THE PRELIMINARY RESULTS OF ARCHAEOLOGICAL INVESTIGATIONS IN KHERLEN RIVER VALLEY

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Archaeological field-survey and limited excavations took place in the Kherlen Valley between 25th August and 11th September 2009. The project was directed by Professor Mark Horton (University of Bristol UK), Professor D. Tumen and Dr M. Erdene (National University of Mongolia). Other members of team included Geoffrey Parkes, John Man, Henrietta Horton, Vito Pecchia and ten undergraduate and graduate students from the National University of Mongolia. The project established a field-base close to Talyn Tolgoi, a small hill, some 19 km to the east of the regional centre of Mongonmorit and 150 km east of Ulaanbaatar. We are grateful to Chinzorig Chuluunbaatur and his team for supplying vehicles and logistics that made the expedition possible.

The project developed from a short reconnaissance in 2008, which located a number of sites in the Kherlen valley, as well as the complex archaeological site of Talyn Tolgoi (Fig. 1, Fig. 2). The principal research aim was to undertake a landscape study of the valley, to locate sites of every period, and record surface remains, together with limited excavations to obtain dating and cultural evidence.

The project had two elements – survey and excavation. The survey element undertook a detailed stone-by-stone survey of the remains on Talyn Tolgoi, at a scale of 1.500, revealing over 150 individual graves (Fig. 3), mostly dating from the Bronze Age (c. 2000-800 BCE). Survey was also undertaken more generally along the valley and its side valleys, locating mostly cemetery sites dating from the Bronze Age, Hunnu (200 BCE-300CE) and Turkic periods (6th-9thcenturies CE). An important monastic site was also recorded. Methods of survey included the use of a total station to plot surface remains, a hand-held GPS to provide general location and orientation information, and digital photography.

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The excavation was concentrated on the site of Talyn Tolgoi. Ten excavations were undertaken (numbered Tr 1 – Tr 13) on selected tombs and other sites. These were directed by Dr Myagmar Erdene, and largely conducted by the university students. Each trench was recorded, both by plan and photography at successive layers, and artefacts and human remains were all carefully curated. At the completion of the excavation, the sites were backfilled, and the architecture reinstated, wherever possible. We are very grateful to our sponsors whose support enabled this project to take place. Significant help was provided by the Open Society Foundation, which enabled the full participation of the Mongolian students. Additional support came from the Stein-Arnold Exploration Fund of the British Academy and the University of Bristol.

1. Talyn Tolgoi

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A small hill rises from the flood plain of the Kherlen river, around 5km to the east of the river itself. Geologically, it was formed as a volcanic 'blister', and the underlying rock formations are igneous. The hill is visible in satellite photographs as its base is ringed by low scrub, around 2.km by 1.5km in diameter. The hill rises from the valley (1417m elevation) to two summits of 1489m and 1490m separated by a low col, aligned northeast – southwest. On the west side of summit of the hill is a depression, now filled with boggy ground, but originally a lake (elevation 1478m).

The two summits contain exposed rocky crags, some of which have been split and laminated by frost action. These slabs of rock were employed in the construction of the tombs. In the survey 175 'features' were identified on the ground as having the potential of tombs or archaeological structures. It is likely that the true number of actual tombs on the site is around 150, as some of 4 Site coordinates are given in UTM grid, zone 49U. This location, at the centre point of the hill is equivalent to 48 17.210 N, 108 48.025 E, and an elevation of 1487m asl. these features on excavation proved to be natural or elusory. Nonetheless 150 tombs on a single site are exceptional for Eastern Mongolia, and it is likely that they all date to the Bronze Age (2000-800 BCE). The tombs were clustered in three general locations. Those in 'site A' were generally found to the east of the southwest summit, on a gentle east-facing slope. 'Site B' was located around the northeast summit, mostly to the east and south of the hill, while 'site C' lies to the east of the former lake. 'Site D' is located on the northeast side of the hill. These locations are all significantly positioned on the east side of a natural feature, facing towards the east and the river Kherlen.

