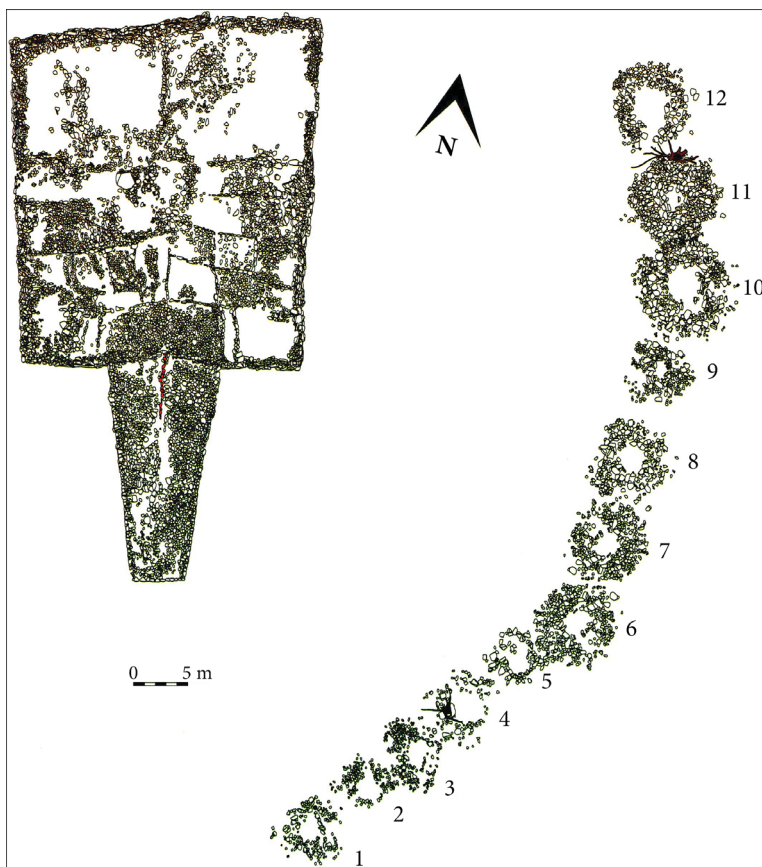


Fig. 2. Plan of mound №189

Рис. 2. План кургана №189

Twelve satellite tombs of M189 are all circular stone tombs, with openings under the turf layer. Most of the stones are exposed to the ground. Possibly due to the disturbance or collapse, a circular, empty area was formed in the center of the stone pile. As a result, the stones are distributed in the shape of a circle. From the south to the north, the sizes of the stone piles increase gradually, among which the stone piles of PM1-PM5 is 4–5 meters in diameter, and the size of the PM6-PM12 piles are all above 6 meters. PM11's stone pile is the largest and is 9 meters in diameter. Stones range from 0.1 to 0.5 meters above the ground. The tomb pits were dug under the stone pile. The exposed openings of satellite tombs seem to be irregular in shape, which could be caused by the collapse of the sandy tomb walls during the construction process. The tomb pits were filled with sand and mixed with fallen stones. PM11 is quite unique. It was intentionally filled with only stones from the top of the coffin to the tomb opening. The bottoms of tombs are mostly oblong or rectangular in shape, and the directions of the satellite tombs gradually change from southmost to northmost, from an orientation of northeast to northwest (from 28° to 336°). The PM7, which is located at the center of satel-

