

Title: **Tell Arbid. Adam Mickiewicz University excavations in Sector P (spring season of 2010)**

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# TELL ARBID ADAM MICKIEWICZ UNIVERSITY EXCAVATIONS IN SECTOR P (SPRING SEASON OF 2010)

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**Abstract:** The Adam Mickiewicz University in Poznań three-year excavation project at Tell Arbid, aimed at extensive exploration of post-Akkadian remains, started in 2008, based on a cooperation agreement with the PCMA University of Warsaw. A three-week reconnaissance in 2008 was followed by regular excavations in May–June 2009. During the last field season the Project completed the exploration of identified structures of the post-Akkadian period, emphasizing the northern and eastern parts of the sector. Most of the baulks between the explored squares were now removed. Digging was carried out also in House I of the Middle Bronze period (its late phase had been cleared by the University of Warsaw mission in 1998–2001), and in the Northern Cemetery of the same period, identified in 2008. Documentation of the finds was completed during a follow-up study season, which also included laboratory analyses of various groups of finds.

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Tell Arbid proved a very busy place in the last century of the 3rd millennium as indicated by the outcome of the 2009 season. A vast structure (“Main Building”), featuring two main phases of use, was found to occupy the central and eastern part of Sector P. It comprised a large courtyard with pebbled floor, an extensive room with clay floor and a series of smaller rooms towards the north and west. The western part of the area was occupied by smaller structures (“Extensions”), one of which was constructed adjacent to the

“Main Building”. A foundry seems to have been located in another one. Further to the west, on the slope of the mound above the structures, a pottery kiln was discovered. The structures were accompanied by several child graves, some of which yielded jewelry and ceramic burial gifts.

The post-Akkadian structure was overlaid by remnants of the Middle Bronze/Khabur Ware period [for an overview of site chronology, see *Table 1*]. Houses belonging to this phase were excavated mainly during the University of Warsaw

excavations in 1998–2001 and in 2008 (House 3). In the 2009 season, the Poznań team excavated a number of graves dug into the ground around the houses. Three or four cemeteries could be defined: a northern one composed of two vaulted chamber graves; a western one which included six chamber graves covered by bricks set in a “diamond” pattern and a pot grave; a central one composed of a vaulted

chamber grave, five shaft-and-niche graves, and three pit graves; and finally, a presumed southern one, of which a vaulted grave, two chamber graves, and three pit burials were explored.

The program of the Project’s third and last season in 2010 focused on the most important issues that had arisen from the previous work. With regard to the post-Akkadian period, the northern and

### Team

*Dates of work:* (field season) 8 May–24 June 2010; (study season) 3 July–19 August 2010

*Directors:* Dr. Rafał Koliński, archaeologist (Adam Mickiewicz University in Poznań), Dr. Abdel-Messih Baghdo, archaeologist (Direction of Antiquities and Museums, Hasake)

*Archaeologists:* (*field season*) Michał Krueger (PhD candidate, Adam Mickiewicz University in Poznań), Xenia Kolińska (freelance), Jowan Kassim, Sa’ud Hussain, Fahad Hassan (all three from Direction of Antiquities and Museums, Qamishli); (*study season*) Dr. Łukasz Rutkowski (PCMA), Xenia Kolińska (freelance)

*Architect:* (*field season*) Marcus Markgraf (Technische Universität in Cottbus, Germany)

*Archaeozoologist:* (*study season*) Dr. Joanna Piątkowska-Małecka (Institute of Archaeology, University of Warsaw)

*Documentalists:* (*study season*) Marek Puzzkarski (PCMA), Lorwan Walika (Tell Arbid village)

*Photographer:* (*study season*) Tomasz Tam (freelance)

*Student-trainees:* (*field season*) Filip Bogaczyk, Michalina Dzwoniarek, Dominika Jankowiak, Agata Kuczowska, Alicja Malinowska, Joanna Mardas, Marika Świążkowska (all Institute of Prehistory, Adam Mickiewicz University in Poznań), Hiba al-Qassar (Institute of Archaeology, Damascus University)

### Acknowledgments

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The fieldwork was financed from a generous grant of the Ministry of Science and Higher Education, Republic of Poland (N 109 3983 33) and additional resources were granted by the authorities of the Adam Mickiewicz University, as well as by the Ça ira Ltd. company. The study season was made possible thanks to the generosity of POLKOMTEL S.A. and its Vice-President Mr. Wojciech Dylewski. The support is appreciated all the more in the face of the deteriorating political situation in Syria, which is threatening to make work in Syria in the nearest future difficult, if not impossible.

eastern parts of the Main Building needed to be excavated, once the Khabur Ware-period House I, which covered them in part, was dismantled. Work in the other excavated buildings (“Extension 1” and “Extension 2”) aimed at exploring the full post-Akkadian sequence, down to the top of the earlier, Akkadian remains. The baulks separating squares 36-38/61, 36-38/62 and 37/63 were also removed with the goal of clearing a complete plan of the structures and taking pictures of unrestricted general views [Fig. 1].

Most of the activities in the Middle Bronze Age levels were geared to investigating post-Akkadian remains. This included completing the exploration of some of the baulks, as well as digging in and under Houses I and III in the northeastern part of the sector. Finally, two huge pits of the early Khabur Ware period, one located in square 37/62 and the other in square 37/63, were explored.

The only activity independent of research on the main period of interest comprised probing in the area of the

Northern Cemetery in order to check whether the two chamber tombs discovered there in 2008 were isolated graves or constituted part of a cemetery.

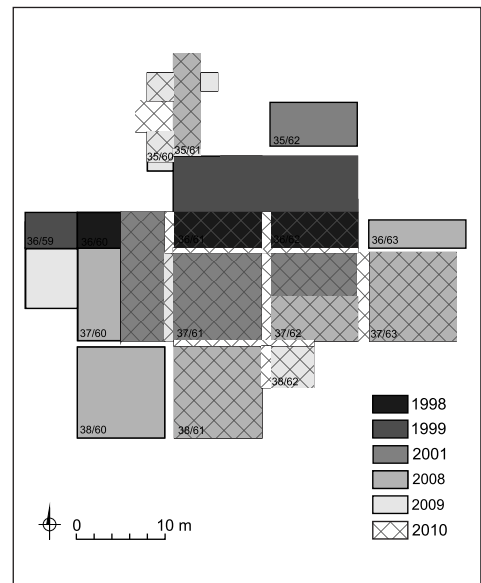


Fig. 1. General plan of Sector P showing areas of activities (Drawing R. Koliński)

Table 1. Overview of site chronology in Sector P on Tell Arbid

Level	Periodization			Conventional date (Middle Chronology)
	Historical	Cultural	Traditional	
VII	Akkadian	Early Jezirah IV	Early Bronze IV	2334–2150 BC
VI–IV	Post-Akkadian	Early Jezirah V	Early Bronze V	2150–2004 BC
III	Old Assyrian	Old Jezirah I	Middle Bronze I/ Early Khabur Ware	2000–1800 BC
II	Old Babylonian	Old Jezirah II	Middle Bronze II/ Khabur Ware	1800–1700 BC
I	Late Old Babylonian	Old Jezirah III	Middle Bronze III/Khabur Ware	1700–1500 BC

## KHABUR WARE/OLD JEZIRAH PERIOD

## NORTHERN CEMETERY

Two vaulted chamber graves (G1 and G2/35/61), discovered in 2008 and explored in 2008 and 2009, seemed to be isolated structures, unlike others of their kind, which at Tell Arbid always constituted the core of a small cemetery composed of diverse kinds of graves (Wygnańska 2011: 608–609). A similar situation was suspected in the Northern Cemetery, despite there being no other graves in a N–S oriented trench dug in square 35/61 in 2008. A zone 4 m wide was now excavated immediately to the west of the 2008 trench, in square 35/60.

A fragmentary mud-brick wall encountered in the westernmost part of the new trench, close to the surface, necessitated an extension of the cut 2 m one way and 3.50 m the other way in order to cover at least part of the newly identified building [see *Fig. 2*]. The discovered remains belonged to a small structure (approximately 2.50 m wide). The east wall was built of mud brick and it joined two walls at right angle to it, of which only the foundations made of tamped earth were preserved. The entrance to this room (Locus 9/35/60) was located in the east wall and provided with a stone door-socket on the inside. This structure corresponded to a small bread oven, discovered in 2009 on a similar level only 2 m to the south (Trial Pit 1). Although the structure did not yield any dated pottery, its stratigraphic position, on top of horizontal deposits sealing entrances to the shafts of graves belonging to an OJ II period cemetery, suggested an OJ III date.

The horizontal deposits, about 0.55 m thick, under Locus 9 covered a hard natural surface, which the grave shafts of the northern cemetery had been dug into. This surface appeared to correspond to the surface of the tell during the OJ II period. This original surface was pierced by extensive, rectangular pits accommodating chamber graves G1/35/61 (Locus 3) and G2/35/61 (Locus 8). However, some smaller pits were observed as well, namely rectangular pits (Loci 4 and 13) and circular ones (Loci 11 and 14), and yet another rectangular pit (Locus 15) observed later in the southern part of the new trench [see *Fig. 2*]. Most of these pits turned out to be grave shafts.

The only exception was Locus 11, a round pit roughly 1.40 m in diameter and 1.60 m deep. It contained fragmented human bones, belonging to an adult person,<sup>1</sup> dispersed in the fill. The pit appears to have been a robber's effort to uncover a chamber grave (for instance G2/35/61, which is close by), which was abandoned when it proved missed and then was filled with earth coming from another pit that did hit a grave. This would explain the presence of human bones in the fill.