A number of architectural types were recorded on the site. The most ubiquitous was the 'slab tomb', of which there were a number of variations, but typically comprising around 3 vertical slabs along each side, and around 2 at each end. Side stones were then laid flat against the outside up against the vertical stones. Internally,

flat stones were laid inside the tomb, which either covered the burial or acted as a 'bed' for it. The typical dimensions were 3m by 2.5m and mostly orientated northwest (c. 288-300 degrees). The second type of tomb was formed by a scatter of rubble in a roughly oval or square area. Here there was little evidence of tomb structure, although likely, these too were originally slab tombs, that have been partly destroyed or robbed in antiquity and certainly follow the same general orientation and size. The third group comprised much smaller cist or box tombs, made from vertical slabs, generally 2.2m by 1.4m. These follow the same orientation and were probably smaller versions of the slab tombs. The final archaeological feature comprised a small number of standing stones.

Excavations

Trench 1 (tomb 94, site B)

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This was the first tomb to be chosen, as it was the only example to have been robbed in recent times (probably in 2007, according to local information). It is slab grave, with 4 intact northern side stones, a west stone and a fallen stone (Fig. 4). On the south was a single massive stone lying flat, which had been moved out of the tomb by the robbers, in order to get into the grave deposits. The robbing trench was off set on the south side of the tomb, an irregular hole, 2.2 by 0.8m in size. When fully excavated, it was 2.0m below the ground. However this was not the first 'robbing' of this tomb as an earlier cut was found, which was around 0.9m deep, and removed all traces of contents of the grave. However, traces of the cut for the grave pit was observed, down to a depth of about 0.8m deep, and oval in shape. A point of interest was the massive stone, heaved out by the 2007 robbers, which could have been one of the side slabs. However its size would suggest that it originally formed the base of the tomb, which might has attracted the original robbers to this location. After they left the stone fell into their trench, and it was this unusual stone that then attracted the modern robbers to this particular site. There were no finds from this excavation.

Trench 2 (tomb 88, site B) 0336941 5350563

This was a well-preserved small slab tomb (2.2 x 1.7m) close to the northern summit. The side stones were intact on all four sides, and there was no evidence for robbing (Fig. 5). On excavation, two large base stones were found inside the tomb, which filled the entire structure. Excavation below these stones revealed a loamy deposit, over natural subsoil, and any grave pit was difficult to define – if it existed at all. No human remains or grave goods were found below the slab. The only finds were two horse teeth in the northeast corner of the tomb in a space between the slabs and base slabs, at a relatively high level.

Trench 3 (tomb 82 site B)

0336896 5350527

This was a much larger slab tomb than T88 (4.6 x 2.3m), with a large east end slab and side slabs (5 on north side, 3 on south), while the west end slab had fallen (Fig. 6). The upper surface of the tomb had a scatter of small stones, with a possible central disturbance, around 300mm in size. Around the tomb there were layers of flat stones banked up against the walls, in typical Bronze Age fashion. On excavation, a large stone was found in the fill, orientated north- south (and thus at a slight angle to the tomb), 2m by 1m in size and .4m thick. On this was a small deposit of probably human bone and horse teeth, as well as Bronze Age cord- impressed pottery. It seems that this slab had acted as a bed on which the burial was located. The excavation was extended to an adjacent tomb, (tomb 83) on its south side. This was more like the box or cist tombs, and comprised eight flat stones, arranged in a rectangle contained within a square f upright stones. On excavation, the flat stones rested on a deposit of loam, and a set of pitched stones, that were set onto natural subsoil. A few sherds of pottery were found in the layer between the stones, but no burial remains.

Trench 4 (tomb 129, site D)

0336669 5350593

On the surface, this tomb differed from the slab tombs of site B, with smaller upright slabs, but still surrounded by flat external layered stones. In the centre, there were two large flat stones and two smaller flat stones, defining a rectangular area around 3 x 2m (Fig. 7). On excavation these flat stones were resting on loam, and were quite superficial. Below this were excavated what looked like a tomb bed, comprising a vertical stone, and three flat stones to the west (Fig. 8). Under these stone was found a significant deposit including flecks of red ochre, some burnt wood fragments, and four bones that might be animal. This deposit rested directly on natural subsoil, at a depth of around 0.8m below the surface.

Trench 5 ('tomb' 38, site A)

0336362 5350180

This looked on the surface like a perfect tomb – a ring of carefully placed stones, with a central stone, with a diameter of 2.4m. On excavation, these stones were found to be very superficial, and to rest on topsoil – suggesting a very recent date (Fig. 9). Our interpretation is that this is model 'ger', maybe dating to as recently as the 1980's, constructed by local children living on the hill. The structure was left in position and carefully backfilled.

