# Emgentiin Kherem, a Fortress Settlement of the Khitans in Mongolia

**Nikolai N. Kradin**, *Vladivostok*
**Aleksandr L. Ivliev**, *Vladivostok*
**Ayudai Ochir**, *Ulaanbaatar*
**Sergei Vasiutin**, *Kemerovo*
**Svetlana Satantseva**, *Vladivostok*
**Evgenii V. Kovychev**, *Chita*
**Lkhagvasüren Erdenebold**, *Ulaanbaatar*

Interest in the archaeological investigation of urbanization in the Mongolian steppes began in the middle of the 20th century (Kiselev 1967, Perlee 1961). However in the first decade of the new millennium there has been a surge of attention to this topic (Danilov 2004, Rogers et al. 2005, Kyzlasov 2006, Kradin 2008, Tkachev 2009, Waugh 2010). This interest has been stimulated by new archaeological discoveries as well as the attempt to develop new theoretical paradigms.

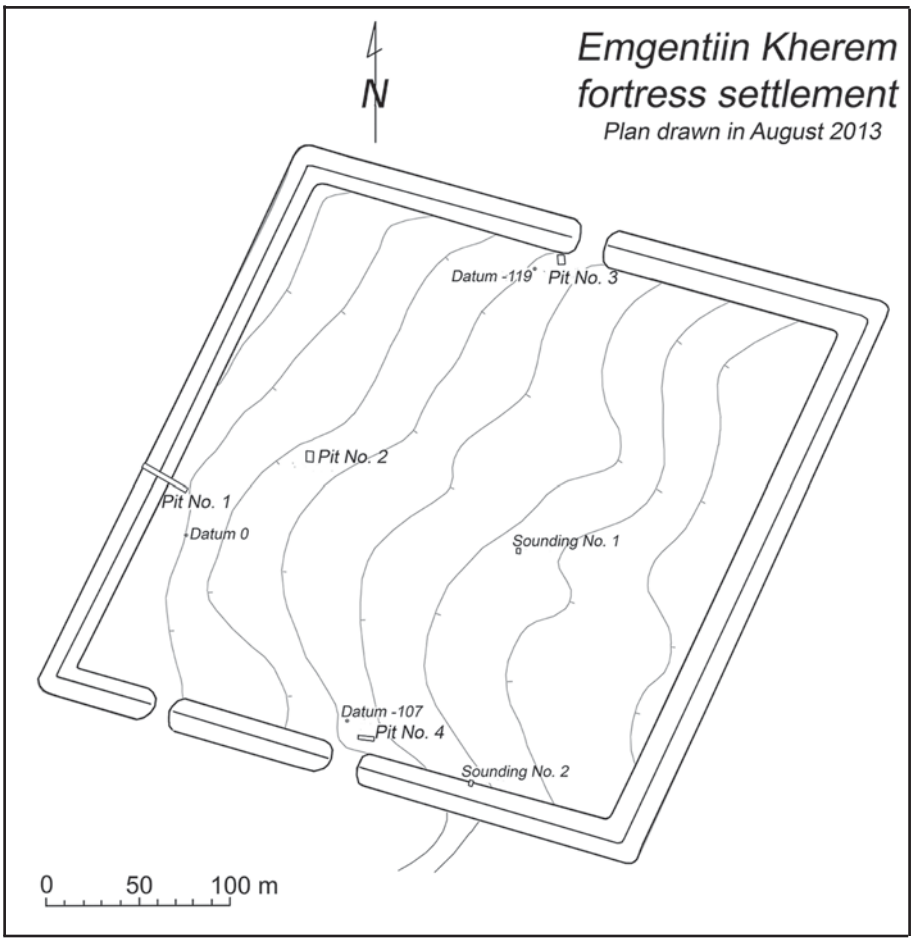
Among the nomad polities of Inner Asia the Khitan empire of the Liao (907–1125) occupies an important place. The period of the emergence of the Liao came during a geopolitical crisis in Inner Asia, when in the interval of several decades, the last steppe empire, the Uighur qaghanate, perished and the Tang dynasty collapsed in China. The Khitans succeeded not only in uniting the nomadic chieftains into a strong confederation but in subduing several states which had been created after the fall of the Tang empire. Have conquered agrarian peoples, the Khitans created a dual system of administration both for the Chinese and for the pastoralists. The northern administration occupied the higher position; it controlled the nomads and other northern peoples (as the "metropole"). The southern administration copied the bureaucratic system of China, controlling the sedentary agricultural territories (Wittfogel and Feng 1949).

The Liao government actively promoted urban construction in Manchuria, Northern China and Mongolia (Ivliev 1983, Steinhardt 1997, Hu 2009). The Khitans could not forget that over a long period of time they had been subjected to raids and exploitation by the Turkic qaghanates. For this reason they undertook a whole series of measures to obstruct the unification of the nomads who moved across the territories of the Mongolian steppes. One of these measures was the creation of a series of urban centers in the Kerulen and Tola river basins. For a long time now Mongolian and Russian scholars have been studying and excavating Khitan settlements in the Tola basin (Ochir et al. 2005; Kradin et al. 2005, Kradin and Ivliev 2008, 2009; Ochir et al. 2008, Kradin et al. 2011). A whole series of larger and smaller settlements are located there. In addition, the Khitans built a wall some 760 km long, which extends through the territory of Eastern Mongolia, Russia and China (Lunkov et al. 2011).