Altogether, four graves were identified and explored in the Northern Cemetery in 2010 (G3–6/35/61): two chamber graves with the “diamond-pattern” ceiling (G4 and G6) and two other child burials in jars (G3 and G5). A small fragment of the outline of another grave pit was observed in the south trench wall (Locus 17), but could not be excavated.

<sup>1</sup> Anthropological examination by Dr. Arkadiusz Soltysiak (University of Warsaw). For a preliminary report, see Soltysiak, Koliński 2012.

Grave G3/35/61 consisted of a rectangular shaft, approximately 1.00 m by 0.80 m, and about 0.80 m deep. At the bottom of the shaft, a large clay vessel was lying on its side with the mouth turned west and blocked by a vertical brick. The jar filled the shaft almost completely. Inside the jar there were the bones of an infant less than one year of age, lying in a crouched position, head pointing to the east. The body was accompanied by two miniature

jugs with painted, banded decoration and a set of eight beads and two shell rings.

The shaft leading to another child grave (G5/35/61) was approximately 1.50 m in diameter and the grave itself was arranged differently. A shallow niche was sunk into the southern part of the shaft wall. The rim of a large vessel was inserted into this niche, but most of the body rested inside the shaft. The pot had been broken prior to deposition in the grave and the

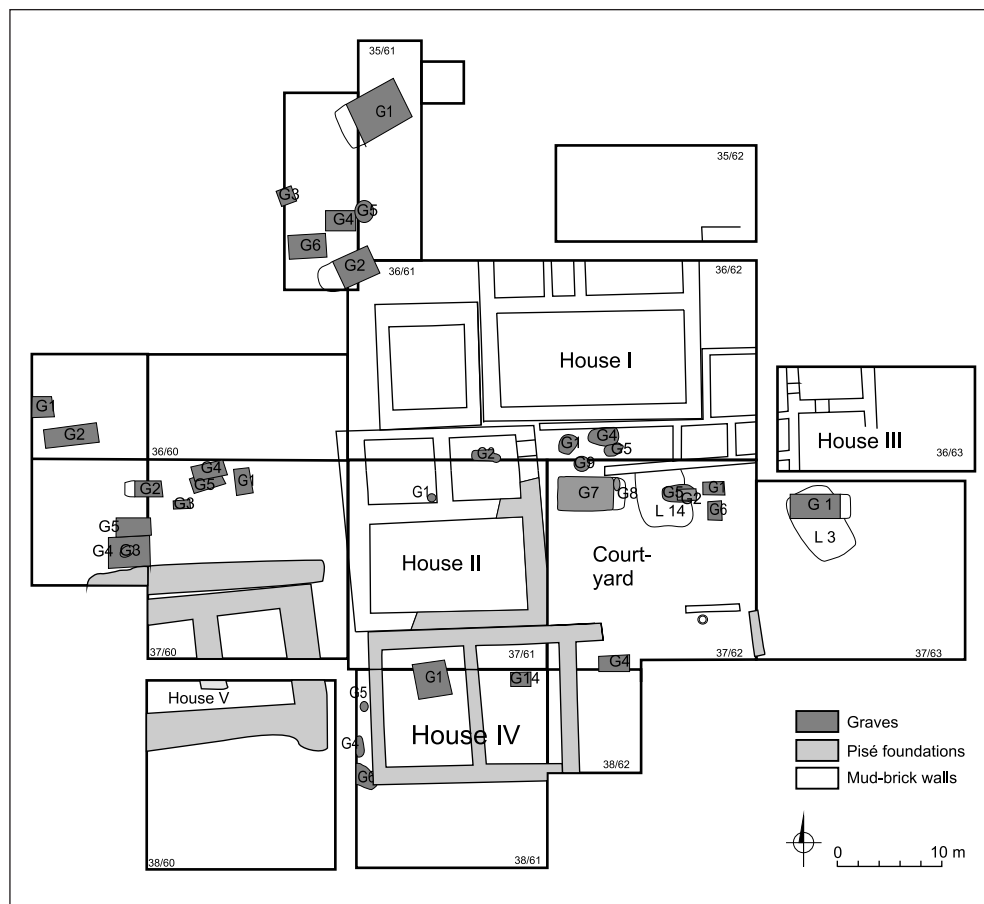


Fig. 2. Distribution of graves and structures belonging to the Khabur Ware period (Drawing R. Koliński)

missing part of its lower body and base was covered from the top and side with dried bricks. The vessel contained bones of a child of approximately three years of age, lying in a crouched position, head pointing east. The body was accompanied by a single bead of dark grey stone.

Grave G4/35/60 was exceptional in having a small chamber grave constructed of bricks at the bottom of the grave pit (the latter measuring 1.80 m by 1.00 m). Its size corresponded to the height of the deceased, a child of approximately three years of age. At Arbid, children of this age group were usually buried in a pit or shaft grave, most often in a clay vessel; in this case, however, a proper chamber grave with a “diamond-patterned” ceiling was constructed. The chamber was indeed small, as its ceiling consisted of seven bricks only; they were found in place, resting upon the side walls of the chamber [Fig. 3, bottom left and schematic drawing]. The child was deposited in a crouched position, its back along the south wall and head towards the east. The child wore two bronze bracelets on its forearms and was furnished with one small, banded juglet, probably placed in one of the hands, and a larger painted, banded jar laid on its side in the western part of the chamber. Moreover, animal bones belonging to a young sheep or goat<sup>2</sup> were discovered in the northeastern corner of the chamber; they constituted remnants of a meat offering, which is typically present in chamber graves at Tell Arbid. One cannot but wonder why a child that would have been typically buried in a vessel placed in a pit/shaft was deposited in a grave used nearly exclusively

for adults and was moreover accompanied by a meat offering normally reserved for adult burials. On the other hand, it seems to have been treated like any other member of the *Infans* age group in other respects: it was furnished with a small painted juglet among the grave gifts and was provided with a set of two bracelets, of a kind known only from another child grave (G6/37/62).

Grave G6/35/60 was particularly interesting because of the form of the roof. The grave pit itself had different proportions than the other chamber graves, measuring approximately 1.70 m by 1.25 m, and it soon turned out that the chamber was much wider than was the case in typical adult graves from Tell Arbid and that instead of a single row of bricks, it was covered with three rows of bricks arranged in the characteristic “diamond” pattern. This exceptional construction was formed of two parallel rows of bricks, the outside corners of which rested on the side walls of the chamber, while the third row was set on top of the first two, locking them in position [Fig. 3, bottom right and schematic drawing]. This allowed for a much wider chamber, up to 0.90 m in comparison to a mere 0.50 m in the case of the graves covered with a single row of bricks. This exceptional kind of roof is known from another example from Tell Arbid (Sector W, grave discovered in 2010, but not explored, P. Bieliński, personal communication), from Chagar Bazar (grave T270, Ö. Tunca, personal communication) and possibly grave T29 from Tell Mozan Area C (A. Wissing, personal communication). Grave G6/35/60, which was entered apparently from the west,

<sup>2</sup> Animal bones from the graves (as well as those from the settlement) were studied by Dr. Joanna Piątkowska-Malecka (University of Warsaw).



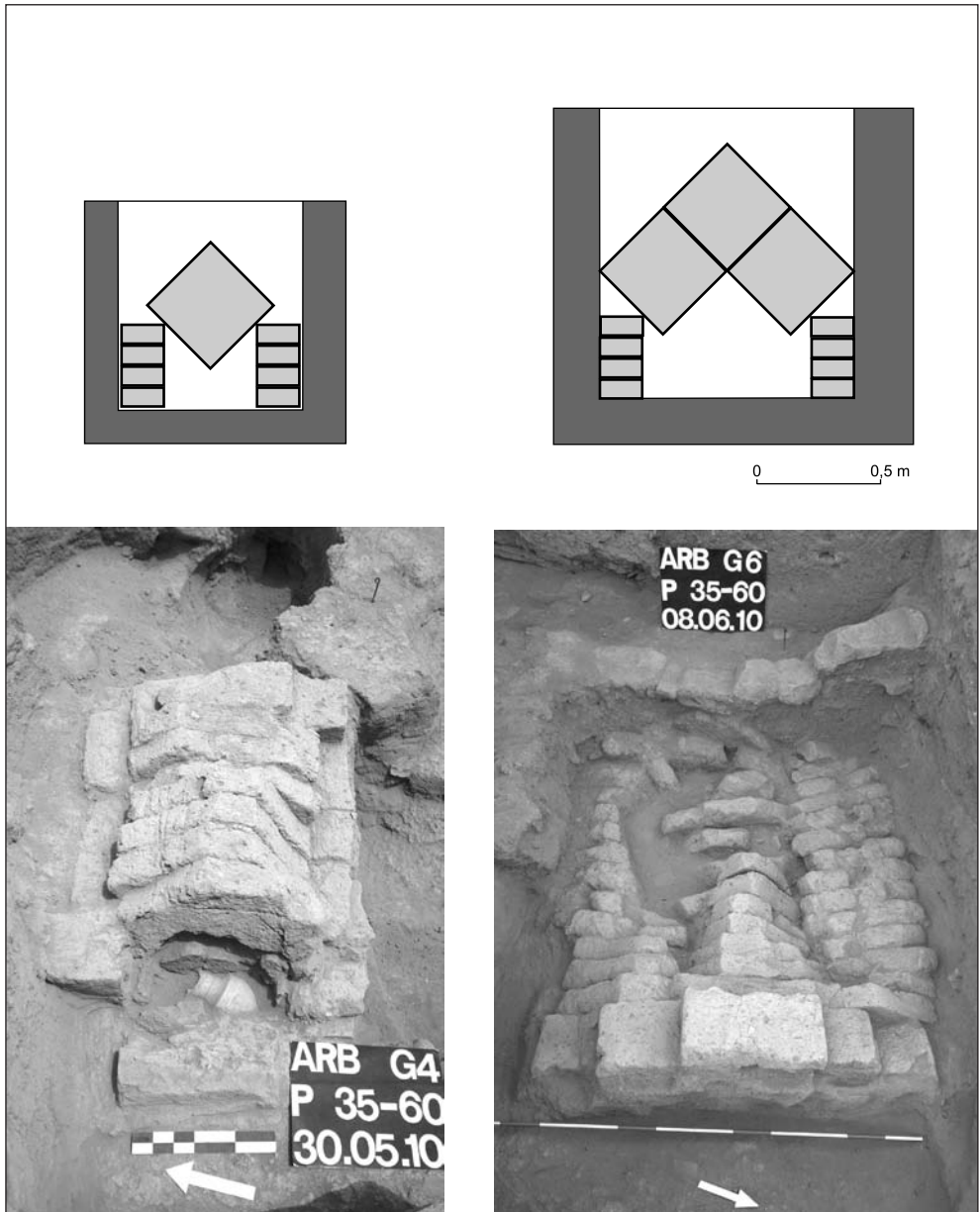


Fig. 3. Khabur Ware-period chamber graves with “diamond-patterned” roof: graves G4/35/60 (bottom left) and G6/35/60 (bottom right) from the Northern Cemetery; schematic section through the roof with one (top left) and three (top right) rows of bricks (Drawing and photos R. Koliński)