Next to this structure was another possible circular structure – possibly another 'model' ger. This was fully excavated (Trench 6, T39), and bedrock was reached at 0.3m below the surface.

Trench 7 (tomb 34, site A)

0336362 5350222

A slab tomb, defined by four stones on each side; the north side is damaged. In the middle of the structure a flat stone at an angle to the main structure, but very close to the surface (Fig. 10). Below this, excavations to natural were around 0.6m deep. There were no finds or artefacts in the tomb, and this tomb may have been robbed or disturbed.

Trench 8 (standing stone, by T 57, site A)

0336482 5350268

A small standing stone was excavated, 0.3 by 0.25m in size, and 0.45m above the ground, resting at a slight angle to the east (Fig. 11). The stone was found to be packed around with four stones. Under these stones there was 0.25m of soil, then further layers to bedrock at 0.9m. The stone was buried 0.17m deep, and there were no finds or datable material in association.

Trench 9 (tomb 126, site C)

0336662 5350613

A small slab or cist tomb, 2.8 x 2.3m, with sides with layered flat stones, ramped up to form a rectangular area (Fig. 12). At the west end there a single vertical stone. Below was a set of flat stones, defining a quadrilateral area. There was no trace of robbing, but a single river pebble was found at the east end.

Trench 11 (tomb 136, site C)

0336634 5350617

This was the most complex and interesting tomb to be excavated. On the surface it was a small slab tomb, with layered external stones. At the east end, there was a vertical rectangular stone 0.8 by 0.35m in size. The centre of the tomb comprised a scatter of small stones (Fig. 13). Below these was found a arrangement of flat stones, which turned out to be an anthropomorphic representation with the head to the west, a triangular stone representing the body, two stones for the arms and two smaller ones for the legs (Fig. 14). The stone representing the head seems to have been chosen with a

ridge representing the nose, and two depressions for the eyes (Fig. 15). Excavation below these stones identified a small piece of worked chert and five worn river pebbles.

Trench 13 (site C)

0336810 5350492

A 1x1m test pit was excavated into the sediments of the dried up lake in order to obtain environmental material. The sequence indicated that organic deposits were 0.55m deep, layered with lenses of lighter sandy brown (suggesting periods when the lake was dry). This deposit rested on a sandy loam, with evidence of iron panning, with a sandy layer below. It is hoped that analysis will show whether this organic material represents a long period that the area was a lake – or a relatively short and recent one.

2. River Tenuun Valley

Five kilometres north of Talyn Tolgoi, the river Tenuun joins the Kherlen. This tributary flows westwards for most of its course, and its valley provides a route through the mountains to the Onon valley and beyond. It is broad valley, around 2 km wide, with narrow valleys leading down the main valley on the north south sides. The river itself is fast flowing, but easily forded. The main road is on the north side of the valley, and we undertook a short survey up to the edge of the provincial boundary, where two tributaries join the river and the landscape opens up into a broad plain, with a considerable area of lake/swamp.

Tenuun site 1

0355257 5354962

This was located at the eastern end of our survey area, where three rivers join to form the Tenuun, at the head of the valley that leads to the Kherlen. A group of six khirgisuur were set around a spur, facing south and east, close to the river that runs to the west. They comprise large mounds of small stones, with diameters of between 8 – 18m. Two have outer curbs (21 and 26m). One were certainly robbed, the others probably largely intact.

Tenuun site 2 (Fig. 20)

0352929 5355519

Large single khirgisuur set on a flat area on the north side of valley. The tomb has a central mound of stones partly robbed out in the centre, 8.5 by 8m, set within a square enclosure of small stones, 17 x 17m, aligned on 300 degrees. Standing stones marks the corners of the enclosure. Within the enclosure at the north east corner is a

small enclosure, and north of the main mound an additional mound. At the eastern end of the enclosure there is a further apsidal annexe laid out in small stones.

Tenuun site 3

0350849 5355377

The site of an abandoned Buddhist monastery is located on a broad terrace on the north side of the river Tenuun. A modern shrine erected in 1998, in the approximate centre, reuses an earlier rubble structure (Fig. 21). The total area of the monastery is around 600 by 130m and detailed plan was compiled of the visible remains on the surface. The buildings were laid out with a consistent north south alignment of 4 degrees. Behind the monastery is a deep valley to the north.