In 2004-2008 a Russo-Mongolian international expedition carried out excavations on the territory of the largest town, Chintolgoi Balgas, which was a Khitan administrative center in that territory, the city of Zhenzhou [Fig. 1, next page]. A substantial collection of artefacts of the urban culture of the Liao empire was obtained and results which demonstrated the multi-ethnic composition of the town (Kradin and Ivliev 2009; Kradin et al. 2011). In 2010–2012, excavations were undertaken in another interesting urban site—Khermen Denzh (Kradin et al. 2012). The archaeological materials there differed from the collection made at Chintolgoi Balgas. There were also many artefacts of an earlier (Uighur) period. We hypothesized that this archaeological site should be identified with the city of Khedun (Kradin et al. 2013). In addition, during two field seasons, 2009 and 2013, the settlement of Emgentiin Kherem was excavated. The general results of the excavations from five years


*Fig. 1. Map showing extent of Liao Empire and Bohai state, with the location of Chintolgoi Balgas.*

*Fig. 2. Site plan drawn August 2013.*




ago have been published. Here we lay out the results of the study of the settlement during the two years of the excavations and also offer some general conclusions concerning the place of the given settlement in the administrative structure of the Zhenzhou district.

**The fortifications of the settlement**

The Emgentiin kherem settlement is located in Dashinchilen sum, Bulgan aimag, approximately 200 km west of Ulaanbaatar. The settlement is located 25 km north of the settlement of Chintolgoi Balgas on the other side of a mountain ridge and sits in a valley between two ridges of hills. It is among the settlements of medium size and is significantly smaller than four large Khitan settlements in that region: Chintolgoi Balgas, Khar Bukhyn Balgas, Khermen Denzh, and Ulaan Kherem. This suggests that its population was of lesser political significance.

The settlement is close to rhomboid in shape [Fig. 2]. The walls are oriented close to the cardinal points of the compass with slight deviation: the deviation of the north-south line

*Fig. 3. View to northeast along the western wall.*

is 19–20°, the east-west line 9–11°. The west wall is 305 m in length, the eastern 312 m, the northern 315 m and the southern 316 m, with the total length of the walls 1248 m. The area of the settlement is 9.6 hectares. The height of the walls is from 0.5–0.7 m on the east and up to 1–1.5 m on the north and west. The width of the wall at the top is 3-4 m and at the base up to 15 m. The eastern wall is the least well preserved and in places has largely crumbled.

Along the eastern side in the lower part of the valley is the bed of a small river (actually streams, which in the rainy season become a rapid river). The settlement is interesting because both the interior and exterior of its wall were faced in stone [Fig. 3]. This is quite similar to the construction principles of the Bohai people, who were conquered by the Khitans in 926 and some of whom deported to the territory of Mongolia (Kradin and Ivliev 2008, 2009). It was precisely this circumstance which was the reason for our studies at the site. Another feature connecting it with Bohai settlements is the technical features of the construction of the gates. There are two gates in the settlement, respectively on the north and south sides. The gates have no supplementary fortification; their external appearance is simply that of gaps in the walls. In addition, on the southern wall near the southwestern corner is a depression which at first was interpreted as yet another gate.

**Excavation of the fortress wall**

In 2009 a cut was made across the wall (*Pit No. 1*) {Fig. 4], its location selected on the western wall, which is the best preserved. The excavation was 121 m from the southwestern corner of the settlement and 182 m from the northeastern corner. The excavation was perpendicular to the wall and ditch and the trench measured 25 x 2 m, its total area thus 50 m$^2$. The trench was oriented along a NNW-SSE line with a declination of approximately 19–20° from the east-west line.

As the turf and first 20 cm deep layer were being removed, the iron tip of an arrow was found along with a piece of iron (possibly the fragment of a cauldron). In the interior part of the settlement were encountered fragments of ceramics and bone, one piece of ceramic with Uighur ornament, and a piece of a corroded cast iron object. The excavation of the third layer turned up an iron weight with loops for attaching a cord [Fig. 7, p. 95], possibly a plumb-bob. Also in this layer were a fragment of a leg for a ceramic pot and several other ceramic fragments. The main finds (ceramics and animal bones) were concentrated next to the wall on its interior. In the subsequent layers also were found ceramic fragments and bones and a very poorly preserved piece of a basalt millstone.