contained a well-preserved skeleton of a 40 to 50 years old female. The body was laid in a crouched position along the north wall of the chamber, the head pointing to the east. Remains of an offering identified as sheep meat were beside the body. The body was accompanied by a single bronze pin with nail head and had a bronze ring between the right hand and the skull. Two vessels accompanied the deceased; they were standing by the feet, in the entrance to the chamber. One of these, a fine-ware pot has a horizontal grooved band on the body, while the other, a jar lacking the rim and upper part of the neck, which were broken off in antiquity, has a decoration of painted triangles, reminiscent of “Early Khabur Ware” pottery, discovered in considerable quantities in other parts of Sector P.

Completed exploration of the chamber of Grave G2/35/60-61, the eastern part of which had been excavated in 2008, revealed it to be nearly empty. There was a cracked painted pot standing in the southwestern corner of the chamber, close to the entrance (the missing fragment of the rim was found in the material from 2008, allowing for a full reconstruction of the vessel), a few animal bones (belonging to a small ruminant) as well as a few human bones from the foot of an adult. The grave had apparently been robbed and the only vessel discovered in it had been left behind presumably because it had smashed.

The pit of grave G1/35/60-61, investigated in 2009, was observed to cut into a structure, most likely a pottery kiln from an earlier period of activity at the site (Locus 24/36/60). In 2010, the remains of this kiln were fully excavated, but it turned out that its northern part had been damaged by the pit of G6/35/60. The kiln, of which only part of the firing chamber remained,

was round and relatively small (its diameter did not exceed 1.30 m) [Fig. 5]. Its walls were made of a layer of clay burned during use (the clay was most likely used to line the sides of a pit dug to serve as the fire chamber). However, two clay-plastered mud-brick pilasters constructed on the opposite sides of the pit presumably served to support the lost grill of the kiln. Air channels to the firing chamber were formed in the clay on both sides of these pilasters. The kiln was most likely open to the north (this opening was lost). The combustion chamber was filled with a thin deposit of light grey ashes, covered with a much thicker layer of burned fragments, the latter probably originating from the upper parts of the walls. Two complete miniature jars were discovered in the rubble, one bearing irregular painted decoration, along with a few sherds representing shapes and decoration typical of “Early Khabur Ware” pottery [Fig. 4].

Another oven was cut by the pit of chamber grave G2/35/60-61. Its nature, size and date could not be determined because of limited exposure, but it seems that the sequence observed in the area of G1/35/60-61 is repeated here. Moreover, numerous fragments of burned clay resembling those coming from the oven walls were discovered about 4 m to the south of oven 24/36/60. Consequently, it seems that there were at least three, if not more, pottery kilns located in this area. The sherds discovered in the only explored kiln, as well as the relatively high number of “Early Khabur Ware” sherds retrieved from the ashy levels into which the graves of the Northern Cemetery were dug, suggested that this area was used for pottery production some time before it was turned into a graveyard during the OJ II period.



Fig. 4. Khabur Ware juglets discovered in the fill of a pottery kiln (Locus 24/36/60)  
(Photo T. Tam)

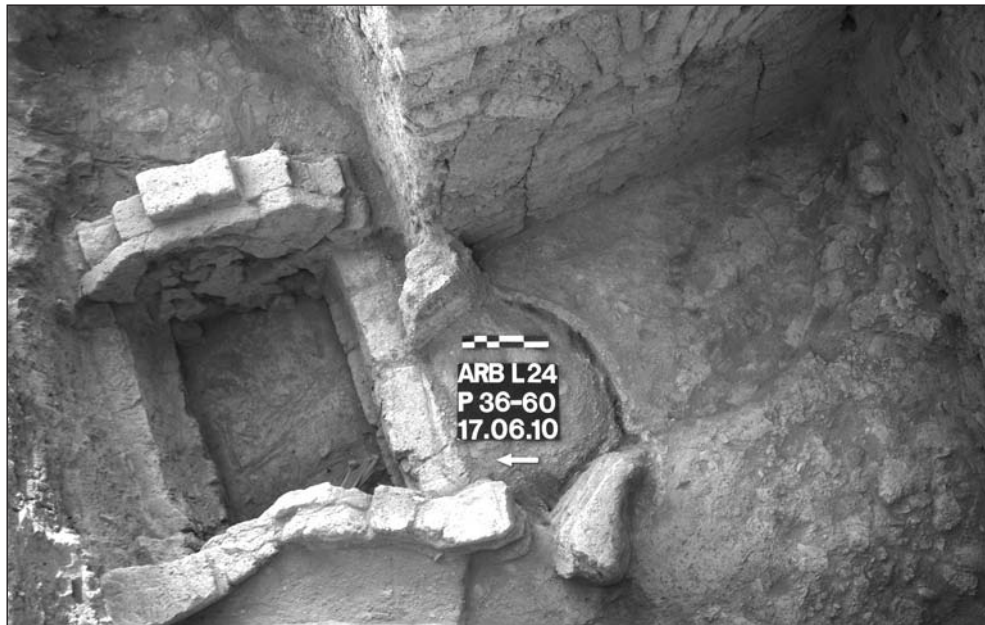


Fig. 5. Remains of an Old Jezirah I period pottery kiln (Locus 24/36/60) damaged by the pits of graves  
G1/35/60-61 and G6/35/60 (Photo R. Koliński)

The last phase of occupation in this area occurred clearly some time after the cemetery had been abandoned, when a new structure was built on top of it (Locus 9/35/60) and some smaller structures around it. It was probably during this period, or slightly earlier, that chamber graves G1 and G2/35/60-61 were robbed.

### HOUSE I

Post-Akkadian levels could not be reached in squares 36/61 and 36/62 owing to the complicated stratigraphic situation in the area of the OJ II period Houses I and III. Instead, an earlier phase of the OJ II settlement and remains dating to the OJ I period were revealed.

Walls belonging to Locus 1/36/61, which was a later addition to House I, were dismantled now, as were the walls and floors of the same period discovered earlier in Loci 2/36/62 and 14/36/62. It turned out that the largest room, Locus 2, remained in continuous use, whereas Locus 14 and adjacent court 22 were built in a later phase (Koliński 2011a: Fig. 2). Mud-brick walls forming the outline of three small rooms appeared in the underlying layer. It became clear that the original layout of House I resembled that of Houses II and V. It was a square structure of just below 10 m length, with one large rectangular room filling the southern part and two smaller rooms in the northern part, one of which was later divided by a partition wall [see Fig. 2]. The floors in these rooms corresponded to the lowermost floor of Locus 2. A rectangular oven was discovered on the floor in Locus 18 (square 36/61), which constituted the northwestern corner of the house.

An approximately 0.10 m thick layer of ashy earth was discovered under the walls of Locus 1. It covered mud-brick

walls belonging to another room from an early phase of the settlement. It was slightly smaller than Locus 1 and had no connection with House I. A sequence of flat hearths of clay was featured on the floor of this unit.

### HOUSE III

House III, which extended into square 36/63, was exposed for the most part in the area located south of House I, underneath Locus 6 of the late settlement phase [see Fig. 2]. The remains were hidden partly under the walls of the said room and partly in the baulk separating squares 36/62 and 37/62. Two rooms forming the western wing of House III were unearthened. The one on the west, furnished with an oven, was Locus 30, the one on the east Locus 31. The entrances to these rooms were not identified and it is not clear how they functioned within the whole complex. The north wall of these rooms was observed to stand on uneven ground with a marked depression over the location of an earlier (OJ I) pit. The wall of House I, which was built against the already existing House III, was set on a higher level, on ashy layers deposited against the walls of this House, which entirely covered the earlier depression. There is no doubt that House III was built considerably earlier than House I, and could be, in fact, the earliest house constructed in the area.

### OTHER GRAVES FROM THE OLD JEZIRAH PERIOD

Among the Old Jezirah period graves discovered in the baulks of the southern part of the sector, which were removed this season, three deserve special mention. Grave G9/37/62 from the Central Cemetery was a pit grave containing the body

of a child of approximately three years of age, deposited on the bottom of a round pit. The body was accompanied by a single pot and 20 stone beads; a ring made of an unidentified, whitish metal was found on a finger [Fig. 6].