The exact boundaries of the enclosure were difficult to establish on the east and north sides. On the west there was a stone alignment, with an apparent entranceway that led to a partly stone metalled roadway, built up on a slight causeway. The southern edge was marked by a low bank with another entrance - a gatehouse comprising an apsidal building. The east side could be suggested by two marker stones; at the south east corner, a curving ditch ran to the north east. Internally the main monastic buildings were located in the centre, at the end of the metalled roadway. There were three rectangular buildings marked on the ground by lines of stones (Fig. 22). One was an aisled hall with six bays, and internal partitions. Remains of one of the timber posts survived. It was entered by steps and was probably the main assembly room of the monastery. To the west and south were two further rectangular structures marked out by lines of stones. South of these was a most distinctive building. It comprised a circular platform with an external dry ditch around it, around 06m deep, and a small grassy area in the centre.

It was entered from the south along a stone causeway and ramp. The main structure was a ring of stones on the edge of the platform. This seems to be a shrine or temple, originally made from wood, but with little surviving. In addition to this possible shrine, there were two further shrines – one reused for the modern memorial and raised octagonal structure. Beyond the central area there were a number of other possible structures. This included a rectangular open enclosure 50 by 30m, two small rectangular buildings, and a narrow structure with an apsidal end. Four stone ger platforms were located in the northwest part of the site. Remains of other platforms were not plotted, as they were heavily damaged by marmot activity. There were also six possible platforms between the enclosure and the river terrace.

Further research is needed to identify the functions and layout of the monastery. What survives does appear to be the remains of a significant establishment that may have housed several hundred monks. Like other Buddhist sites in Mongolia, it is unlikely to date to before the 16^{th} century CE, but further work and additional survey is warranted for this important site.

Tenuun site 4

0346967 5355580

A rubble scatter at the base of a spur overlooking the river, comprised seven probably tombs orientated east west. They seem to have been badly damaged, but are probably Bronze Age in date.

3. River Zuun Burh

This is a western tributary of the Kherlen river, passing close to Mongonmorit, and provides an important route northwards – indeed the valley was used for the evacuation of some of the Soviet troops in 1991, and traces of the roadway are still visible. The importance of this valley (and that of the Terelj to the north) was noted in Hunnu period with the construction of two forts where the valley meets the Kherlen flood plain. We undertook a brief reconnaissance along this valley on 8th September 2009.

Zuun Burh site 1

0310550 5353957

A group of ten slab tombs were located set on an elevated plateau, between two rock outcrops, either side of the present roadway. The tombs were very well constructed with side and end stones, and seem to have been largely unrobed, with the exception of one tomb (tomb 5) where there was evidence of recent looting, and a scatter of cordimpressed pottery on the surface around the excavation. The tombs were all orientated between 275 and 290 degrees, and varied in size and between 5 by 4m and 2 by 1m. They were all of classic slab tomb cultural group of the Bronze Age (Fig. 23).

Zuun Burh site 2

0312731 5349375

A small distance to the east of the road, in the slopes of the valley another small group of tombs were located. The main tomb was an un-robed khirgisuur with a central stone mound with a diameter of 12m, and an external stone kerb, with a diameter of 20m (Fig. 24). To the south were two subsidiary tombs, one with a diameter of 4m, and a slab tomb 2 by 3m aligned on 280 degrees. South of these, around 80m away were a further very damaged slab tomb.

Zuun Burgh site 3

0313461 5347590

Two tombs. 80 m apart were identified between the road and cliff edge. They

were probably khirgisuur, and were mounds of small stones, with a diameter of 8m (Fig. 25).

Zuun Burgh site 4

0313693 5347219

An isolated slab tomb was noted, around 500m south east of site 4 on the west side of the road

4. River Hahir Valley

This eastern tributary of the Kherlen joins the main river some 10km south west of Talyn Tolgoi. It is a small river valley, and provides access to Manhan Uul, the largest mountain in the area (2213m asl), which was the focus of the 2008 reconnaissance. Along the valley a number of sites were located adjacent to the road, generally on the north side.

Hahir site 1

0329409 5343838

A group of six slab tombs or robbed out examples. The slabs are made from a white quartzite stone and the tombs are either north south or east west orientation. The tombs cover an area of around 100 by 100m.

