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EXCAVATIONS IN SECTOR P  
AT TELL ARBID (SPRING 2009)**

**Rafał Koliński**

Institute of Prehistory, Adam Mickiewicz University in Poznań

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The second season of a three-year research project of the Institute of Prehistory of the Adam Mickiewicz University in Poznań took place in 2009, following on a short, three-week reconnaissance in 2008 (Koliński 2011a; 2011b; 2012). The project, which was carried out in cooperation with the Polish Centre of Mediterranean Archaeology of the University of Warsaw, aimed at exploring well preserved post-Akkadian remains identified in Sector P (relabeled in 2008 from the original designation as Sector SR).

In 2008 the team was able to establish the stratigraphic sequence of the site.

Upper layers comprised extensive domestic architecture and contemporary burials from the Middle Bronze Age (OJ II, approximately 1800–1700 BC, according to the ‘middle chronology’), found directly under the present surface of the tell<sup>1</sup> and overlying an abandonment horizon. It featured numerous pits piercing the post-Akkadian layer (EJ V, approximately 2150–2000 BC), preserved in most areas just under the usage level of the early 2nd millennium BC stratum. Remains from the earlier part of the 3rd millennium BC, representing a local Ninevite V culture (EJ II, 2800–2600 BC), were noted in the westernmost part of the sector. These

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<sup>1</sup> The findings confirmed the results obtained in this area by the University of Warsaw PCMA mission in 1998–2001, see Bieliński 1999; 2000; 2002.

remains, discovered on a relatively high level, point to a tradition of terracing activities on the site.

The main focus of excavations this season [Fig. 1, top] were the post-Akkadian remains identified last year in the southern part of the sector, mainly in squares 37/61 and 37/62, and referred to in the earlier report somewhat misleadingly as a Residence. Later structures overlying these remains were removed in the course of the season where necessary. A paved courtyard (Locus 9-38/62) belonging to this Main Building

was investigated in an extension of the trench in the northwestern quadrant of square 38/62. Explorations of the southern part of the Main Building and of extensions to this structure took place in the northern part of square 38/61. Two of the three formerly identified concentrations of burials: cist graves in squares 37/60 and 37/59, and chamber graves located in square 35/61, were explored. A representative sample of Early Khabur pottery material characterizing the MBA stratum was obtained from a large pit with ashy fill (Locus 14-37/62).

## KHABUR WARE PERIOD

Remnants belonging to the Khabur Ware period were discovered in nearly all of the trenches explored during the 2009 season. Architectural remains in the form of house foundations were identified in squares 37/61 and 36/61 (some *pisé* house foundations had been cleared last season and were presently partly removed). Graves and pits dating from this period were encountered in other areas [Fig. 1, bottom].

### DOMESTIC ARCHITECTURE

Dismantling of the northern and western baulks of square 37/61 revealed the rest of the walls of House II. The west wall (W3) was very well preserved. Like other walls, it stood on a foundation of tamped earth, reaching approximately 1.50 m below the brick superstructure. A building trench on the west side of the wall showed how the house had been cut into the tell slope, which rises here steadily toward the west.

### Team

*Dates of work:* 9 May – 25 June 2009

*Field directors:* Assoc. Prof. Rafał Koliński, archaeologist (Institute of Prehistory, Adam Mickiewicz University, Poznań), Jowan Qassem, archaeologist (Regional Direction of Antiquities and Museums, Qamishli)

*Archaeologists:* Sa'ud al-Hussein, Fahad Hussein (both Regional Direction of Antiquities and Museums, Qamishli), Michał Krueger (Institute of Prehistory, Adam Mickiewicz University, Poznań), Dr. Łukasz Rutkowski (PCMA)

*Archaeologist, documentalist:* Xenia Kolińska (freelance)

*Student trainees from the Institute of Prehistory, Adam Mickiewicz University, Poznań:* Iwona Barczyńska, Michał Lawer, Joanna Mardas, Agata Smilgin, Adam Szczęsny, Marika Świążkowska