*Fig. 4. Pit No. 1, cut through the western wall. View from the southwest.*

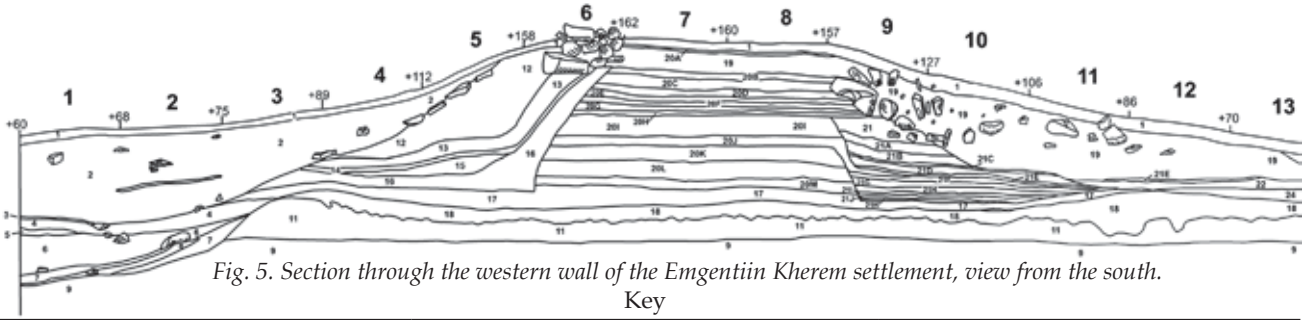


*Fig. 5. Section through the western wall of the Emgentiin Kherem settlement, view from the south.*

Key

| | | |
|---|---|---|
| 1 – humus | 2 – brown loam | 3 – black loam |
| 4 – light brown loam | 5 – black loam mixed with brown | 6 – brown loam |
| 7 – whitish light brown clay | 8 – white clay | 9 – light brown clay with a yellowish cast (virgin soil) |
| 10 – dark brown loam | 11 – compact whitish gray clay | 12 – compact white clay with brown specks |
| 13 – light brown clay | 14 – brown clay | 15 – whitish light brown clay with small lumps |
| 16 – light brown clay with small lumps | 17 – brown clay | 18 – dark brown clay (buried turf) |
| 19 – compact gray clay | 20A – compact white clay | 20B – compact white clay |
| 20C; 20E; 20G; 20I; 20K – gray clay | 20D; 20F; 20H – white clay | 20J – brown clay |
| 20L – dark gray clay | 20M – dark brown clay | 21 – brown clay |
| 21A; 21I – gray clay | 21B; 21H – light brown clay | 21C; 21G – gray clay with gravel |
| 21D; 21K – white clay | 21E; 21J – dark brown clay | 21F – compact white clay |
| 22 – dark brown clay | 23 – lens of gray ashy clay | 23A – lens of dark brown clay |
| 24 – light brown loam | 25 – light brown loam dotted with gray and reddish color | 25A – gray ashy loam |

The study of the stratigraphy shows that the wall was constructed by the method known as *hantu* — that is, of rammed earth layers. In addition, both inside and out the wall was faced with stone [Fig. 5]. The technique of *hantu* was known to the Chinese from ancient times. In Mongolia it was used in the construction of the capital of the Uighur qaghanate, Karabalgasun, and the Khitan towns Chintolgoi Balgas and Khermen Denzh. This technique also is encountered in the Jurchen towns of the 12th–14th centuries on the territory of the Russian Far East. For Bohai towns on the territory of the Russian Far East different construction techniques were used: a stone facing of unworked rock, stone fill, a stone facing of the interior, exterior and top of an earthen wall, and a facing of stone blocks. Stone facings have been found as well on the walls of the Upper Capital of Bohai in Heilongjiang Province 黑龙江省 (Ivliev et al. 1998; Kradin and Nikitin 2003).

Thus the wall of the Emgentiin Kherem settlement somewhat differs from the Far Eastern tradition. Here we have the combination of the *hantu* method and the use of stone for facing the exterior and interior.

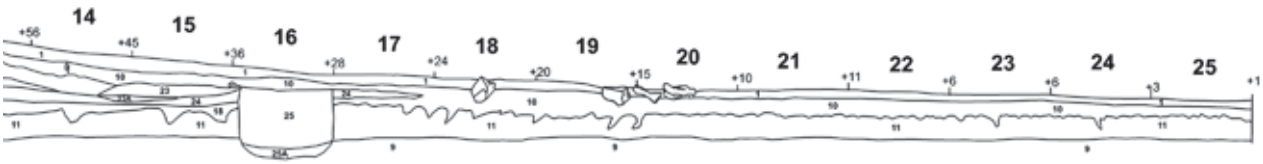
**Other excavation areas**

In 2013 our expedition continued excavations at the settlement. Three small pits were opened with a total area of 60 m$^2$.

*Pit No. 2*, measuring 4 x 6 m, was located 70 m to the west of the eastern edge of the section through the wall which was designated as Pit No. 1. There was an accumulation of stones here, sticking out of the ground, which we thought could have been the remains of a *kan* — a heating system. In the removal of the turf and excavation of the first layer were found several small fragments of ceramics and also animal bones. The majority of the stones lay on the old surface and over time had become covered over with turf. It turned out that this was not a heating system. The excavation revealed two pits. One of them extended into the wall of the excavation; a second round pit was approximately in its center with a slight deviation in the direction of the eastern edge. Its diameter was approximately 1.8–2 m, and the fill was light brown loam. This pit contained remains of a large bovine: its rib section joined to the spinal column in correct anatomical position. While finds in the pit were few, it is interesting that Khitan ceramics were found both above and below the animal bones.