lite tombs, directly orient towards the north. Other than PM1 and PM3, which has no coffin, other nine tombs all have a rectangular wooden coffin. The human bones in the coffin were disturbed to varying degrees. Judging from the preservation condition, most of them were buried in extended position. Although these twelve satellite tombs of M189 had all been disturbed to varying degrees and the quantity of funerary objects unearthed is relatively small, the types of funerary objects are diverse, including pottery, iron, bronze, gold, silver, etc. A total of 5 pieces of potteries were discovered, including each one piece from PM8 and PM9, and three from PM11. These potteries all have a thick layer of soot outside, most of which fell off, indicating that they were utility utensils. Iron artifacts are severely corroded, which are mainly horse gears, iron arrowheads. Only iron arrowheads unearthed from PM6 are well preserved. Besides, one circular or crescent-shaped iron plate was unearthed from each of the five tombs including PM7, PM9, PM10, PM11 and PM12, are well preserved. The bronzes are mainly mirrors and cauldrons. PM8, PM11, PM12 each has a bronze mirror fragment. Judging from the inscription and the decoration, these are a Zhaoming (昭明) mirror and two TLV mirrors. Gold and silver ware are mainly ornaments. Among them, a belt on the waist of the skeleton in PM10 was made of iron with gold plates on the buckle. Another belt on the waist of the skeleton in PM12 is also iron and the buckle was covered by silver, and the surface was hammered into flower patterns. One piece of agate and turquoise inlaid gold ornament was discovered in PM12. This ornament has a gold flat base decorated with small beads. In the center, there is a hemispherical-shape agate bead, surrounded by a circular ring consisting of six connecting turquoise tubes. On the back, there is a silver buckle at the bottom (broken). So we assume the ornament was used for clothes decorations. The excavation report of the satellite tombs was published in the Chinese academic journal of *Huaxia Archaeology* (华夏考古) in 2021.

The edge of the chamber and dromos of M189 main tomb were lined with stone walls above the ground. The walls have collapsed to varying degrees, but the outline is preserved well. The existing walls around the chamber have a maximum height of 1.5 meters (the middle of the north wall), and maximum height of dromos walls is 1.3 meters (the northern end connecting the chamber). On the surface of the main tomb, a stone partition beam in the middle of the chamber extended southward from the north of the chamber to the center of the passage, which is a feature that is present in many Xiongnu noble tombs excavated in the past. However, the structure and width of the central ceiling partition beam to the north of the looting hole is significantly different from the beams in the south (on the south ceiling and the central ceiling of the passage). The central partition beam also does not extend to the southern end of the passage. The surface of the dromos was covered with stones of various sizes. At the northern end where the passage connects the chamber, a stone beam of east-west direction separates the dromos from the chamber. The central beam continues to extend downwards. Both sides of the passage walls retracted inward irregularly, which may be caused by the collapse during the tomb construction process. The tomb passage was filled with sand and stones of various sizes without obvious stratification, and the stone filling is denser near the chamber. It is a feature that is present in many Xiongnu noble tombs excavated in the past. However, the structure and width of the central ceiling partition beam to the north of the looting hole is significantly different from the beams in the south (on the south ceiling and the cen-

tral ceiling of the passage). The central partition beam also does not extend to the southern end of the passage. The surface of the dromos was covered with stones of various sizes. At the northern end where the passage connects the chamber, a stone beam of east-west direction separates the dromos from the chamber. The central beam continues to extend downwards. Both sides of the passage walls retracted inward irregularly, which may be caused by the collapse during the tomb construction process. The tomb passage was filled with sand and stones of various sizes without obvious stratification, and the stone filling is denser near the chamber.

Traces of outer coffin were found at a depth of approximately 10.7 meters from the top of the tomb ceiling, and wooden top board was found at a depth of 11 m. The middle of the top board collapsed, thus the east and west ends were tilted upwards. After cleaning, it was found that on the east of the top board, a young male skeleton in an extended position was placed facing down with the head towards the south. The upper body was located in the middle on top of the coffin case. When the top board collapsed, the body fell into the coffin case and the lower body was still outside. From the archaeological remains, it is difficult to identify whether this body was one of the looters or was the tomb occupant who was disturbed and moved to the outside of the coffin. After excavation, we can confirm that the burial furniture consists of one inner coffin and two layers of outer coffin (or coffin cases), which were placed in the north-south direction. Affected by looting activities and heavy sand and gravel deposit on top of the coffin case, the coffin and cases all collapsed and were severely deformed. According to the remains, we can tell that the wooden coffin was painted with red lacquer, and the coffin cover was made of multiple wooden boards connected by dove-tail tenon (燕尾榫). The funeral objects in the coffin were all looted, and no skeletal remains of the tomb occupant were found. However, there are still many interesting phenomena. A layer of fabric was laid on the bottom of the coffin, and then a layer of millet with shell was spread, mixed with a small amount of *Chenopodium* seeds. Another layer of fabric was placed on top of the seeds, and covered with the second layer of millet with shell, mixed with a large amount of wood chips and small pieces of charcoals and fewer *Chenopodium* seeds. The third layer of textile was then placed on top under the corpse. 1 M189 墓底清理 to clean the bottom of the main tomb.