The excavation of grave G4/37/62, which had been protected when it could not be explored in full in the 2008 season, was now completed. The trapezoid chamber had internal dimensions of 1.70 m by 0.90–1.05 m. There is no clue as to how the chamber was covered. The southern part of the chamber contained several child skeletons; anthropological analysis established the number of individuals at seven. The oldest was about 10 years of age and three more or less completely preserved skeletons belonged to children of three, two and between two and one years of age. The remaining individuals (an adult

and two other children) were represented by a few bones or teeth only. All the buried individuals seem to have been lying on the right side, in a crouched position, observing an east–west orientation [Fig. 7]. The dead were provided with seven miniature painted vessels (six juglets and a “grain measure”), as well as eight beads of stone.

The northern part of chamber grave G1/38/61, which was fully excavated after the removal of a baulk between squares 37/61 and 38/61, did not reveal any finds of interest, apart from some fragmentary human bones and pottery sherds, which may have found their way into the grave after the roof of the chamber had been destroyed. Clearing of the north wall of the chamber demonstrated that the grave was of a vaulted-chamber type, but, in contrast to other chamber graves discovered at Tell Arbid, its orientation was north–south

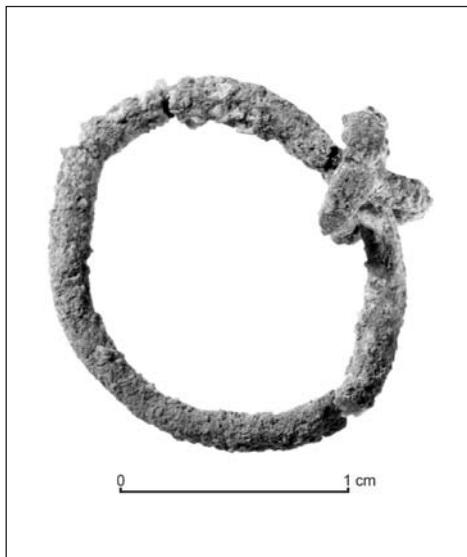


Fig. 6. Ring of unidentified metal from Khabur Ware-period grave G9/37/62 (Photo T. Tam)



Fig. 7. Khabur Ware-period grave G4/37/62 (Photo R. Koliński)



rather than east–west. Moreover, no trace of a shaft was observed on the north, which strongly suggests that the entrance to the chamber was located on the south. The only grave following this orientation is G1/37/60, excavated in 2001, constituting the topmost burial in the Western Cemetery. In consequence, the two graves, as well as grave G3/36/62, which cut into a wall of House I, should be taken as the latest of the Old Jezirah period series of burials. Thanks to the discoveries in square 35/60 (see above) they can be related presently to a settlement phase represented by Locus 9/35/60 and tentatively dated to the OJ III period.

The last grave to be discussed was discovered in square 37/63 and probably formed an isolated burial, possibly related to House III. A large area of disturbed Khabur Ware-period remains had been identified in the northwest part of the square already in 2008. The disturbance now turned out to be due to a large, rectangular pit measuring 2.70 m by 1.80 m and oriented east–west. The size and the orientation of the pit were reminiscent of a chamber grave, a perception corroborated once a perpendicular wall of brick was found in the eastern part of the pit under approximately 0.45 m of ashy fill, dividing it into a shaft (on the east) and a chamber (on the west). The shaft, which was only 0.60 m wide, contained at the bottom a single painted Khabur Ware vessel. The presence of a retention wall and of the shaft indicated a vaulted chamber grave, but it turned out to have a “diamond-patterned” roof [Fig. 8, top left], despite being used in a manner typical of barrel-vaulted chamber graves. The chamber was relatively high (approximately 0.70 m) and contained four skeletons of adults, three of which were

pushed to the far end of the chamber, while the fourth one was found in anatomical position close to the entrance, the head to the west, looking north. The last buried individual was 30–35 years of age and most likely a female. The grave goods discovered within the chamber included a bronze spearhead, three nail-headed pins, two pottery vessels and four beads [Fig. 8, top right]. Several features of this grave, that is to say, the presence of multiple burials, a shaft with a vessel deposited inside it and weaponry among the burial gifts, provided a strong indication that there was no functional difference between vaulted chamber graves and chamber graves with “diamond-patterned” roofs.

#### OLD JEZIRAH I REMAINS

Old Jezirah I remains were encountered mainly in the southern part of the sector, where a small fragment of a wall, a bread oven and two large rectangular pits were identified already in 2008 and 2009 (Loci 14/37/62 and 3/37/63, respectively) [see Fig. 2]. One of these pits was partly explored in 2009 (Koliński 2011a: 312–313; 2012c). The pits continued to be explored in 2010 and a pottery kiln from the same period was found in square 36/60 in the course of this season’s work (see above). Structural remains identified in the dismantled baulk between squares 37/62 and 37/63 included a fragment of *pisé* wall, probably corresponding to a wall discovered in 2009 in square 37/62, and a surface reinforced with flat-lying sherds. However, most of the OJ I pottery material came from pit Locus 14/37/62, partly explored in 2008, and from another pit, very similar in dimensions and fill composition, identified in square 37/63 (Locus 3). The considerable number of pottery sherds

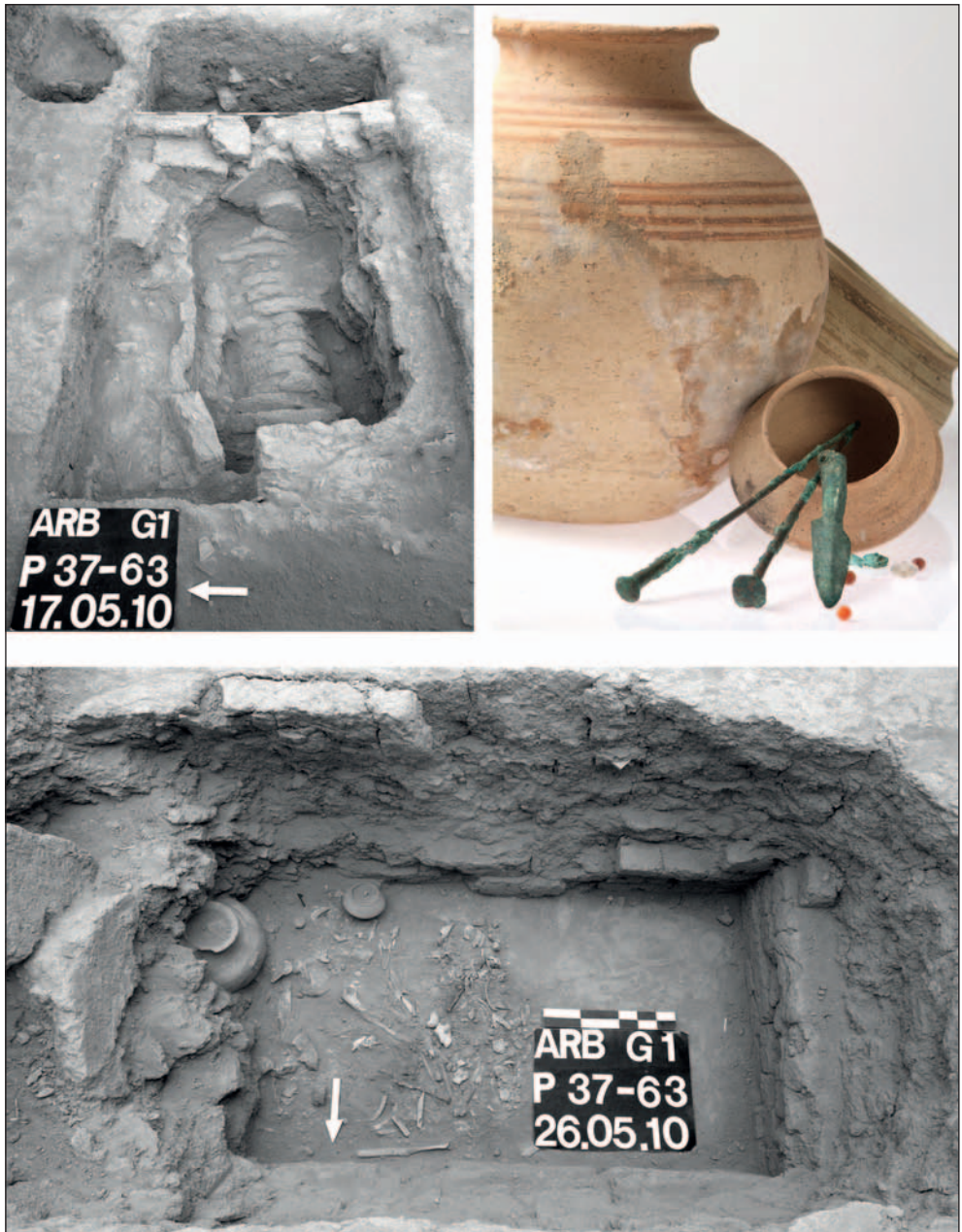


Fig. 8. Khabur Ware-period chamber grave G1/37/63: general view of the “diamond-patterned” roof (top left) and the burial inside the chamber (bottom); set of burial gifts from the grave (Photos R. Koliński, T. Tam)

retrieved from both pits represented the second known Old Jezirah I or “Early Khabur Ware” pottery assemblage from

Northern Syria and corresponded quite closely to the one discovered at Tell Barri (Baccelli, Manuelli 2008).<sup>3</sup>

## POST-AKKADIAN PERIOD

### MAIN BUILDING

Nearly the entire area covered by the Main Building was investigated during the 2010 season. The removal of the western, northern, and eastern baulk separating square 37/62 from neighboring squares uncovered a substantial part of the remains

and permitted a much more complete plan of the building to be drawn [Fig. 9].