*Pit no. 3* was located approximately 20 m southwest of the northern gate. Initially we supposed that here might have been graves of a somewhat later origin than the settlement itself. One of the supposed graves was a round covering approximately 3 x 4 m in size, slightly stretched along the north-south line or north-west to south-east line. In the center was a guardian stone leaning in the northeastern direction, its height 36 cm and rhomboid section measuring approximately 20 x 16 cm. The top of the stone showed evidence of having been shaped by chipping.

The excavation of a 5 x 4 m pit revealed no traces of a grave under the stone cover. There were some animal




bones and one ceramic fragment, and the excavation exposed a cover of rectangular stones, oriented SW-NE and measuring 110 x 80–90 cm. The cover was filled with stone rubble. Following the removal of the stone construction, dark soil was removed and an oval pit opened oriented along the east-west line and measuring about 2 m long, 0.5–1 m wide and 15–20 cm deep. Below the pit was a fragment of a bushing from the hub of a wheel.

The excavation of the rest of this pit revealed a large collection of bones in the northwestern part, ceramics, and also a partially worked bone object. Underneath was a shoulder-blade of some animal, and below it was a layer of ash and ceramic with Khitan decoration. Theoretically this could be the remains of a hearth or several hearths of different periods. We can surmise that in this part of the site were no surface or dugout dwellings. The population lived in yurts, inside of which were hearths faced with stones.

*Pit No. 4* was located in the southern part of the settlement approximately 8 m north of the southern gate. The excavation was opened so as to study the area in front of the gate and if possible to identify the remains of a street and other structures. The trench measured 2 x 8 m, its long dimension oriented along an east-west line. The cultural layer in this part of the settlement is very thin. The stratigraphy of the pit divides in two parts. In the western part is brown loam (a street?); in the central and eastern part light brown loam. The third layer (at a depth of 20–30 cm from the current surface of the ground) yielded a fragment of the neck of a gray vessel polished on its interior and with two horizontal grooves on the exterior.

**The artefacts**

A lot of ceramics, clay objects, iron, and faunal remains were found during the excavations. The ceramics constituted the largest part of the finds, all of the ceramics wheel-turned and the majority made of gray fine-textured clay with a temper of small pieces of stone, often white in color. The distinctive feature of Khitan ceramics observed here as elsewhere is the concave base of the vessels and the presence on the walls, primarily in the lower part of the body, of ornament made by a stamp wheel in the form of rows of wedge-shaped or rectangular incisions (the so-called comb ornament).

At the same time, in this settlement among the ceramics are some distinct, non-Khitan features. These include horizontal corded handles, which are characteristic of Bohai ceramics, and so-called Uighur ornament decorated with rhombs or concentric arcs. The excavations of the Chintolgoi Balgas settlement in 2004–2008 showed that such Uighur ornament continued in use there in the Khitan period. Evidence of this are vessels of Khitan shape with such ornament and the combination of the Khitan comb stamp with Uighur ornament on one and the same vessel (Kradin and Ivliev 2009). In the Emgentiin Kherem settlement the excavations likewise uncovered a fragment of a vessel with the combination of the comb and Uighur ornament.

We can distinguish two groups of vessels according to the composition of the ceramic fabric. In the first group are vase-shaped vessels, basins and tubs of dark gray clay with a temper of small pieces of white stone. The second group is distinguished by a porous black or brown ceramic with sand temper. Vessels of this group include clay kettles and cooking pots which as a rule had undergone heating in the process of being used.

*Ewers.* In the third layer in sector 6 was a fragment of the base of a ewer, a gray shard with a temper of small pieces of white stone. The surface is dark gray. Starting at the bottom, the vessel is covered by 2 cm-wide horizontal bands of comb ornament impressed by a wheel. While the clay was still wet, at the very bottom in the vessel wall was made a 1.6 cm diameter opening of the type found in other such Liao ewers.

Fragments of vase-shaped vessels include their tops and parts of the neck, extending into the shoulder. One of these pieces from the second layer of sector 8 is a cylindrical neck that curves inward on the exterior and has a thicker upper edge. Polishing on the exterior of the neck has added an ornament shaped like a vertical zigzag. The interior fabric of the shard is gray, its surface dark, almost black. The top of a vase-shaped vessel from layer 4 in sector 5 is a rounded convex cylinder whose upper edge widens above

the neck. Its upper part is covered with horizontal polishing. The diameter of the rim is 15.6 cm. Another variant of decoration, on the neck of a vase-shaped vessel found in the 5th–6th layers in sector 1, has several polished vertical bands. A large fragment of the neck and shoulders of a vase-shaped vessel from Pit No. 1 in sector B16 has a cylindrical neck covered with horizontal polishing and with a chain of triangular impressions midway in its height. On the shoulders directly below the neck is a wide band of comb stamp made with a wheel. This band is separated from the next band of comb stamp by a band of horizontal polishing 3.8 cm. wide. The fabric of the vessel is dark gray, almost black, with tiny inclusions of white stone.