Some observations and comparisons

Most of the remaining funerary objects are located between the two layers of coffins, most of which are domestic wares, chariot gears, and ornaments. A large ceramic urn and a small guan pot were found in the northwest corner, and a guan pot was found in the southeast corner. The firing temperature of these utensils was not high, which indicates, they were not durable and were crushed by the collapse of backfill. The rest of the funerary objects were mostly discovered in the southeast corner between the inner and outer coffins, and a majority of them were placed in a wooden case. The case has only the bottom remained. The objects in the case are broken and fragmented, among which we can still identify some gold and silver ornaments, bronze fu containers, bronze objects decorated with animal-head pattern, bronze objects with sprout, iron hook, gold-gilded silver dragon ornament, a jade belt hook, wooden cups, leather horse harness, hair-woven textile, etc. (Fig. 3). In addition, there are a large number of pieces of gold-clad iron bars, which, according to previous excavation data, should be the surface decoration of the wooden coffin. There are also large number of turquoise fragments of dif-

ferent shapes, which could be clothing ornaments. Among these artifacts, two gold-gilded silver dragons attracted a lot of attention. One of them was situated in the coffin, and the other one was under the upper body of the skeleton above the top board of the outer coffin. The two dragons are similar in style and exhibit strong Western Han style. After studying the shape and foot design of both dragons, we think they are possibly ears or handles of an arcbelly object. The images of dragon were occasionally seen on the funerary objects of the Xiongnu noble tombs, all decorated on horse accessories. This kind of dragon-as-the-only-motif artifact was discovered in the tombs of the Xiongnu nobles for the first time. The jade belt hook is also found for the first time in Xiongnu noble tombs. The gold ornaments on the coffin, the petal-shaped chariot cover ornaments (*gai gong mao*), etc. are similar to the artifacts found in M1 of this cemetery. Meantime, gold-gilded silver dragon and jade (Fig. 3) belt hook which were discovered for the first time indicate the higher level of the tomb occupant M189 the northern grassland Tomb No.189 of the cemetery Gol Mod-2.



Fig. 3. Gol Mod-2. Some archaeological finds from the excavation

Рис. 3. Гол мод-2. Некоторые археологические находки, полученные при раскопках

Comparing with tombs of the Xiongnu nobles excavated in Mongolia and Russia in the past, M189 of Gol Mod-2 and the satellite tombs present many new features: (1) There are significantly fewer animal bones in the main and satellite tombs. Burying animal bones as part of funerary practices was one of the common features in Xiongnu burials (Эрдэнэбаатар, 2016). Animal bones were usually placed on top of the coffin or outside of the north of the coffin. Regardless of the size of the tomb or the severity of looting, animal bones were often well preserved. For example, among 29 satellite tombs of M1, 23 of them have animal bones (Хүннүгийн язгууртны..., 2021). However, the twelve satellite tombs of M189 have only yielded one deer antler (PM8), a horse skull (PM11), and some animal bones in the bronze fu container from PM12. Although the main tomb of M189 is a high rank tomb, only one sheep skull was found. It is significantly different from M1 in the same cemetery, where more than twenty horse skulls were discovered. The looting activities may have affected the distribution of animal bones. But it is highly unlikely that any animal bones were taken out of the tombs. Therefore, the lack of animal bones is not caused by looting. Instead, it indicates a difference in the funeral practices. (2) There are significantly fewer funerary objects. Of the twelve satellite tombs, only three tombs have a total of five potteries. Most tombs do not have any funerary objects. (3) The looting activities show strong characteristics of retaliation. All satellite tombs were disturbed (the upper part of PM11 also has traces of disturbances), but these disturbances are clearly different from the common looting activities. For example, the upper body and skull of the skeleton in PM7 are missing; a mandible was found outside the coffin of PM8, but no sign of the rest of skull and part of shoulders, although funerary potteries are all intact; a skull was outside of the coffin of PM9, while the rest of the skeleton and pottery artifacts are intact; the skull from PM10 was mixed with the stones in the backfill, while the rest of the skeleton was intact; in PM12, the lower body, funerary bronzes and golden objects are intact, while the skeleton and part of shoulders are missing. These phenomena indicate that most disturbance might have been for human skeleton, instead of robbing the funeral objects. Therefore, we speculate that this destruction might be a retaliation, different from looting activities that are commonly seen (Fig. 3). The ceiling and the internal structure of the tomb chamber of M189 main tomb exhibit new features. The stone grid structure on the ceiling is different from the herringbone structure seen in the past. The stone structure and herringbone wood structure in the middle of the chamber wasn't found in previous excavations, and most of the woods in the backfill have burning marks on one end. All these are first-seen phenomena. The bottom of the main tomb coffin was placed with layers of fabrics and cereal, and the skeleton was placed on top. This is also the first time to see in tombs of the same kind. The gold-gilded silver dragons and jade belt hook in the funeral objects were also discovered for the first time in similar tombs, which may indicate special background of the tomb owner. Other than these unique phenomena, we took seven samples for carbon 14 dating from different wood pieces, funerary animal bones, and the skull on top of the coffin case. Based on the results, we estimate that the dates of woods in the wooden structure on the south side of the looting hole was no earlier than 66 cal. A.D., and the dates of woods in the herringbone wood structure was no later than 20 cal. AD. The date of the skull was 22–170 cal. AD. The date of the sheep skull was 49 cal. BC – 72 cal. AD (Fig. 4).