After the removal of the western baulk, the remaining part of Locus 24 was cleared, revealing a large storage jar standing in the eastern corner of the chamber. The vessel was placed in a small

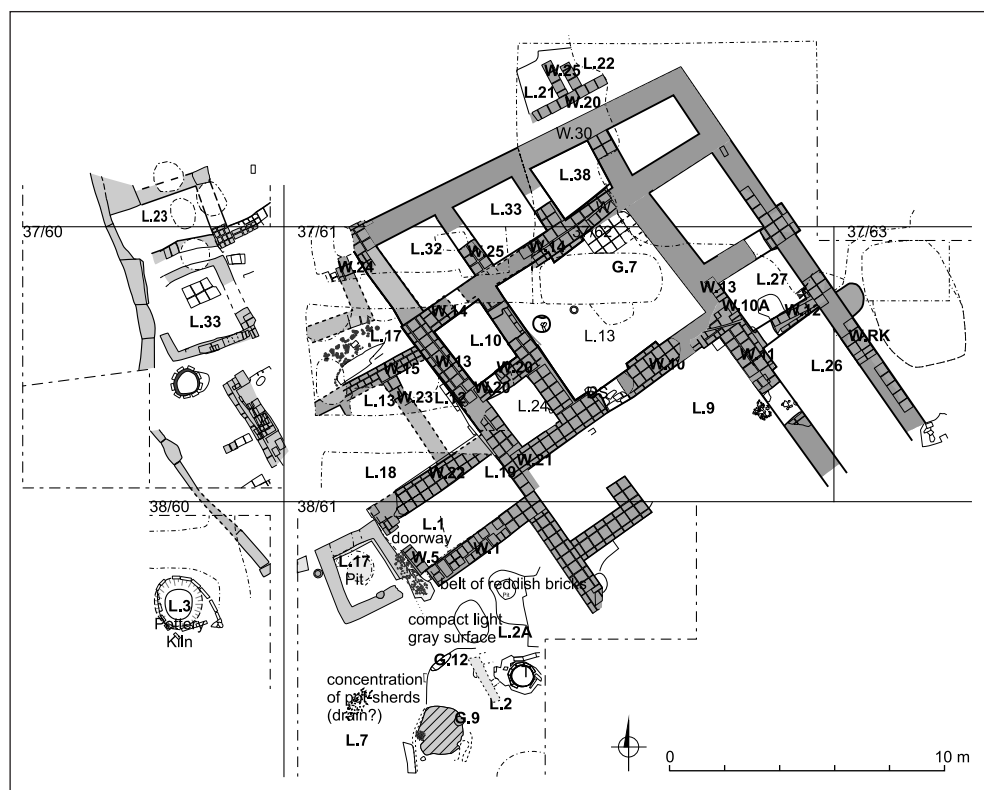


Fig. 9. Reconstructed plan of the early phase of the post-Akkadian Main Building showing contemporary structures (Drawing M. Puzkarski and R. Koliński)

<sup>3</sup> For an overview of the “Early Khabur pottery” material, including the Tell Arbid collection, see Koliński, forthcoming.



enclosure of upright bricks and was most likely a permanent installation. It bore three semicircular impressions on the shoulder, but the relation, if any, between this marking and the capacity of the vessel (it measured 138 liters) could not be ascertained as there does not appear to be a clear correspondence to any known volume unit. The presence of the storage vessel confirmed an earlier assumption that the room had been used for storage.

The removal of the northern baulk and of the northern part of the western baulk revealed another part of the main hall of the Building (Locus 13/37/62). The topmost floor of the room, which was

cleared to the north and to the west of the pit of the OJ II chamber grave G7/37/62, was nearly devoid of material, in contrast to the southern part of the chamber, which had yielded numerous finds in 2009. Even so, there were the remains of various installations: a circular oven (*tannur*) fronted by a pavement of rectangular bricks and, to the east, a buttress in the north wall of the room. At first, it seemed that the entire floor had originally been paved with mud bricks, but their presence could not be traced in other parts of the room. Consequently, the bricks were interpreted as part of a wide bench or platform stretching along the wall. The northeastern corner

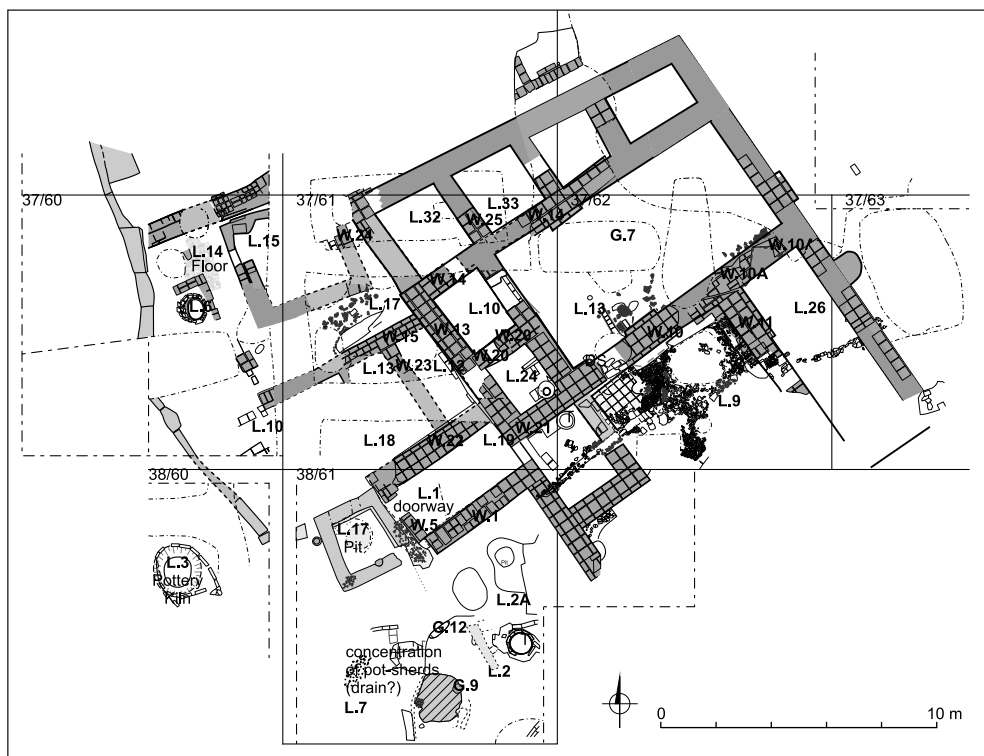


Fig. 10. Reconstructed plan of the late phase of the post-Akkadian Main Building showing contemporary structures (Drawing M. Puzkarski and R. Koliński)

of the main hall was entirely destroyed by later pits; the same could be said of the northern series of rooms, cleared partly in square 37/61 and in the westernmost part of square 37/62. It seems that four small rooms were located here, communicating through doorways in the north–south walls (two such doorways were identified in Loci 33 and 38, in square 37/62).

Removal of the eastern baulk of square 37/62 cleared the eastern part of the structure. Despite apparent damages, there is evidence for another series of small rooms, running from the missing northern corner of the building towards the southeast. At least two rooms were attested (Locus 26 and 27 in square 37/62), but the presence of another room, although entirely destroyed, may be surmised from the reconstructed plan. The rooms differed in dimensions, Locus 27 being the smallest, and Locus 26 the biggest. The western corner of the Main Building turned out to be destroyed by slope erosion.

The west wall of the courtyard of the Main Building, including a passage from the courtyard to the structure referred to as Extension 1, was covered by a short baulk between squares 38/61 and 38/62, but no trace of the southern perimeter wall of the courtyard was discovered. Consequently, there is no means of reconstructing the exact extent of the Main Building in its southern part.

A significant episode of reconstruction of the Main Building was observed. The courtyard level was raised and the layout of the main hall (Locus 13/37/62) changed, including new passages inside and rainwater drainage. During the older phase, the Main Building was composed of a rectangular courtyard, 8.70 m wide, paved with pebbles (Locus

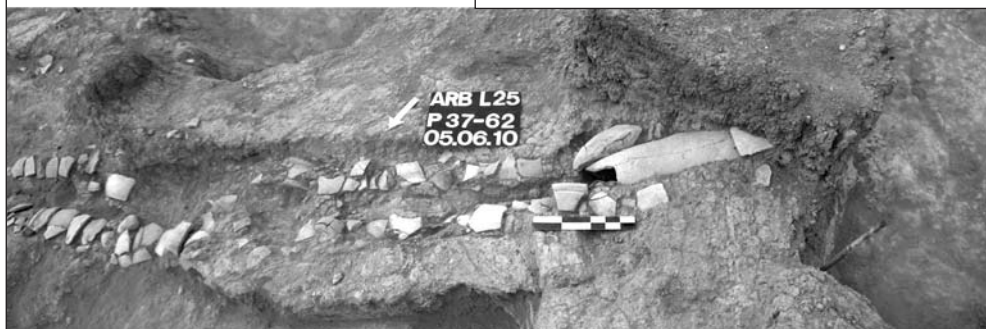
9/37/62), a square main hall measuring approximately 5.55 m by 5.00 m (Locus 13/37/62) and nine small chambers of various dimensions, distributed to the west, north and east of the main hall [see *Fig. 9*]. The entrance to the complex has not been identified; it was located most likely in the south wall of the courtyard, which has been eroded away in its entirety. Two entrances led to the building. A bigger one, 1.05 m wide, provided with a threshold of large stones coated with clay and a large door socket of white stone, led to the main hall (Locus 13/37/62), while a smaller one, located in the northeastern wall of the courtyard, with a threshold of plastered small stones, led to the largest of the side rooms, Locus 26/37/62. The main hall had no other doorway, therefore it seems very likely that all the small chambers communicated via a series of small doorways, starting with Locus 26/37/62 in the east and ending in Locus 24/37/62 in the west (traces of such doorways were identified in all the extant division walls of these small rooms). In the younger phase, the main hall of the Main Building was extended eastward by means of incorporating the former small chambers located in the eastern wing of the building [*Fig. 10*]. The extended Locus 13/37/62 was 5 m wide and 8.90 m long. The extension of Locus 13 induced changes in the communication within the building, as the small rooms in the north and in the west became separated from the entrance located in the western wing. A new entrance was cut out in the west wall of Locus 13, leading to Locus 10/37/62, which now served as a vestibule allowing entrance to a storeroom (Locus 24/37/62) towards the south and four rooms in the north (Loci 32, 33, 38 and an entirely

destroyed chamber located in the northern corner of the structure). Slightly enlarged, Locus 26/37/62 became the only room in the eastern wing of the structure accessed from the courtyard, as in the former phase. However, the character of the room seems to have changed. An open water channel running across the room precluded its use as a storeroom. It is therefore surmised that it was used as a stall for animals.