A significant part of the whole mass of ceramics found at the settlement of Emgentiin Kherem consists of fragments of *pails* or *tubs* of similar capacity which have a thick rim and vertical walls but with marked inward curvature on the lower exterior. The outer surface of the rim is covered entirely with horizontal polishing. Below the rim on the exterior walls are wide horizontal bands of comb ornament; in one instance there is a horizontal raised band with triangular incisions. Unlike the bowls, such containers had no polished ornament on the interior of the walls and bottom. The diameters of their rims vary from 22 to 44 cm. In fact these are storage vessels. From the artefacts of other sites, among them Chintolgoi Balgas, we know that the Khitans had their own bowls with more gently sloping walls and polished ornament on the interior. Two such fragments with ornament of curving polished lines on the interior surface were also found in the excavations at Emgentiin Kherem.

Seven fragments of the tops of *cooking pots* of the "Khitan type" were found, rather ill-defined vessels whose shape varies from pots with a clearly articulated body, neck and mouth, to vessels of an almost tub-like cylindrical shape. We label them in this way because they are among the most characteristic types of vessels found in Khitan culture. As a rule, all of them have traces of burning on the walls. The ceramic fabric of cooking dishes contains a significant amount of temper of sand and has a black, red or brown color—evidence of firing in an oxidizing atmosphere. The tops of such dishes are thicker along the upper edge; their exterior surface and also the upper border often are covered with impressions of comb ornament. All the fragments with one exception come from rather thick-walled vessels. They differ from ordinary pots of the "Khitan type" by the absence of clearly delineated raised bands on the exterior wall below the rim. One vessel whose rim diameter is approximately 13 cm is distinguished by walls only 0.35 to 0.55 cm thick. The raised band on its exterior wall immediately under the rim was created by applying pressure to the wall, as evidenced by a groove on the interior.

The most interesting of the ceramic finds are fragments of *clay cauldrons* which are copies of analogous iron wares [Fig. 6]. They have a vertical mouth, decorated with horizontal grooves. The edge of the rim is turned in. On the main body of the vessel is a broad horizontal ring. Pendant legs are attached to the body. On the interior surface can be seen traces of its having been worked on a potter's wheel. Among the fragments of such cauldrons found in the excavation are tops, legs and part of a horizontal ring. Two examples are very well preserved, one found during the collection of scattered artefacts in the area of the northern wall of the settlement. The fabric of this cauldron varies in color from bright red-brown to black. In the clay is temper of stone grains measuring 1-1.5 mm; some individual pieces of stone are as long as 5 mm. The surface of the cauldron is brown with

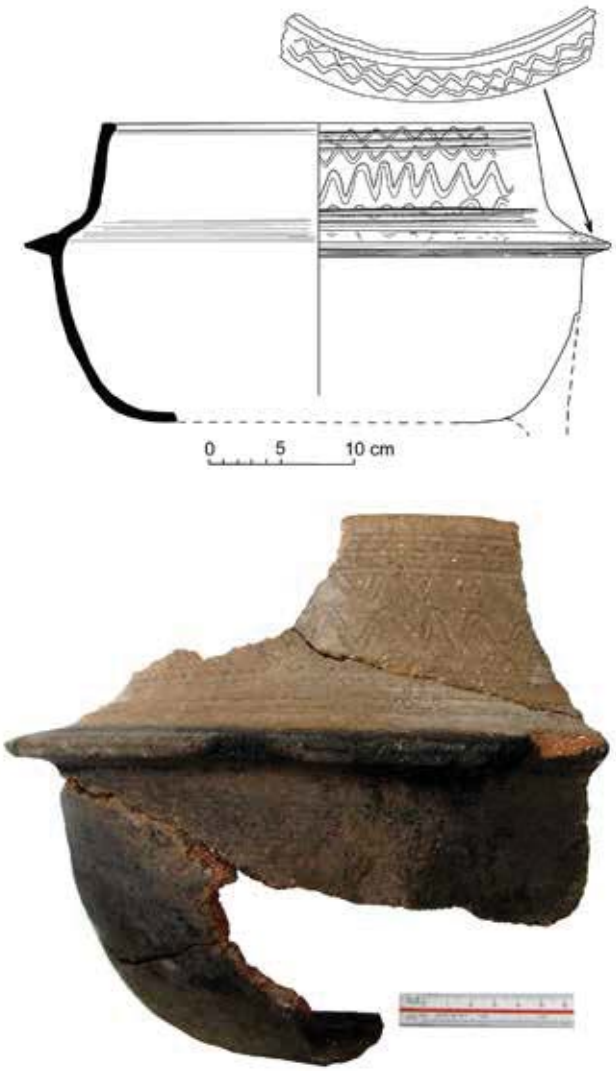



*Fig. 6. Fragment of a clay cauldron.*

traces of soot; the interior surface black. The horizontal ring which goes around the middle of the body of the cauldron is 3 cm wide; its diameter is 36.6 cm. Above the ring, the walls of the vessel have not survived; only one of the three feet has been preserved.

