## Preliminary report on the 2019 field work of the "Wall of Chinggis Khan" Archaeological Research

The field work carried out in July and August 2019 continued our work from the previous season (2018) which is about to be published in Antiquity: Shelach-Lavi G, I. Wachtel, D. Golan, Otgonjargal Batzorig, Amartuvshin Chunag, R. Ellenblum, and W. Honeychurch (Forthcoming), Long-Wall construction in the Mongolian steppe during the Medieval Period (11th to the 13th centuries CE), *Antiquity*. This time our focus was on test excavations of the wall itself and of structures south of it. The goals of the excavations are not to expose large areas but to provide information on the structure and building methods of the wall as well as to collect samples for dating, paleo-climatic reconstruction and micro-geology.

The work focused on a wall section and a cluster of structures labeled No. 24 on our general map of the wall (Fig. 1). The cluster is located more-or-less at the center of the wall line, in Dornod province, around those coordinates: 49.16402, 115.46950. This cluster was selected because it includes several different features: a large rectangular structure inside which a second, smaller rectangular structure is situated, and a large circular structure (Fig. 2).



Fig. 1: The northern line and the location of the 42 clusters of auxiliary structures

We started our work with an intensive survey of the main features of the cluster. Using the "Dog-Leash" sampling methods we marked 82 circles of 1m radius and intensively collected all the artifacts found in them. The data of this survey is already uploaded into our database but we still need to plot the results using GIS tools. All-in-all the density of artifacts was relatively low. It seems that the clearest indications from this survey was the relatively large number of potshards found within the small rectangular structure (which is also reflected in the excavations of area H) and the large number of small stone artifacts (mycrolithes) found at the southern part of the circular structure (also seen in the excavations of area E and I).

Following the survey, we started to test-excavate the different features. We were able to excavate five trenches (test pits, see fig. 2): **Area A** (that combined what we mark in the field as A, B and G) is some 15m long trench that cut through the longwall; **Area C&D** started from a cut that existed in the southeastern corner of the small rectangular structure and develop into a test pit into this thick wall; **Area E** is a cut

through the wall of the circular enclosure and into its interior; **Area H** is a test pit located inside the small rectangular feature and up to its southwestern wall; **Area I** is a test pit located in the center of the circular enclosure.

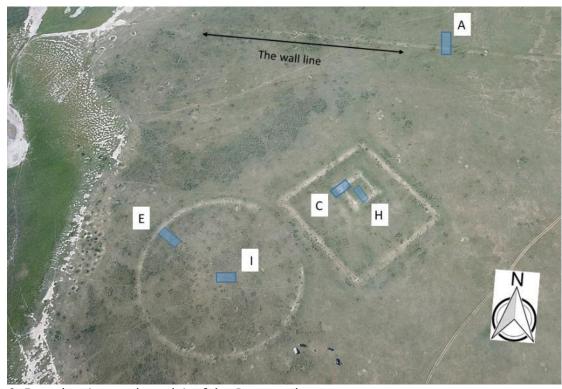


Fig. 2: Location (approximately) of the 5 excavation areas.

Area A: The excavation trench is 2m wide and 15m long. From inside the wall (south) through the peak of the wall to the mote north of the wall. The existing peak of the wall is at 673.65 the lowest point at the mote is at 670.89 – a difference of 2.76m. On the south (area B and G in the original definition) the sloping of the wall is very clear in the section. Our initial reconstruction of the wall suggest that it was a pile of the earth excavated from the mote and covered by a white material (limestone material?). The sloping of the wall southwards (inwards) is very clear in the section (fig. 3). The wall is probably eroded. On the northern side of the section (the outer side of the wall) the layout of the mote is very clear with the later accumulation of earth layers inside it (fig. 4).

No artifacts were found in the excavations but we did recover a few animal bones. We systematically took samples for OSL dates, as well as soil samples microgeological analysis of the makeup of the wall, from different parts of the section. In addition to the analysis of those samples, we need to produce a photogrammetric illustration of all sections and to reconstruct the wall.



Fig. 3: the wall sloping southwards.



Fig. 4: The western section of the northern part of area A.