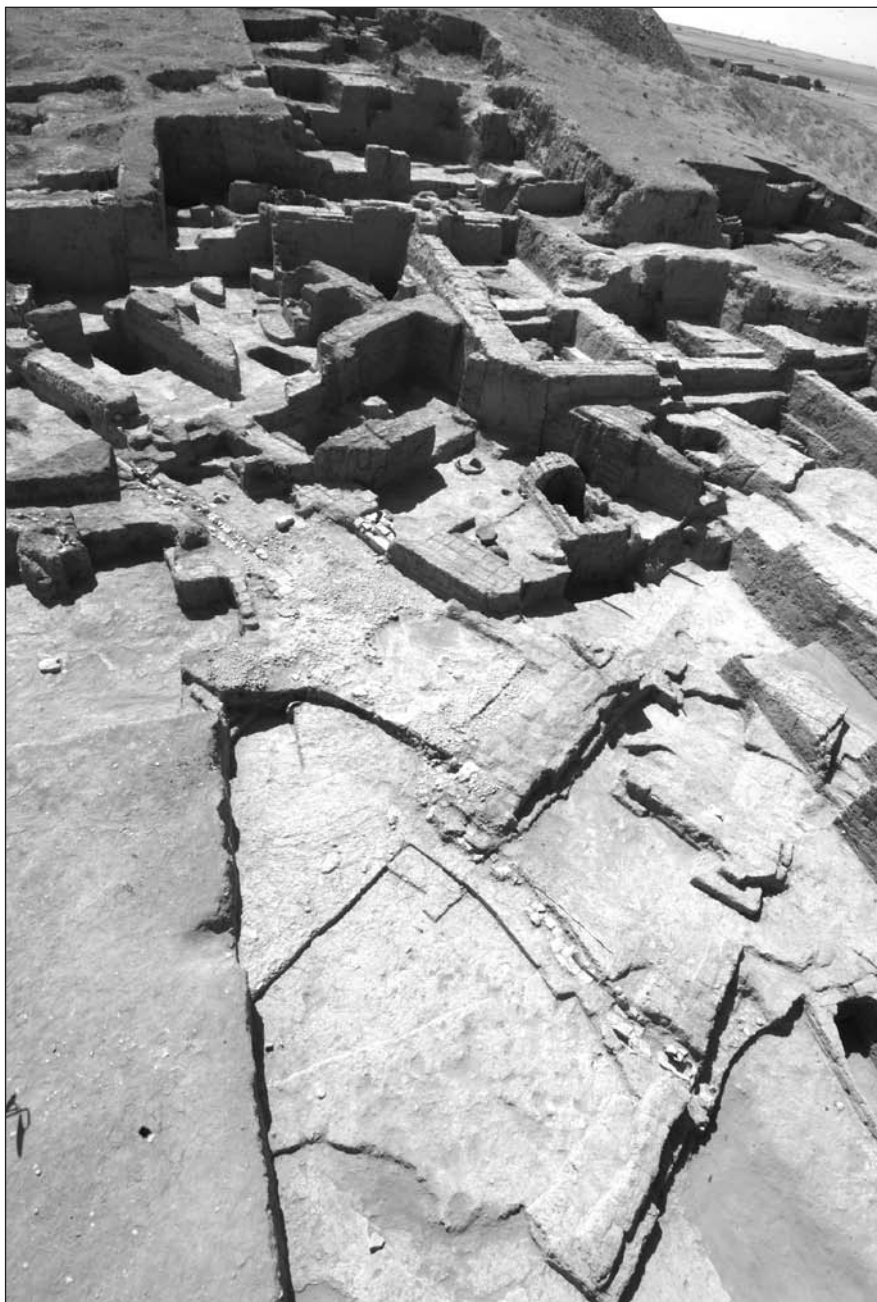


There were changes to the courtyard located in front of the structure as well. The old pavement was covered with an approximately 0.20 m thick layer of clay. A new pavement was laid on top of it, composed of pebbles (as in the earlier phase) and occasional larger stones. However, baked bricks were used in front of the entrance to Locus 13, forming a rectangle measuring 1.40 m by 1.00 m. The doorway leading to Extension 1 was blocked with bricks, and the western end of the courtyard was cut off by a high bench made of clay. The compartment (Locus 25/37/62), which was thus formed, accommodated a bread-oven constructed against the wall of the Main Building. In the final building stage, two low clay benches were constructed along the north and east walls of the courtyard.

A water evacuation system constituted a peculiar installation connected with the rebuilding of the complex. It ran through the Main Building, from an open area to the west of it down to a similar area to the east [see *Fig. 10*]. Part of this system was made up of terracotta pipes, approximately 1 m long and 0.20–0.25 m in diameter, which crossed the west wall and



*Fig. 11. Terracotta pipes running across the west wall (top) and the east wall of the post-Akkadian Main Building (Photos R. Koliński)*



*Fig. 12. Open water channel lined with stones and pottery fragments and pebble-paved courtyard of the Main Building (Photo T. Tam)*



the eastern perimeter wall of the Main Building [Fig. 11]. A third pipe was placed under the threshold of a doorway leading from the courtyard to Locus 26/37/62. The remaining part of the water evacuation system took on the form of an open channel lined with stones and sherds. The first section of this channel led through a household compartment cut out from the courtyard (Locus 25/37/62) and discharged onto the pavement covering the courtyard. The second part of the channel was uncovered in Locus 26, where it ran from a pipe located under the threshold to the pipe set in the east wall of the Main Building, allowing water to be discharged into the open space located there [Fig. 12]. This installation apparently drained rainwater from the open areas to the west of the Main Building and flowed down the eastern slope of the tell. The builders of the later phase of the Main Building apparently took precautions to avoid the risk that running water poses to mud-brick architecture.

#### EXTENSION 1

The Extension 1 structure had been partly destroyed by two later graves (G7 and G10/37/62, see Koliński 2012c), but an undisturbed section of locus 18/37/61 survived, as it turned out, under the western part of the baulk between squares 37/61 and 38/61. It featured a tamped earth floor with many fragments of a large storage vat lying on it (all the fragments belonged to the same side of the vessel, therefore it was possible to reconstruct its shape and full height).

This structure had been built when the outer walls of the Main Building were already standing, but the use of bricks of the same color and format and

of the same kind of mortar for the two structures suggests that the two were raised at the same time or very shortly one after another, as elements of the same functional complex. Two main phases of use were attested solely in the southern part of the building. The original phase was connected with the courtyard of the Main Building by a doorway opening in the east wall of Locus 1/38/61. There seems to have been no other doorway and the locus was used independently from the other three chambers of this structure (Loci 12, 13, and 18/37/61). Closely related to this structure was a small compartment enclosed by low fencing made of clay (Locus 3A/38/61) which may have supported a light structure of perishable materials, serving to protect an opening leading to a substantial bell-shaped pit located in the centre of Locus 3A (Locus 17/38/81) [see Fig. 9]. The pit, with a round opening only 0.85 m in diameter, was 2.40 m deep, and 1.50 m wide at the bottom, which accounts for 4.80 m<sup>3</sup> in volume. If the pit was used for grain storage, which seems quite likely, it could hold 4800 liters of grain, an amount which, assuming rations of a liter per person per day or a sowing ratio of 90 l/ha (see Reculeau 2011: 129–130) would suffice to feed 13 persons for a year or to seed 50 hectares of fields respectively.

In the later phase, the pit was filled with earth containing a considerable number of large pottery sherds and the clay walls enclosing it were leveled, and partly covered by a surface of small worn sherds. A new doorway to Locus 1/38/61 was made in the west wall of the chamber (the original one, leading from the courtyard of the Main Building, was blocked in this phase) [see Fig. 10].

## EXTENSION 2

Work in the area of the structure referred to as Extension 2 started with removal of a substantial block of *pisé* foundation belonging to the Khabur Ware-period House V. The pit of this foundation destroyed the topmost post-Akkadian phase (corresponding to the later phase of the Main Building) but did not reach earlier remains. The most important discovery in this area was a well-preserved clay oven (Locus 39/37/60) [Fig. 13]. Its dimensions and structure (walls of burned clay, 2–3 cm thick, supported on the outside by two rows of vertically set half-bricks) are very similar to those of two large ovens discovered in previous seasons (Locus 6/37/60 and Locus 14/38/61) [see Figs 9 and 10]. Oven Locus 39/37/60

was found outside of a supposed foundry discovered in 2009 (Koliński 2012c: 554) and it is very tempting to relate this installation to the activities in the workshop. It was not a bread oven (*tannurs* of this period are usually smaller and lack the mud-brick support structure), but would have been used rather to melt metal in the foundry. It is very likely that the two other ovens of the same type served the same purpose. An oven (Locus 6/37/60) was discovered in a higher post-Akkadian level in the same square (Bieliński 2002: 291), which suggests very strongly that the foundry continued to function in the same area in the later phase as well.