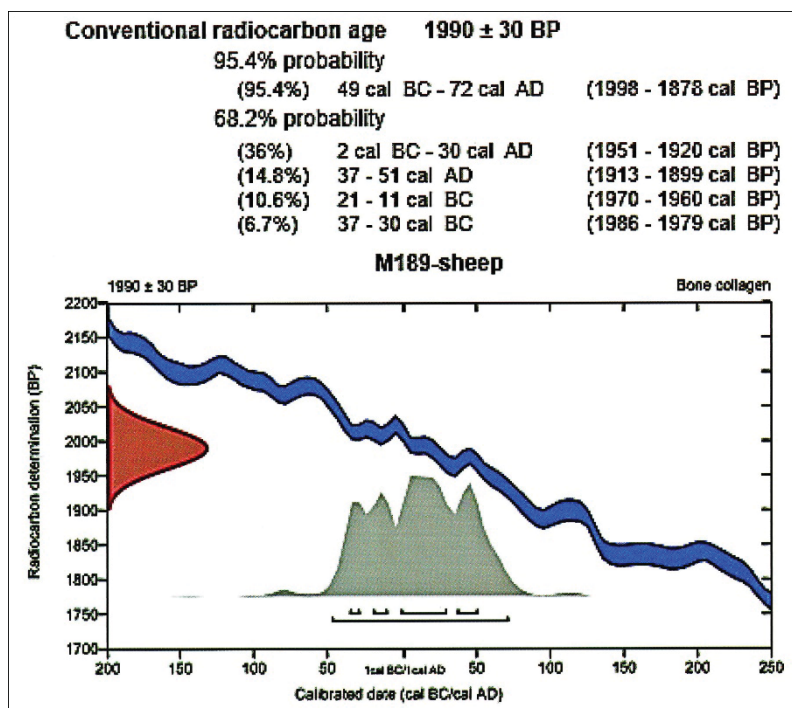


Fig. 4. Radiocarbon dates

Рис. 4. Радиоуглеродная дата

The dates from three samples of the wooden structure to the south of the looting hole is close to each other, which is different from the dates of woods from the herringbone structure. Therefore, we estimate that the wood structure was possibly used for supporting the looting hole. Considering that most of the woods in the herringbone structure have burning marks at one end, the possibility of using dry wood at the time is relatively large. Therefore, the dates of these wood samples may be slightly earlier than the time of burial. Because the sheep skull was stained green by patina and might have been placed in bronze, the date of the sheep skull shows a better association with the date of the tomb. In conclusion, we estimate that the tomb date is around 0 A.D. and no later than 72 A.D. The date of human skeleton not only provided very few clues about the owner's identity, but also led to a lot more questions. Since the date of the skeleton coincides with the date of the supporting structure of the looting hole and the sheep bones, the skeleton might have belonged to a looter who was buried by the collapse of the looting hole (the skeleton face downwards. The left arm extended towards the southeast corner of the coffin, where the funerary objects were stored). However, we cannot rule out the possibility that the skeleton was the tomb occupant, who was dragged out of the coffin (no human remains were found in the coffin, which is very rare in the Xiongnu noble tombs). Most of the similar tombs that have been excavated were disturbed or looted. Therefore the orientation of skeleton remains unclear. Currently, M10 is the only well-pre-

served square-shape tomb with a tomb dromos. The owner of the tomb owner was oriented towards north. The satellite tombs of M189 also have northward facing skeletons (sometimes slightly deviated from the north). Therefore we estimate that the deceased of M189 also oriented toward the north. If all these assumptions are confirmed, the skeletons outside of coffin (the skull is oriented towards the south) are unlikely to belong to the tomb owner.