Area C&D: This area started from a probing that existed in the outer side of the western corner of the internal (small) rectangular structure (Fig. 5). We cleaned this section (labeled area D) and it became clear that the entire wall of this structure is made of highly compressed layers that include many small limestones and other materials (to be tested) (Fig. 6). To further check this structures, we opened another

pit (area C) north of this section and on the top of the corner of the rectangular structure. This pit was separated by a 0.5m unexcavated area form the other section. It was 4X4m. The northern corner of this area was not excavated and we went down deep, to the bottom of the wall, only in a smaller area of 2X3m. Most of the excavation is inside the compressed layers of the construction and in the bottom of them we reached a layer that should have been the floor of the structure and beneath it the dark virgin soil (fig. 7). The upper level of this structure is 677.03 and the bottom of the construction layers is at 675.55 – the preserved height of it is almost 1.5m. We suggest that this serve as a foundation for a corner tower, that was probably built of wood. We did not find any remains of this upper structure or imprints of its pillars etc., probably because the upper level of the earthen foundation has been eroded.

A small number of potshards were recovered from this area, some of them typical incised "Liao" shards. We took OSL samples from below the foundation and from within it and there are also charcoal that may be used for 14C analyses.

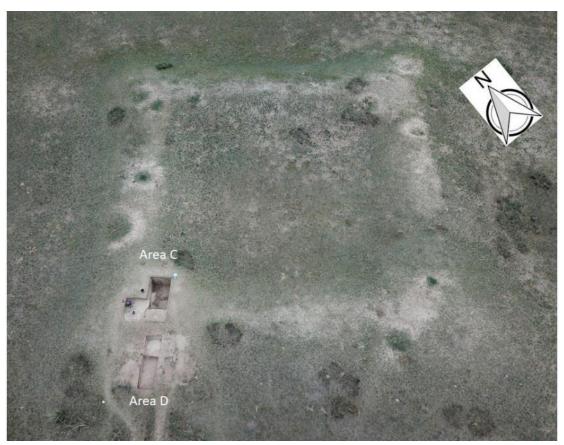


Fig. 5: Areas C and D and the small rectangular structure.



Fig. 6: the section in outer side of the structure's wall (area D). The construction layers are clearly visible at the upper part of the section.

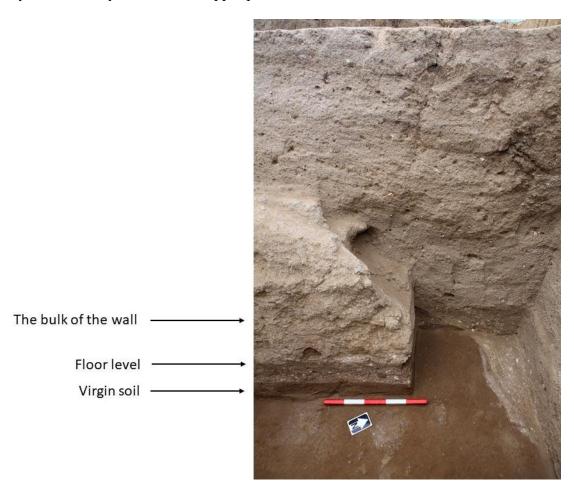


Fig. 7: The deep section in area C.

Area E: A 2X7m long trench that at the circular feature (enclosure?) (Fig. 8). The northwestern limits of the section start at the highest point of the enclosure wall and the trench enter into the interior of the enclosure. The excavations cut through the enclosure wall which was built form layers of yellow color material with a lot of gravel. The building technique is similar to that of the small rectangular structure although the layers are not as clear (fig. 9). At its peak the wall is preserved to the height of some 60cm (from 676.44 to 675,82) but originally it must have been higher. The level of the original soil on which the wall was built is clear and we did not detect marks of foundations that were dug into it – so it seems that the wall was built directly on the soil, maybe after it was leveled. From inside the wall there are diagonal layers that approach the wall. Part of it can be the erosion of the wall material. A gray layer that starts inside the enclosure (but it is less clear as we go further away from the wall) may be the remains of the activity that took place within the enclosure (Fig 10).



Fig 8. The location of Area E



Fig. 9: Section into the enclosure wall area E.

Gray layer

Enclosure wall

Fig. 10: Area E: a look from the northeast

We took samples for OSL dating from under the wall, the wall material and the layers that approach the wall. We also took samples from the gray layer for microgeological analysis. We will produce a photogrammetric illustration of the sections.