A second example of a cauldron has preserved a significant part of the body from the rim to the base. The clay fabric of this vessel is analogous to that of the one described above. Right above the horizontal ring the vessel has angled shoulders which transition toward the vertical, still somewhat tilted walls of the mouth. The bottom is flat, smoothly transitioning into the walls. On the exterior of the walls and to a degree on the ring is soot and a layer of remains from burning. On the lower part of the body is a remnant of where one of the three feet was attached. This example of a cauldron differs in its unusual décor in the form of wavy incised lines. Two such lines are on the upper surface of the horizontal ring and three on the exterior of the vertical wall of the neck. Furthermore, the corrugation typical for such cauldrons on the surface of the neck is inscribed in the shape of three horizontal grooves above a wave-like ornament at the edge of the lip and along the shoulders. The diameter of the cauldron at the ring is 40.4 cm.

*Glazed ceramics* are represented by two fragments. One of them is a fragment of the bottom of a vessel with a wide circular base whose ring is 1 cm thick. It has a fine grained beige fabric with numerous pores and specks of white stone. The vessel is covered with a transparent, shiny, olive-colored glaze. The interior surface is uneven on account of its having been stretched out on a potter's wheel. The exterior surface of the ring-shaped base and the area inside it are unglazed. A second fragment comes from a thick-walled bottle-shaped vessel, covered with dark olive glaze. The thickness of the walls, which also have an uneven surface, is 2.2cm.

*Porcelain*. Lying on the ground was a fragment of the bottom of a porcelain cup. The cup is white with a fine-textured cream-colored fabric. The transparent shiny glaze was applied over a thin layer of underglaze. On the surface of the walls is only a dribble of glaze without the white underglaze. The diameter of the ring-shaped base is approximately 9 cm.

*Stone wares*. A fragment of a basalt millstone was found, shaped like a slice from a cone with lightly marked depressions on the narrow side. The entire surface was carefully worked, but the sides are chipped; yet there are no traces of abrasion. The diameter is 17.8 cm. at the bottom and 21 cm at the top and the thickness 9.5 cm.

Among the *clay wares* in the excavation were a spindle whorl and two chips. The spindle-whorl, carved from the wall of a vessel, is 7.1 cm in diameter. In the center is a drilled opening 0.7 cm in diameter. The chips are round pieces, 4.1 and 4.7 cm in diameter, which were used either in table games or ones whose playing board was laid out on the ground. They are rather crudely formed out of fragments of the walls of clay vessels. Such chips are common finds at Bohai sites in the Russian Far East. They are also known from the Khitan settlements at Chintolgoi Balagas and Khermen Denzh.

The *iron and cast iron wares* in the excavation included five objects: a nail, a plumb-bob, an iron plate, the leg of a kettle and the bushing of a wheel hub. Of the greatest interest was the discovery in Pit No. 1 of a cast iron round weight with a pointed lower end and a loop at the top. It measured 5.5 cm in height and 3.5–3.6 cm in diameter, the height of the loop being 1.5 cm and the weight approximately 150 g. Its shape recalls that of a steelyard weight, but differs from it on account of its sharp lower tip [Fig. 7]. In Pit No. 3 was a fragment of an iron bushing of the hub of a cart wheel. The wall of the bushing narrows on one end; its thickness is 0.9-1.1 cm, and the length of the bushing is 2.9 cm. One of the teeth on the exterior of the bushing has been preserved. This bushing is typical for the wagons of East Asia throughout the first two millennia CE.


*Fig. 7. The plumb-bob found in Pit No. 1.*

**Discussion and conclusions**

The artefacts from the excavations of the Emgentiin Kherem settlement are evidence that the site dates to the Liao period. The materials of the excavations here also demonstrate the presence of Bohai and Uighur cultural traditions. Furthermore, one can note some differences between the materials of this site and that of Chintolgoi

Balgas. At Emgentiin kherem they are evident in the unusual décor of the pottery cauldron, in a certain distinctness of the shape of the cooking vessels "of the Khitan type," in the predominance among the ceramic materials of storage vessels similar to tubs, and also in the insignificant presence of prestige dishes (only one porcelain fragment, found in surface scatters in 2013 near the southern gate).

On the whole, the cultural layer in the settlement is thin. The quantity of deposits from human activity is also small. This might attest either to a short period of habitation at the site or to the fact that the site could have been a place for the stationing of a separate military cavalry unit. One could suppose that the nomads lived in yurts and did not construct permanent houses, and also possibly that they used the enclosure at the site only in certain seasons and, in the event of danger, as a refuge (possibly along with their cattle). If this was the case, then it is understandable why there is such a limited cultural layer, compared with that of other Khitan settlements in that region. A task as yet for the future is to reconstruct the features of the daily lives of Khitan military units and the craftsmen and agriculturalists from among the Bohai, Jurchens and Chinese who were assigned to them in Mongolia.