Tomb No. 10 (M10) is a square-shaped tomb with a dromos, located in the west of the cemetery and facing south at 165 degrees. The tomb chamber and dromos are outlined with stones, with a total length of 13.3 meters (Fig. 2). The dromos is 3.4 meters long. The chamber is 9.9 meters long. On the east side of the main tomb, there is a circular stone satellite tomb, with no stone line or other ancillary structures. In 2019, the second group of members of the Henan archeological team arrived at Mongolia and completed the excavation of this tomb. This tomb is the only well-preserved tomb of the Xiongnu nobles that has been excavated so far, which is also a rare discovery among other Mongolian or Russian cemeteries. 1. Satellite tomb M10's satellite tomb is a circular stone tomb located on the east side of the main tomb. The stone mound covers an area about 2 meter's in diameter. A n empty area of around 1.6 meters in diameter due to disturbance is in the center of the mound. The burial chamber opens at the lower part of the rock pile and is filled with sand and stones inside. The wooden coffin is 1.15 meters deep from the tomb opening. A human skeleton was placed in the coffin with the head towards the north. No funerary objects were found. The chamber of the main tomb is in trapezoidal shape, wider in the north than the south. The chamber and the dromos were filled with sand and stones. Stone mound does not show any special arrangement of piling. A horse chariot and 15 horse skulls were placed at a depth of 1.8 meter from the opening. Horse skulls are located on the northeast side of the tomb, arranged neatly into two rows on the east and south side, with 12 skulls in the north and 3 in the south. During the excavation, we also found ribs and other bones in the area where the horse skulls located. After removing the skulls, 1-2 toe bones were discovered under each skull. The horse chariot is located in the middle of the chamber. The overall shape was damaged due to the collapse of sand. The first exposed half was a wheel on the east side. Judging from the existing traces, the chariot was placed in a north-south direction. Because the wheels on the other side were stacked under the vehicle and other components, we believe that the chariot was laid sideways when buried, or it rolled to the side due to soil subsidence. The upper wheel held 12 wooden spokes, the longest of which is 36 cm. We estimate that the complete wheel was about 98 cm in diameter. The north, east, and west sides of the compartment were well preserved, while the south side was in relatively bad condition. The compartment on the east side was 2.1 meters long and the north side was 1.5 meters wide. The wooden boards were decorated with painted cloud pattern. The structural integrity of the chariot was destroyed. The horse skulls and the lower part of the chariot were still filled with sand and stones when excavated, and the wooden funerary container, which consists of a chamber case and a coffin, were exposed at a depth of about 4.9 meters from the top. The chamber case is 2.9 meters long, 1.5 meters wide, and 0.35 meters in remaining height. The coffin is 2.1 meters long, 0.58 meters wide and 0.35 meters in remaining height. There are fabric marks on the coffin. A human skeleton was placed in the coffin in an extended position. The skull was pointed towards north facing up. According to the skeletal features, the skeleton belongs to an adult male. The fu-