The vicinity of Locus 39 was littered with sherds, mainly of storage jars. Not a single complete vessel could be

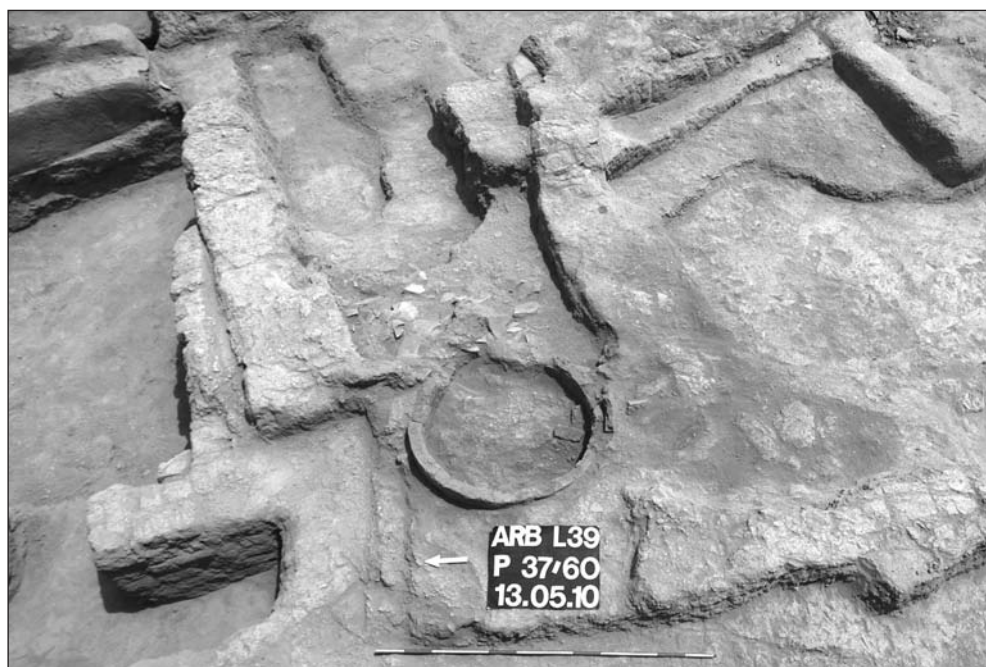


Fig. 13. Oven Locus 39/37/60 south of the foundry (Locus 33/37/60)  
(Photo R. Koliński)

recomposed from this material, but several full profiles were restored. The sherds — a selection obviously — were seemingly brought here from an unidentified source. Hardly any structural remains could be found to the south of the oven. A narrow space between a retention wall to the west and the west wall of Extension 1, together with another open space (Locus 17/37/61, located between Extension 1 and Extension 2), served for communication and for collecting rainwater flowing down the slope of the tell and from the roofs of post-Akkadian buildings.

Another chamber belonging to the Extension 2 complex was discovered to the north of Locus 33/37/60. Locus 23/36/60 was rectangular in outline (side dimension 3.30 m by 1.80 m) and provided with a wide bench under the west wall. Both the bench and the floor of the room were finely plastered with high quality clay mortar. The entrance to the room was probably located in the east wall and most likely led to another chamber, as yet unexposed, belonging to the earlier phase of Extension 2.

### EXTENSION 3

Yet another “extension” had been located on the opposite side of a narrow street separating it from the Main Building (Koliński 2012c). Further explorations in the area now revealed an earlier post-Akkadian structure beneath the walls exposed in 2009. The older wall separating it from the street had been built exactly in the same spot, but had not been provided with a doorway, as its counterpart in the later phase would be. A wall separating the two fragmentarily uncovered chambers (Loci 21 and 22/36/62) was placed differently than in the later phase. The

size, plan and purpose of the discovered structure could not be determined at the moment due to the presence of superimposed remains of the Khabur Ware period.

### THE EARLIEST POST-AKKADIAN LEVEL

The earliest post-Akkadian remains were identified in a few spots in various parts of the sector (Koliński 2012b: 103, Fig. 2). They followed the same orientation of walls as the complex of the Main Building, but were of far inferior quality. Nothing could be added to the only more complete plan belonging to Locus 35/37/60, exposed in 2009.

### POST-AKKADIAN GRAVES

Following the discovery of several more graves from the post-Akkadian period, they can now be divided into four groups:

- graves predating the Main Building complex (for instance, G3/37/61, see below),
- graves contemporary with the Main Building complex,
- graves postdating the Main Building complex (G10/38/61, discovered in 2009; G17/38/61),
- graves discovered in an open area in square 38/61, either contemporary with the Main Building, or younger (impossible to date precisely on the grounds of stratigraphy alone).

Of the first group, grave G3/37/61 [Fig. 14] appeared to hold the greatest interest. It was a pit grave with rectangular pit measuring 1.70 m by 1.15 m, and 0.60 m deep. It contained disarticulated bones of a female, 20 to 25 years old, accompanied by a small pottery jug. Two other pits of the same orientation and similar dimensions,



discovered in squares 38/61 and 38/62, could have also belonged to graves of the same period; regrettably, they could not be fully explored during the season.

The group of graves related to the use of the Main Building consisted of burials of newborn babies. They were found always in a similar stratigraphic position, that is to say, in small pits under the clay floor of a room in the Main Building or the extensions. Some of these graves were related to a later phase of the Main Building, but there are at least two graves of this kind which belong to its earlier phase.

Some graves were dug partly or entirely into the walls or floors of the settlement contemporary with both phases of the Main Building. One of them is



Fig. 14. Post-Akkadian grave G3/37/61  
(Photo R. Koliński)

G10/38/61, the burial niche of which had been discovered in 2009, but the burial shaft of which was not explored until 2010, when the baulk between squares 37/61 and 38/61 was dismantled. The shaft was round in outline and approximately 0.90 m deep. The entrance to the burial niche was partly blocked by a large sherd taken from the bottom of a storage vessel. To the same series of late graves belongs grave G17/38/61, dug partly in the wall of Locus 1/38/61 [Fig. 15]. In this case, the body of a child, about two years old, was deposited in a small pottery jug put in a niche cut into the wall of the post-Akkadian structure. Some of the previously discovered graves (for instance, G3/38/62 from the 2008 season) belonged to the same phase.

The fourth group consisted of graves discovered in the area of household activities to the south of Extension 1. Because of the limited depth of the explored deposits, resulting from the fact that post-Akkadian remains were cleared nearly immediately under the present surface of the tell, it was impossible to establish the relative connection between these graves and other post-Akkadian structures and levels.



Fig. 15. Post-Akkadian grave G17/38/61  
(Photo R. Koliński)

## STUDY SEASON

Intensive fieldwork in the past seasons had not allowed all finds to be documented and studied in full, hence the need for a study season, which was focused mainly on the documentation of post-Akkadian artifacts. All the pottery material was evaluated with respect to the discovery context and most sherds from disturbed or tertiary contexts were discarded. All post-Akkadian pottery was drawn and about 50% described in terms of the technology. A similar procedure was applied to Khabur Ware pottery, but in this case just about 45% of sherds were drawn and photographed; technological description was very limited in this case. The small finds were nearly all drawn and/or photographed; solely the assemblages of clay wheels and fragments of animal figurines were not documented in their entirety.

Animal bone material from three seasons of fieldwork were studied, leaving only some animal bones from graves G7/37/62 and G1/37/63, which were found mixed with human bones; these were left unsorted for future anthropological examination. Soil samples were processed using a flotation device<sup>4</sup> and the organic material obtained by flotation, as well as some samples from the 2008 and 2009 seasons were transported to Poland for specialist study, the charred plant remains by Prof. Krystyna Wasylkowa (*emeritus*, Institute of Biology, Polish Academy of Sciences, Kraków) and the charred wood remains by Prof. Maria Lityńska-Zajac (Institute of Ethnology and Archaeology, Polish Academy of Sciences, Kraków). Reports on this research will be included in the final publication of the project.

## CONCLUSION

Three seasons of fieldwork in Sector P have brought remarkable results. The outcome of the 2008 season had made it clear that this part of Tell Arbid held well-preserved remains of diverse post-Akkadian architecture and rich deposits of contemporary material. The wealth of information and finds that the discoveries of two subsequent seasons have produced have made the North Mesopotamian site of Tell Arbid of leading importance for all studies of the post-Akkadian and Early Khabur Ware periods.

The sequence of post-Akkadian date in Sector P comprises four settlement

phases (for a review of the stratigraphy, see Koliński 2012b), two of which, the second and the third, are marked by the presence of the Main Building. The structure is of remarkable quality and opulence [*Fig. 16*], one of the most complex architectural units known from the Jezirah, unparalleled in post-Akkadian North Mesopotamia in terms of its building plan, quality of masonry, richness and diversity of finds. This has made it difficult to interpret, but the present tentative assumption is that it was a caravanserai with the excavated extensions serving as subsidiary units. There are many factors arguing in favor of this

<sup>4</sup> I am much indebted to Dr. Inna Matejciucová of the Masaryk University in Brno (Czech Republic), who allowed us to use a flotation machine made for her team and provided us with the know-how necessary to use it.

interpretation and they can be presented in three larger groups.