Hahir site 2

0329325 5343773

A single isolated tomb, with a diameter of 8m, with traces of an external kerb. This is a very damaged khirgisuur, of likely Bronze Age date.

Hahir site 3

0329416 5343746

Two rubble spreads - probably tombs of unknown date.

Hahir site 4

0330482 5343537

A group of seven tombs, lying along the slope of a hill facing southwards in the valley, 1.5 km t the east of site 3. Six of the tombs were slab tombs ranging in size between 4.50 and 2.5 m, and aligned east west (ranging from 270 - 310 degrees). The

seventh tomb was a circular structure, with a diameter of 3.8m. There was some evidence for robbing. The tombs cover an area of about 60 by 40m.

Hahir site 5

0331780 5343135

A rectangular rubble spread, covering an area 4.5 by 3m, and orientated on 150 degrees. At the north end there were traces of a courtyard. This is tomb of unknown date.

Hahir site 6

0335698 5341112

A group of four slab tombs in a little group orientated on 030 degrees are located immediately below a rock outcrop on the north side of the valley. 60m to the west three further stones probably indicate another slab tomb. There were also two circular rubble spreads on the north side of the group that may be small Bronze Age khirgisuur-type tombs.

5. Tsagaan Nuur Gorge

The Kherlen passes through an attractive narrow gorge a little to the south of Mongonmorit, and this provided a distinctive landscape feature as a focus for mostly Bronze Age activity. A range of hills forms the east side of the gorge, with two river valleys at the north and south ends (the river to the south is Ih Gutay). The west side is formed a low range of hills (max elevation 150m asl). To the west of these is lower ground (and probably an earlier course of the Kherlen), and at some time these hills probably formed an island in the river. The sites are listed in a mostly north to south direction.

Tsagaan Nuur site 1

0325445 5331308

The remains of an isolated khirgisuur are located to the east of the road as the north end of the gorge. It comprises a single mound, diameter of 8m with a kerb of 20m around the structure. The centre seems to have been robbed, and from the robbing pit is growing a small tree.

Tsagaan Nuur site 2

0323595 5326634 A complex of tombs were located at the end of a dry valley, adjacent to the gorge. There were at least two khirgisuur, several slab tombs and rubble scatters. Time did not allow a detailed examination of the site.

Tsagaan Nuur site 3 (Deer stone site)

0321810 5323093

Three standing 'deer stones' and three probable fallen stones were located on a low plateau overlooking the gorge (Fig. 26). Two of the deer stones are in a row, with carvings well preserved on the south face, and the northern face, less visible covered in lichen. Stone one has an undecorated standing stone on its west side. The third stone lies 20m to north and is taller than the other two, and now leans at an angle. Around this third stone was some robbing activity, and a possible carved stone that has been recently smashed. To the west is another standing stone not carved, and broken, while to the north another possible stone lying half buried also exposed in the robbing activity. Southeast of the site there is another stone lying flat that may have been carved, but not visible on the surface. So while there are three deer stones, there may originally have been six examples. In addition to the deer stones and their packing, there were two *ovoos* on the site, and two damaged slab tombs to the northwest.

Stone one (1.75m high) (Fig. 27.).

Standing stone, with pointed top.

Face one (south) shows three deer leaping upwards, a single band and disc,

Face two (east) undecorated, except for band,

Face three (north) shows three deer leaping downwards, a single band and disc,

Face four (west) undecorated, except for band.

Stone two (1.28m high) (Fig. 28)

Standing stone with pointed top.

Face one (south) four deer leaping upwards, one indistinct, and fifth from the west face, wrapping around. At the base a horizontal band.

Face two (west). Three deer leaping, wrapping around to the south face. At the base a band decorated with chevrons.

Face three (east). Traces of anthropomorphic face at the top section of stone.

Face four (north). Very indistinct carvings, not visible.

Stone three (2.30m) (Fig. 29)

Narrow standing stone, with carved end, possibly representing anthropomorphic shape. The carvings on this stone are not as accomplished as these on the other two stones. The stone is much more rounded, so the deer carving flow across the faces.

Face one (east) three deer leaping upwards.

Face two (south) one deer, wrapping around from face one.

Face three (west) one deer, wrapping from face two (but not visible on face two).