nerary objects are mainly located between the chamber case and the coffin, made of varieties of materials like gold, silver, copper, iron, jade, stone, and pottery. The objects include containers, chariot objects, and coffin ornaments. In the coffin case, we found six ceramic vessels, 1 bronze cauldron container, 30 silver equestrian ornaments, and 5 pieces of gold plates. There are cloth marks on the surface of the bronze cauldron, and animal bones inside, which are likely to be horse bones. The equestrian ornaments were made of iron and covered with silver, and decorated with animal motifs such as unicorn. Ornaments are in strip, gourds, and circular shapes. Some of them are covered with fabrics. Since the tomb was not disrupted by looters, these horse ornaments may be a complete set. In the coffin, we unearthed jade sword decoration, a golden ring, silver hairpins, a silver ring, and small jade ornaments. There may also be persimmon-shaped copper pieces that could be part of the coffin ornaments. Preliminary Results According to the results of surveys, 77% of terrace tombs at the Gol Mod-2 Cemetery are between 10-29 meters in length, only 3% of tombs are more than 40 meters long. The remaining 20% are smaller than 10 meters in length. M10 is one of the smallest terrace tombs. M 10 is located in the west of the cemetery, far away from other tombs. The size is significantly smaller than most tombs of the same type, which may have saved it from large-scale looting activities at this cemetery, and made it the only well-preserved terrace tomb in the cemetery. Although the tomb is small in scale, it exhibits all the basic elements of Xiongnu noble tombs: a square-shaped main tomb with a dromos, a satellite tomb to the east, and chariot and horse skulls as funerary objects. The type and quantity of funerary objects are no less than those of other noble burials of the same kind, especially the jade sword ornament and golden crown-shaped ornaments that were discovered for the first time in Xiongnu tombs. The location of this tomb is markedly far from the main body of the cemetery, and no charcoal layer is seen on the top of the coffin. These characteristics are different from similar Xiongnu noble tombs found in the past, which need to be studied further in the future. The discovery of jade sword ornament in this tomb is particularly noteworthy. Jades are not uncommon in the Xiongnu noble tombs. Jade bi disks, jade huang disk, and small ornaments were found before, but the sword ornament was first seen in similar tombs. Records of Xiongnu (汉书·匈奴传) say that the Emperor Xuan of Han bestowed a jade decorated sword to the Xiongnu Tomb No. 10 (M10) is a square-shaped tomb with a dromos, located in the west of the cemetery and facing south at 165 degrees. The tomb chamber and dromos are outlined with stones, with a total length of 13.3 meters. The dromos is 3.4 meters long. The chamber is 9.9 meters long. On the east side of the main tomb, there is a circular stone satellite tomb, with no stone line or other ancillary structures. In 2019, the second group of members of the Henan archaeological team arrived in Mongolia and completed the excavation of this tomb.

Conclusion

This tomb is the only well-preserved tomb of the Xiongnu nobles that has been excavated so far, which is also a rare discovery among other Mongolian or Russian cemeteries. Satellite tomb M10's satellite tomb is a circular stone tomb located on the east side of the main tomb. The stone mound covers an area about 2 meters and diameter area of around 1.6 meters in diameter due to disturbance is in the center of the mound. The burial chamber opens at the lower part of the rock pile and is filled with sand and stones inside. The wooden coffin is 1.15 meters deep from the tomb opening. A human skeleton was placed in the coffin

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of the ancient Xiongnu nobles. The complete set of horse ornaments can be compared with the set from M1, and provide new insights for studying the horse decoration characteristics of Xiongnu nobles, the differences in the ranks of the aristocracy and how these differences were reflected in the funerary practices.

In particular, in September 2019, Xinhua News Agency introduced our archaeological discoveries of the Gol Mod-2 Cemetery in English, which earned us global attention, and led to the honorable award as one of the “Top 10 Discoveries 2019” from the American Archaeology magazine. This project is by no means a task that a dozen archaeologists can complete. The leadership and colleagues of the Henan Provincial Institute of Cultural Heritage and Archaeology and the Luoyang Institute of Cultural Heritage and Archaeology have spent lots of time and energy helping us handling various procedures to work overseas and participate in field archaeological work. We are most grateful to the family members of the archaeologists, their selfless support strengthened us and enabled us to withstand the difficult work environment with water and electricity shortages and no internet, and completed this field work in high quality. We are also thankful to more than 100 college students from universities in Ulaanbaatar, students from Buryat University in Russia, and local residents, who participated in the field work. In the three seasons of working together, the team members from China and Mongolia broke through language barriers and built trust and friendship. We are deeply moved by the hard work and positiveness of these people. As Henan’s first overseas archaeological team consists of young archaeologists all under 40 year-old, we owe our success to the guidance of administrative authorities at all levels, the help of colleagues, the support from friends in the media, the hard work of team members, and the strong support from their families. We are proud to withstand various challenges and difficulties, and finally complete the project successfully. By this book, we would like to express our sincere gratitude to everyone who has supported, helped, and encouraged us

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