Below the wall level, in the area directly under the wall and some 15cm below its base, we excavated a layer with many small stone artifacts (microliths) as well as some potshards and fragments of shells (Fig 11). Because this was not the focus of our research we did not expose a large area of this level and we were unable to identify any context to those finds. We were able to collect charcoal that may give date to those finds which are tentatively identified as Neolithic remains. Similar artifacts were found in area I as well as during our intensive survey of this part of the circular enclosure, thus we hypothesize that a site may exist here or that it was an activity area during prehistoric periods. We record similar finds during our survey, last year, of cluster no. 27.



Fig. 11: Potshards and microliths from the "Neolithic" level

Area H: is a test pit located inside the small rectangular feature and up to its southwestern wall (Fig. 12). Because this was the area where during the survey we find the densest artifact concentration we opened this test pit in the hope of getting more evidence for the activity that took place within those structures and materials to date those activities (and the use life of the structures). The pit is oriented according to the orientation of the rectangular structure (corners to the cardinal directions) and is 8X4m in size. Its southeastern side intrude into the structure's wall and the rest of the pit is dug into the interior of the rectangular structure (fig. 13). In the interior of the square enclosure we went down in layers with some artifacts until we reached a white hard layer that was the living floor. Under this floor there is a clear brown virgin soil. The level of the floor is 675.27 in the northwestern part and 675.57 in the southeast. It is more or less the same or slightly lower than the floor level identified in area C. On the southeastern side of the excavation area the wall of the enclosure is very clear – its structure is similar to that which we have seen in area C & D. In the section the terminal line of the wall is clear and so are the floor of the enclosure and diagonal layers that cover the floor and raising towards the wall (fig. 14). The lower strata of those layers maybe accumulation during the lifespan of the structure but upper layers must be after the structure was already abandoned (but we will know this better once we process the OSL and <sup>14</sup>C samples collected).



Fig 12: the location of area H inside the small rectangular structure



Fig. 13: A look at area H from the northwest



Fig. 14: The eastern corner of area H.

Relatively to other areas the strata of area H were rich in finds, including animal bones, potshards and a couple of iron artifacts. Most striking is a large number of large animal bones. Those bones are associated with a well-defined stratum which is relatively high and seem to be from a period after the abandonment of the structure (fig. 15). Also found are relatively large number of potshards, some of the diagnostic (decorated, rims). Among those shards are also coarse shards that the Mongolian archaeologists did not recognize, but they may have been cooking pots of the same period (Liao?) (fig. 16). We systematically took samples for OSL and 14C dates, as

well as soil samples micro-geological analysis. In addition to the analysis of those samples, we need to produce a photogrammetric illustration of the excavation sections.



Fig. 15: The northeastern section of the excavation. The large bones are clearly seen in the section and are associated with a diagonal stratum.



Fig. 16: Shards found in the excavation of area H.

<u>Area I</u>: A 4x2m test pit located in the center of the circular enclosure (Fig. 17). The aim of this pit was to see if we can identify the original "living floor" of this structure and collect data relevant to the activity that took place in it. Some 30cm below the ground level (at c. 676.30) we reached a hard yellowish color layer that

may represent the virgin soil. Above it were a few gray color patches that could be related to the activity that was done in this area, but unlike area E where we could identify a layer of this material here it was not so clear (may even be rodent activity and not human). A few small shards were recovered from this area, some decorated in the "Liao" style. We also recovered a relatively large number of microliths (Fig. 18), that are related to the "Neolithic" activity we identify in the survey of this area and in area E.



Fig. 17: the location of area I in the center of the circular structure



Fig. 18: A collection of stone artifacts from area I.

Regional Survey: In addition to excavations our team conducted one day of a systematic archaeologic survey in areas south of cluster no. 24. The aim of this survey is to identify remains of human activity that took place outside the structures we previously identified. We were not able to survey a large area but we focused on two types of environments – a higher area (the highest in this area which is relatively close to the wall) where we wanted to see if there is evidence for some kind of watchtowers or lookout structures. And a starch of lowlands, similar in their geographic location to that of the cluster, where habitations may have been located. In both areas we found very little evidence of past occupation. All-in-all we only made 4 collections, of some stone artifacts and very few potshards.