Face four (north) one deer leaping

Tsagaan Nuur site 4

This is a large and complex site east of the river on a terrace and overlooked by the spur containing the deer stones. The tombs here date to the Bronze Age and Turkic periods, and are extremely well preserved. The local name for the site is Mukhar Gutain Adag. There were four khirgisuur on the site with associated features and tombs.

Khirgisuur 1 0321392 5323141

This is the most southerly of the group and comprised a central mound of 10m, within a rectangular kerbed enclosure of 34 by 26m (Fig. 30). Stone lines radiating from the central mound mark out the northeast quadrant. There was a apsidal annexe to the northern kerb. On the south side there were ten 'sacrifice pits'. On the west side of the khirgisuur were ten secondary tombs, represented by stone scatters and a standing corner stones, all approximately rectangular in shape.

*Khirgisuur 2*0321537
5323942

This elaborate monument comprised a central mound with a diameter of 15m with an enclosing circular kerb of 36m (Fig. 31). It was preserved along most of its circumference except the southwest corner, where two radiating kerb lines extended from the centre to the edge of the outer kerb, which was then missing at this point. This feature seems to be a secondary alteration to the original form of the tomb. Additional features to the complex include a row of sixteen inner pits and six outer pits; probable sacrifice pits. Due south of the tomb and on its axis at a distance of 60m were two standing stones, that may be related to the main tomb. Southeast of main tomb there was a possible slab tomb, 2 by 1.5 m orientated on 040 degrees.

Turkic tombs 0321568 5323809

Next to khirgisuur 2, were a number of tombs that appear to be of Turkic origin (6-9th century CE). The most northerly was formed by parallel lines of upright slabs, in filled with rubble and slightly oval at either end. This tomb was 11 by 5m and orientated on 022 degrees.

Due south, were a further five tombs of similar type, although smaller. They were all laid out in a neat row, aligned on 022 degrees, and varied in size between 3 and 4m, with the same slab sides and raised rubble fill (Fig. 32, Fig. 33, Fig. 34). In front of a number was a small standing stone.

Khirgisuur 3 0321734 5323807

This was another large khirgisuur with an unrobed central mound of 14m, and an external circular kerb of 34m (Fig. 35). Between kerb and mound were two small standing stones. There was no trace of an entrance, although the kerb was slightly broken at the southeast. Around the north and east sides were twelve sacrifice pits.

Khirgisuur 4 0321939 5323616

The smallest of the four khirgisuur, lies at the base of a rock outcrop on the east side of the road. The central mound was 9m, within a square kerbed enclosure of 15m, aligned on 340 degrees. The northwest corner had a slightly larger stone. On the south side there were two small graves (or possibly sacrifice pits) and three on the north side.

6. Jargalantyn hondiy

This broad valley leads eastwards from the main Kherlen valley, and provided a flat plain that overlooked the modern town of Baganuur. A small river runs down the valley. At the end of the valley, and to the east of the main road leading down the east side of the Kherlen valley are three major complexes of tombs. Time allowed to us only to map in detail two of sites.

Jargalantyn hondiy site 1

0313338 5293180

This site comprised two circular stone mounds with a number of secondary tombs around it (Fig. 36). The larger mound was approximately 18 by 16m. 8 kerb stones were visible at various points around its circumference and there were twelve set of slab tombs around the central mound in a somewhat random fashion, generally aligned east west. On the northwest side, there were three distinctive tombs, quite different and more substantial rubble construction. Unlike the others, they are aligned on 045 degrees, and seem to be more likely to be Hunnu in date. The second mound was smaller than the first, around 14m. There was no kerb, but three kerbstones were visible on the south side. Four secondary tombs, rectangular in shape, lay adjacent to the

mound. Beyond this there were a further eight tombs, similarly of rectangular rubble spreads.

Jargalantyn hondiy site 2

0313658 5293303

This site lay 400m to the east, and comprised a robbed central mound of 11m, with an external kerb with a diameter of 30m, but preserved on the west side (Fig. 37). At the northern point there were traces of a small apsidal extension. Within the enclosure and cutting through the kerb were 8 rectangular tombs orientated east west. These were marked by rubble spreads, a kerb line of placed stones, and larger stones at each corner. To the southeast there was a further stone mound of 8m. Southwest of this was another group of six rectangular tombs, lying east west and two standing stones. 300m further to the east are three outlying tombs characterised by rubble spreads, orientated north south, around 4 by 3m in size.