We know from written sources that in 1004 CE 20,000 Khitan cavalrymen were sent here on military duty, and for the provisioning of them were assigned 700 Bohai, Jurchen and Han Chinese families, which were distributed in the district center Zhenzhou and its subordinate towns Fanzhou and Weizhou (Kradin et al 2011, p. 163). In order to bring under their control the nomads who inhabited the Mongolian steppe, the Khitans created a network of urban centers in the Kerulen and Tola.river basins. In the Tola basin was a whole series of larger and smaller settlements. The four largest were Khar Bukhyn Balgas, Chintolgoi Balgas, Ulaan Kherem and Khermen Denzh, positioned almost in a single line which one can actually trace if looking at a map or a satellite photo. From the hill of Chintolgoi in good weather one can see the stupa of the settlement of Khar Bukhyn Balgas. In all likelihood, in each town were erected signal towers, and in emergencies, with the aid of fires, information could instantly be sent around to the entire territory of the district. It is interesting that the distance between settlements was roughly half a day's journey on horseback. Approximately the same distance separated the district center and Emgentiin Kherem. If our hypothesis is accurate, that settlement was a place for the stationing of a mobile military garrison and their families, which defended from the north the approaches to the district city Zhenzhou, that is, the site of Chintolgoi Balgas.

**Acknowledgements.**

This study was supported by grant of Russian Scientific Foundation # 14-18-01165. We are grateful to the Mongolian students who took part in the excavations in 2009 and 2011.

## About the authors

Dr. **Nikolay N. Kradin** is a Professor at the Institute of History, Archaeology and Ethnology of the Far Eastern Branch of the Russian Academy of Sciences, and Head of the Department of World History, Archaeology, and Anthropology of the Far Eastern Federal University, Vladivostok. E-mail: <kradin@mail.ru>.

Dr. **Aleksander L. Ivliev** is a Senior Research Fellow of the Institute of History, Archaeology and Ethnology of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok. E-mail: <ivliev@mail.primorye.ru>.

Dr. **Ayudai Ochir** is a Professor at the International Institute of the Study of Nomadic Civilizations, Ulaanbaatar. E-mail: <nomciv@magicnet.mn>.

Dr. **Sergey A. Vasiutin** Is Head of the Department of the Mediaeval History of the Kemerovo State University, Kemerovo. E-mail: <vasutin@history.kemsu.ru>.

Dr. **Svetlana E. Sarantseva** is a Research Fellow of the Institute of History, Archaeology and Ethnology of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok. E-mail: <sarantceva@mail.ru>.

Dr. **Evgenii V. Kovychev**is a Professor at the Transbaikal State University, Chita. E-mail: <kovychevevgenyi@mail.ru>.

Dr. **Lkhagvasüren Erdenebold** is an Associate Professor at the Mongolian University of Technology, Ulaanbaatar. E-mail: <erdene_ethnology@yahoo.com>.

## References

Danilov 2004

Sergey V. Danilov. *Goroda kochevnikov Tsentralnoi Azii* [The towns of the nomads of Central Asia]. Ulan-Ude: Izd-vo. Buriatskogo nauchnogo tsentra Sibirskogo otdeleniia RAN, 2004.

Ivliev 1983

Alexandr L. Ivliev. "Gorodishcha kidanei" [Forts of the Khitans]. In: *Materialy po drevneii srednevekovoi arkheologii iuga Dal'nego Vostoka SSSR i smezhnykh territorii*. Vladivostok: DVNTsANSSSR, 1983: 120–33.

Ivliev et al.1998

Alexandr L. Ivliev, Vladislav I. Boldin, and Iurii G. Nikitin "Gorodishcha kidanei" [Forts of the Khitans]. In: *Arkheologiia i etnologiia Dal'nego Vostoka i Tsentralnoi Azii*. Vladivostok: Institut istorii, arkheologii i etnologii Dal'nevostochnogo otdeleniia RAN, 1998: 152–56.

Kiselev 1957

Sergei V. Kiselev. "Drevnie goroda Mongolii" [Ancient cities of Mongolia]. *Sovetskaia arkheologiia* 1957/2: 97–101.

Kradin 2008

Nikolai N. Kradin. "Urbanizatsionnye protsessy v kochevykh imperiiakh mongol'skoi stepi" [Urbanization processes in the nomadic empires of the Mongolian steppe]. In: *Mongol'skaia imperiia i kochevoi mir*, kn. 3, ed. B. V. Bazarov et al. Ulan-Ude: Izd-vo. BNTs SO RAN, 2008: 330–46.

Kradin et al. 2005

Nikolai N. Kradin, Alexandr L. Ivliev, Ayudai Ochir, et al. "Preliminary Results of the Investigation of Kitan Ancient Town Chintolgoi Balgas in 2004." *Nomadic Studies Bulletin* (International Institute for the Study of Nomadic Civilizations) 10 (2005): 72–80.

Kradin et al. 2011

Nikolai N. Kradin, Alexandr L. Ivliev, Ayudai Ochir, et al. *Kidanskii gorod Chintolgoi-balgas* [The Khitan town Chintolgoi Balgas]. Moskva: Vostochnaia literatura, 2011.