Firstly, there is the situation of Tell Arbid itself. The Main Building and Extension 1, built later than the Main Building, but most likely as a part of the same construction process, differ from all the other post-Akkadian buildings discovered on Tell Arbid with regard to the quality of the architecture (building material, apparatus involving use of two- and three-brick wide walls, wide use of clay mortar of good quality and of stone elements). The plan of the Main Building is regular,

covering an area of approximately 14 m by 14 m; it reveals no features typical of domestic architecture discovered in other areas of the site. The Main Building and the accompanying extensions yielded evidence of crafts production (foundry in Locus 33/37/60, pottery kiln Locus 3/38/62), storage of goods (Locus 24/37/62 of the Main Building, pit Locus 17/38/61) and processing of food (two bronze sickles, threshing floor with winnowing remains around it in the Open Household Area in square 38/61, querns and grinders in the Main Building, bread ovens in the

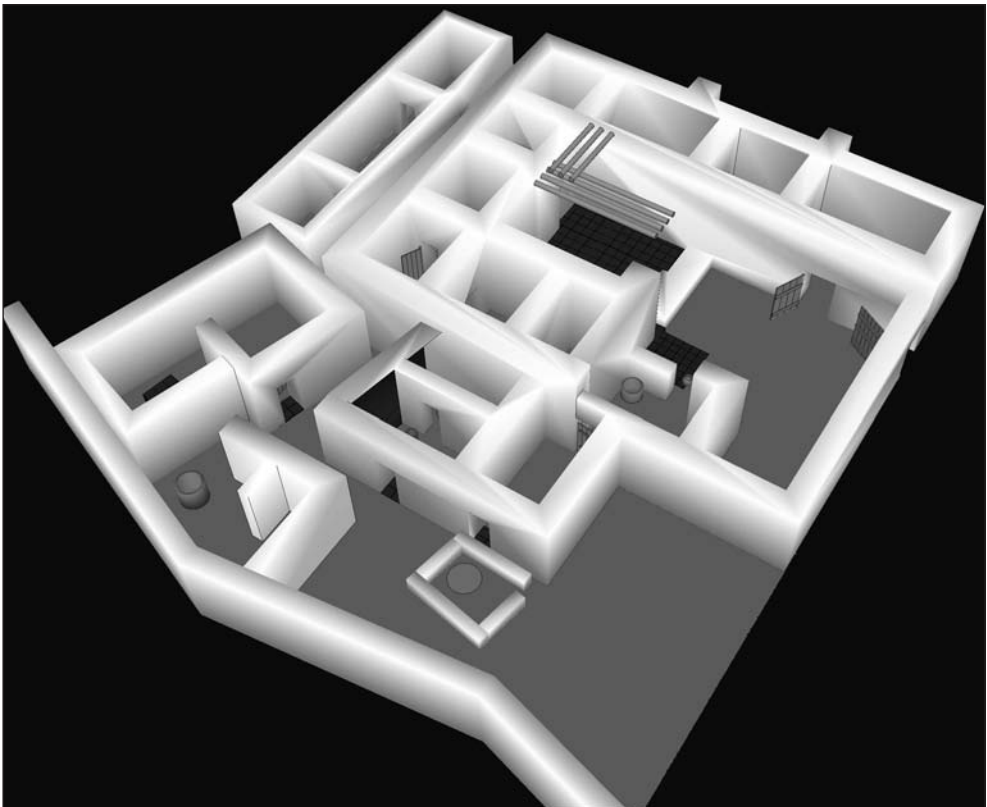


Fig. 16. 3D reconstruction of the Main Building and other post-Akkadian structures unearthed in Sector P at Tell Arbid (Reconstruction drawing X. Kolińska)

Main Building and in Extension 1). Food processing may be typical of domestic structures, but as no typical domestic areas could be identified within the Main Building, it is tempting to interpret these remains as traces of everyday activities of the personnel of the caravanserai, meant to provide sustenance for both travelers and staff. Finally, the Main Building and the Extensions yielded numerous items of metal, including tools, numerous pins, a cosmetic tool (kohl-spatula), and several more or less damaged gold beads, suggesting a wealthy social environment, in contrast to other areas settled in the post-Akkadian period (on the top of the tell) and to residential areas of earlier and of later periods. The presence of a star/DINGIR sign on one of the sickles may point to the institutional character of the complex (Koliński 2012c: 550 and Fig. 10), probably related to a temple environment and dependent on a center located in one of the neighboring cities (either Nagar/Tell Brak or Urkeš/Tell Mozan).

These observations lead to the second set of arguments, based on the socio-political situation in the Khabur Triangle area. The two most important centers, both serving as seats of local dynasties of Hurrian origin, were Nagar, approximately 25 km to the south, and Urkeš, about 25 km to the north. The Tell Arbid settlement is thus located midway, on the best natural road connecting the two cities, constituted by a shallow wadi starting in the Tur Abdin mountains a few kilometers east of Tell Mozan and joining the Jaghjagh river a few kilometers west of Tell Brak. The wadi passes the base of Tell Arbid on its eastern side, very close to Sector P. The location of the Main Building on a site located midway between two large centers,

within a day's travel for pack donkeys, and moreover its location in the lower part of the site, as close as possible to the wadi linking Nagar and Urkeš, is a strong indication that the building may have been invested with a function related to trade. There is independent evidence for the importance of trade during the post-Akkadian period derived from Urkeš, where part of a spacious house belonging to a merchant named Puššam (as evidenced by his seal reconstructed from more than 250 fragmentary sealings discovered in the house) was excavated by a German mission (Dohmann-Pfälzner, Pfälzner 2001: 127–133; 2002: 163–168; for the seal inscription, see Volk 2004: 88–94).

A wider Mesopotamian context supplies the third set of factors in favor of the presented interpretation. The Nagar–Urkeš road is in fact a segment of a much more extensive exchange network, spanning the Euphrates valley (first of all, Mari) and copper mines in the area of Ergani Madden in present-day Turkey, some 250 km northwest of Urkeš. The importance of this road resulted from the political situation, namely, from the presence of a polity referred to as the Third Dynasty of Ur state, controlling the south and northeast of Mesopotamia, probably as far as Niniveh. It was a specific economic regime, described sometimes as an *oikos* economy (Renger 2002: 241–244), focusing on satisfying its own economic needs and not interested in trading in imported resources. Therefore, it constituted a very efficient barrier between northwest Mesopotamia and the copper sources in Oman, which constituted the most important source of copper through most of the 3rd and the early part of the 2nd millennium BC. Consequently, polities of North Mesopotamia had to

rely on Anatolian deposits of copper ore. The nearest of such deposits is located in the Ergani Madden mining region, which could be easily reached from the North Mesopotamian steppe through the Mardin pass, located only a few kilometers from Urkeš/Tell Mozan. The Tell Arbid caravanserai served thus not only as a station for travelers on the Nagar–Urkeš road, but first of all for long distance merchants traveling from the Euphrates valley to the mountainous areas where copper could be obtained. Last but not least, there is the textual evidence for the presence of road inns in South Mesopotamia at this time. The year formula of Shulgi, King of Ur, for his 7th regal year refers to the construction of a road from Ur to Nippur, on which inns were built at a day's travel distance from one another, to provide travelers with a safe place to stay the night.

The three radiocarbon dates obtained for samples of organic materials from the Main Building and neighboring structures are the first absolute dates

available for Tell Arbid [*Table 2*].<sup>5</sup> The dates presented below correspond to other published <sup>14</sup>C dates of the post-Akkadian period from the Khabur Triangle (Ristvet 2012), confirming that the chronological determination based on the archeological material is correct.

The post-Akkadian levels notwithstanding, the excavations have also contributed data for the study of later phases of Old Jezirah I and Old Jezirah II date. The Old Jezirah I settlement, although it yielded very few structural remains, produced a rich assemblage of pottery related to this period. In fact, the collection from Tell Arbid is second only to that from Tell Barri in the Khabur Triangle. The importance of this fact lies, firstly, in that it sheds light on an obscure period constituted by the first two centuries of the 2nd millennium BC, for which very little archaeological and historical data regarding this region is available, and secondly, because there are close similarities between the pottery assemblages from Tell Arbid and from Tell

*Table 2. Radiocarbon dates for three samples from the post-Akkadian Main Building at Tell Arbid, calibrated with OxCal v. 4.1 software (<https://c14.arch.ox.ac.uk/oxcal/OxCal.html>)*

Sample No.	Level	Findspot	Date BP	Date BC calibrated 95.4%	Probability of date calibrated at 95.4%	Probability of date calibrated at 68.2%
AA98355	Main Building, Later phase	Locus 38/37/62 Main Building	3737±48	2291–1981	2290–2018 94.2% 1994–1981 1.25%	2204–2116 42.2% 2096–2040 26.5%
AA98356	Main Building, Earlier phase	Locus 39/37/60 concentration of ashes around tannur	3769±39	2334–2037	2332–2326 0.4% 2300–2114 82.3% 2100–2037 12.7%	2281–2249 17.6% 2231–2218 5.5% 2213–2136 46.9%
AA98357	Main Building, Earlier phase	Pisé wall of Locus 3A/38/61	3848±39	2460–2204		2436–2420 5.5% 2404–2378 10.0% 2350–2274 34.9% 2255–2208 17.9%

<sup>5</sup> I am very grateful to Prof. Harvey Weiss for his generous proposition to have the Arbid samples analyzed within the framework of his project at University of Arizona laboratories.



Barri. This has now enabled “Early Khabur Ware” pottery to be defined as a distinct and easily recognizable group (Koliński, forthcoming), facilitating its recognition in material from other sites in the future.

Of greatest interest with regard to the later Old Jezirah period (OJ II) are the cemeteries discovered around the houses. Three seasons of excavations in 2008–2010 brought to light 31 graves (contrasting with the much more limited number from sector SR excavated by the University of Warsaw expedition in 1998–2001, see Wygnańska 2006/II: 23–26). These were dug mostly in the ground in open areas

around the houses. Variations in grave form, evidence of mortuary rituals, rich and diverse finds preserved in some of the graves (G7/37/62, G1/37/63), have shed new light on burial customs and the relation between the living and the dead in North Mesopotamia during the early 2nd millennium BC.

It has been tempting to continue excavations in Sector P of Tell Arbid, especially in its northern and eastern parts, but the rapid deterioration of security conditions in Syria since March 2011 have regrettably made a project of this kind virtually impossible.

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