Jargalantyn hondiy site 3

0313584 5292908

Unrecorded site, with rectangular tombs and stone scatters.

Conclusions and Discussions

The survey and excavations identified a very rich archaeological landscape in the Kherlen valley, with material ranging in date from the early Bronze Age to the Turkic period. There was a notable absence of burials from the Mongol period, although often these are difficult to identify on the ground. This absence is surprising given the centrality of the Kherlen valley to early Mongol history.

We had hoped that TalinTolgoi was going to provide a multiperiod site, from our initial examination in 2008, but careful survey and excavation suggested that it belonged exclusively to the Bronze Age. The graves were all of the slab grave cultural grouping that flourished in eastern Mongolia during that 2nd-3rd millennium BCE. There does seem to be some variation in the size and scale of the slab tomb architecture with the presence of ochre and worked stone, that might point to an earlier Bronze Age for some of the tombs, while the larger slab tombs, with their pottery assemblages may be later Bronze Age. The testing of this hypothesis rest in future C14 dates. The absence of significant quantities of human remains can partly be explained through robbing activity as well as the high acidity of the soil. However, some bone was found, and this cannot explain some of the more elaborate grave structures without bone that may be 'cenotaphs' in which stones replace the actual human remains within the tomb. Tomb 136 was a particularly striking example of this kind of cenotaph construction, with a

stone effigy of the deceased replacing the actual body itself. It suggests the pull of ancestral burial places to the Bronze Age communities – and is a tradition that may have continued through nomadic central Asian societies into more modern periods. For example, the enormous effort extended to bury Chinggis Khan in his ancestral lands, and probably ancestral cemetery may be a reflection of these ancient prehistoric practises.

The survey revealed other discoveries. The Kherlen valley lies on the boundary of two Bronze Age cultures, the slab grave culture of Eastern Mongolia and the khirgisuur culture of central and western Mongolia, so it not surprising that examples of both were recorded. The presence of deer stones close to a group of four khirgisuur strengthens the link between the two, recorded elsewhere. These deer stones may be the among the most easterly recorded in Mongolia and is a significant addition to our knowledge about their distribution. The observation that some of the khirgisuur are being cut by builders of rectangular tombs (although not strictly slab tombs) is a further indication of the chronological suggestion in the area. Hunnu occupation is relatively thin in the valley, beyond two recorded fort sites near Mongonmorit. However our suggestion that there may be some Hunnu graves at Horgoryn hooloy is potentially important, and this site is one that deserves further investigation. Turkic graves were located at and this is an important addition to the known distribution of Turkic cultures. Previously, a Turkic site was known only near Mongonmorit, with its characteristic statue-stelae marking a possible burial site. Finally, it is worth noting the particular interesting Buddhist monastery on the river Tenuun. While not as old as other sites, it holds particular historical importance for post 16th century Mongolian history, and warrants further investigation.

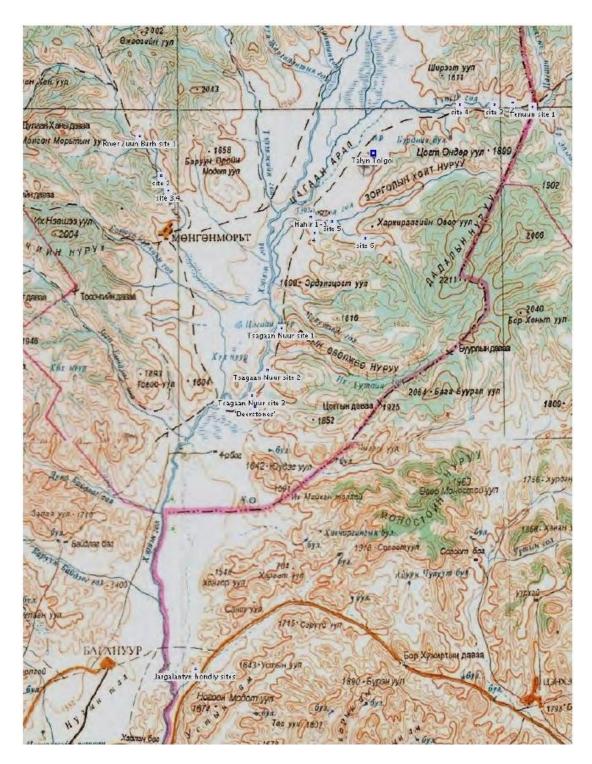


Fig. 1. Map of the Kherlen River Valley, with sites located in the survey marked. Based on Russian survey (1:250,000)