Kradin et al. 2012

Nikolai N. Kradin, Alexandr L. Ivliev, Ayudai Ochir, et al. "Rezul'taty issledovaniia gorodishcha Khermen-denzh v Mongolii v 2010–2011 gg. [Results of the study of the Khermen Denzh town in Mongolia in 2010–2011]. In: *Istoriia i kul'tura srednevekovykh narodov stepnoi Evrazii*. Proceedings of the Second International Congress. Barnaul: Altaiskii gos. universitet, 2012: 168–71.

Kradin et al. 2013

Nikolai N. Kradin, Alexandr L. Ivliev, and Sergei A. Vasiutin. "Kidanskie goroda kontsa X – nachala XI v. v Tsentral'noi Mongolii i sotsial'nye protsessy na periferii imperii Liao" [Khitan towns of the end of X – beginning of the XI centuries and social processes on the periphery of tha Liao empire]. *Vestnik Tomskogo gosudarstvennogo universiteta*, ser. Istoriia, 2013/2 (22): 53–57.

Kradin and Ivliev 2008

Nikolai N. Kradin and Alexandr .L. Ivliev. "Deported Nation: the fate of Bohai peoples of Mongolia." *Antiquity* 82 (2008): 438–45.

Kradin and Ivliev 2009

Nikolai N. Kradin and Alexandr L. Ivliev. "The Downfall of the Bohai state and the ethnic structure of the Kitan city of Chintolgoi balgas, Mongolia." In: *Current Archaeological Research in Mongolia. Papers from the First International Conference on "Archaeological Research in Mongolia"*. Ed. by Jan Bemmann et al. Bonn Contributions to Asian Archaeology 4. Bonn: Vor- und Frühgeschichtliche Archäologie Rheinische Friedrich-Wilhelms-Universität, 2009: 461–75.

Kradin and Nikitin 2003

Nikolai N. Kradin, and Yuri G. Nikitin. "Nekotorye rezul'taty izucheniia srednevekovykh pamiatnikov Ussuriiska." [Some results of the study of Ussuriisk area mediaeval sites]. In: *Arkheologiia i kul'turnaia antropologiia Dal'nego Vostoka i sopredel'nykh territorii*. Blagoveshchensk: Izd-vo. Blagoveshchenskogo gos. pedagogicheskogo universiteta,2003: 349–59.

Kyzlasov 2006

Leonid R. Kyzlasov. *Gorodskaia tsivilizatsiia Sredinnoi i Severnoi Azii: istoricheskie i arkheologicheskie issledovaniia* [The urban civilization of Central and Northern Asia: Historical and archaeological studies]. Moskva: Vostochnaia literatura RAN, 2006.

Hu 2009

Hu Lin. "Urban landscape and politics: The making of Liao cities in Southeast Inner Mongolia." Unpublished Ph.D. dissertation. University of Chicago, 2009.

Lunkov et al. 2011

Andrei V. Lunkov, Artur V. Kharinskii, Nikolai N. Kradin and Evgenii V. Kovychev. "The Frontier Fortification of the Liao Empire in Eastern Transbaikalia."*The Silk Road* 9 (2011): 104–21.

Ochir et al. 2005

Ayudai Ochir, Altangerel Enkhtör and Lkhagvasüren Erdenebold. *Khar Bukh balgas ba Tuul Golyn sav dakh' Khiatany üeiin khot, suuringuud* [Khar Bukh balgas and the remains of medieval Khitan settlements in the Tuul valley]. Ulaanbaatar: Admon, 2005

Ochir et al. 2008.

Ayudai Ochir, Nikolai N. Kradin, Aleksandr L. Ivliev, et al. *Arkheologicheskie issledovaniia na gorodishche Chintolgoi* [Archaeological Studies in Chintolgoi town]. Ulaanbaatar: International Institute for the Study of Nomadic Civilizations, 2008.

Perlee 1961

Kh. Perlee. *Mongol ard ulsyn ert, dundad üeiin khot suuriny tovchoon* [A short history of ancient and medieval cities and settlements on the territory of the Mongolian People's Republic]. Ulaanbaatar: Ulsyn khevleliin khereg erkhlekh khoroo, 1961.

Rogers et al. 2005

J. Daniel Rogers, Ulambayar Erdenebat and Matthew Gallon. "Urban centres and the emergence of empires in Eastern Inner Asia." *Antiquity* 79 (2005): 801–18.

Steinhardt 1997

Nancy Steinhardt. *Liao Architecture*. Honolulu: Univ. of Hawaii Pr., 1997.

Tkachev 2009

Valentin N. Tkachev. *Istoriia mongol'skoi arkhitektury* [A history of Mongolian architecture]. Moskva: The Association of Architectural Universities Pr., 2009

Waugh 2010

Daniel C. Waugh. "Nomads and Settlement: New Perspectives in the Archaeology of Mongolia." *The Silk Road* 8 (2010): 97–124.

Wittfogel and Feng 1949

Karl A Wittfogel and Feng Chia-Sheng. *History of Chinese Society. Liao (907–1125)*. Transactions of the American Philosophical Society, n. s., 36. Philadelphia, 1949.

— *Translated by Daniel C. Waugh*