Fig. 2. The low hill of Talyn Tolgoi looking westwards



 $\it Fig.~3.~Slab~tomb~from~Talyn~Tolgoi,~site~C$



Fig. 4. Trench 1 (tomb 94), showing robbing pit and displaced stones

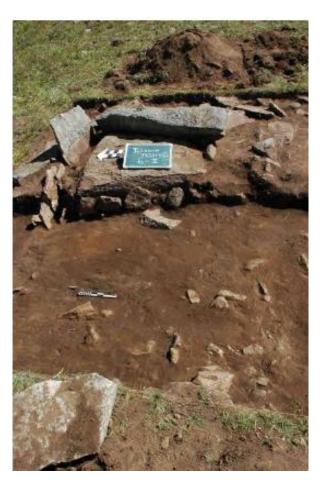


Fig. 5. Trench 2 (tomb 88), showing tomb half sectioned, and to trace of underlyinggrave pit



Fig. 6. Trench 3 (tomb 82) showing upper structure, including the flat stones packing the uprights



Fig. 7. Trench 4 (tomb 129), showing tomb structure, and covering of flat stones



Fig. 8. Substructure of tomb 129, showing internal bed' sealing a spread of red ochre and some burnt wood fragments



Fig. 9. 'Toy ger' found in trench 5, with stones representing elements of a ger.



Fig. 10. Trench 7 (tomb 34), which seems to slab have been disturbed



Fig. 11. Small standing stone found near graves in the Talyn tolgoi



Fig. 12. Trench 9 (tomb 126), showing tomb structure and empty burial pit, note the standing stone at the west end



Fig. 13. Excavation of trench 11 (tomb 136), with planning the upper level of stones



Fig. 14. Excavation of tomb to show internal stone arrangement laid out where the body should have been located



Fig. 15. Close-up of stone arrangement, suggesting anthropomorphic figure

Finds from Talyn Tolgoi



Fig. 16. Possible human remains from Tomb 82



Fig. 17. Part of Chert core, UpperPalaeolithic, unstratified



Fig. 18. Bronze Age pottery from Tomb 82



Fig. 19. Horses teeth from tomb



Fig. 20. Tenuun site 2, looking across the valley in a south-easterly direction



Fig. 21. Modern shrine (1998) on the site of earlier shrine base, in the centre of the much larger monastic site



Fig. 22. Remains of rectangular building



Fig. 23. General view of Zuun Burgh site 1 looking south



Fig. 24. Un-robbed tomb at Zuun Burh site 2



Fig. 25. One of the tombs at Zuun Burgh site 3



Fig. 26. The three deer stones at Tsagaan Nuur site 3, looking north- east. Stone one is to the right, stone two in centre and stone three in the background

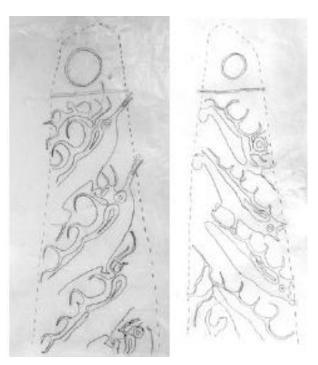


Fig. 27. Face one and two of stone one (original drawing)



Fig. 28. Face one of stone two, and wrap around image on other faces (original drawing)



Fig. 29. Faces of stone three, wrap around drawing (original drawing)



Fig. 30. Tsagaan Nuur site 4. Khirgisuur 1, looking west



Fig. 31. Tsagaan Nuur site 4. Khirgisuur 2, looking south



Fig. 32. Tsagaan Nuur site 4. Possible tomb of the Turkic period



Fig. 33. Tsagaan Nuur site 4. Small Turkic tomb



Fig. 34. Tsagaan Nuur site 4. Row of possible Turkic period tombs, looking south



Fig. 35. Tsagaan Nuur site 4. Khirgisuur 3, with outside circular kerbstone, looking towards
Deerstone site



Fig. 36. Jargalantyn hondiy site 1 looking eastwards



Fig. 37. Jargalantyn hondiy site 2 looking eastwards, with central robbed mound and traces of external kerb