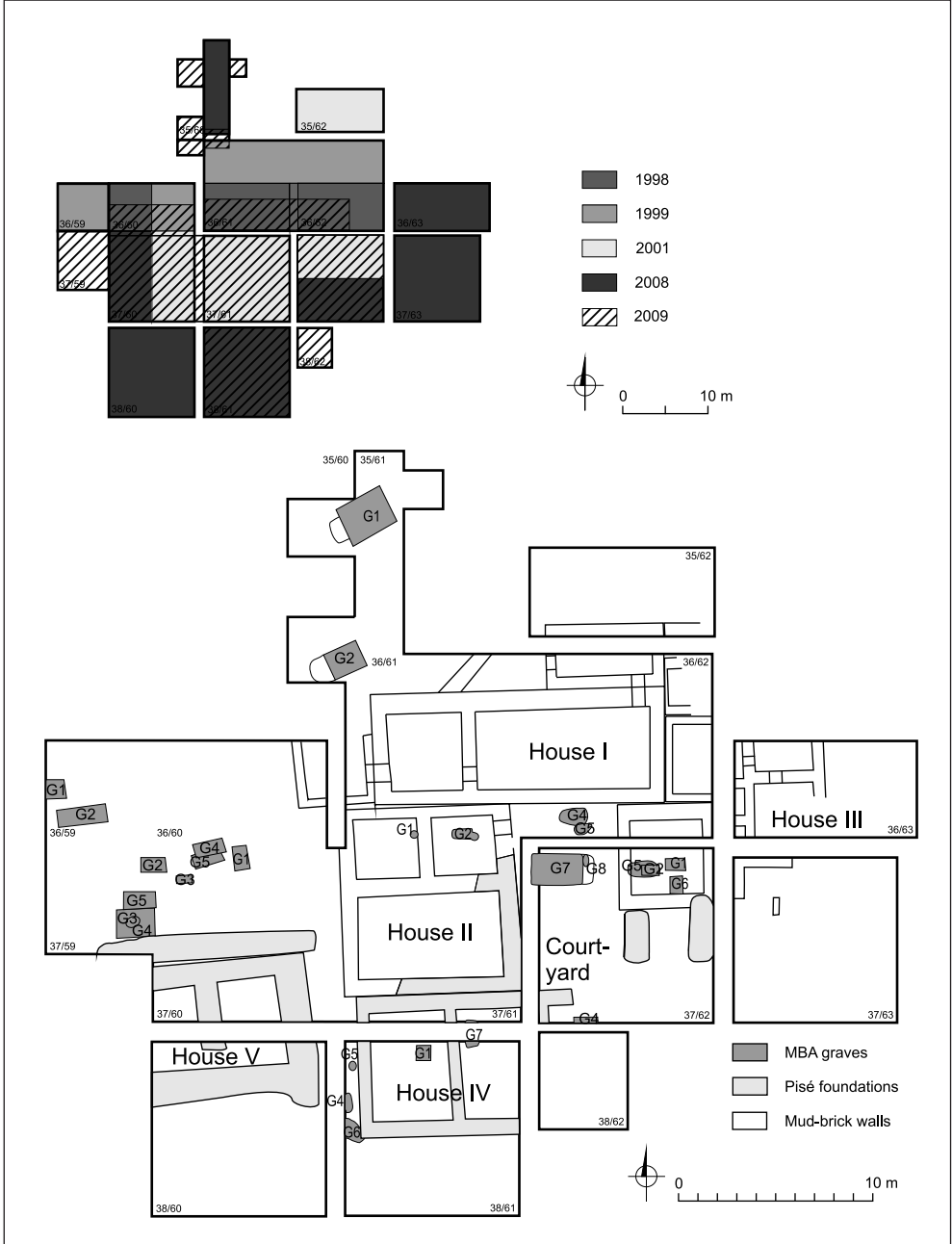


Fig. 1. Schematic plan of Khabur Ware period (MB/OJ II) remains; inset top, extent of work in Sector P in 2009, showing also previous explorations (Drawing R. Koliński)

The trench was filled with loose earth containing complete and fragmentary dried bricks and Khabur Ware sherds. More importantly, the lack of interbonding between walls W3 and W10 and the different levels on which the two walls were set indicated separate construction of the northern and southern parts of the house [Fig. 2]. The southern parts of two small rooms (Loci 9-36/61 and 3-36/61) were cleared once the northern baulk had been removed. Neither of the rooms appeared to have a doorway. A low bench by the west wall with a small clay oven constructed against it was found in the latter of the two chambers.

Two child graves were identified under the floors of House II. One (G1-36/61) consisted of a complete Kitchen Ware pot standing on its base, the rim covered with a square baked brick. The pot was deposited inside a small, round pit dug in the northeastern corner of Locus 9. The grave contained poorly preserved bones of a fetus buried without any grave goods. The

other grave, located in the center of Locus 3 (G2-36/61), belonged to a different type. A rectangular shaft measuring 1.10 m by 0.45 m was dug under the floor of the room. A niche cut into the wall in the southeastern corner of the shaft contained a Kitchen Ware pot lying on its side. A single dried brick set obliquely blocked access to the niche. The pot contained the well preserved bones of a child and a single small jug with banded decoration, typical of Khabur Ware. It is extremely rare at Tell Arbid for burials to be located inside rooms; in fact, graves of this kind from this period have not been found outside House II.

### PISÉ FOUNDATIONS

The building technique used to construct the *pisé* foundations of MB/OJ II houses was studied in the course of removing some of the foundations of Houses IV and partly also II (south and east walls), a move necessitated by the aim of the project to elucidate the plan of underlying



Fig. 2. West wall of House II: W10 to the left of the measure, W3 to the right of it, showing the separate structure of the two; view of the wall looking west (Photo R. Koliński)

post-Akkadian remains. A trench approximately 1.50 m to 2 m long and about 1 m wide was first dug in the ground. The excavated earth was then mixed with water and dumped back into the trench, being probably tamped in the process. This created a hard homogenous light-gray fill. The work proceeded apparently in sections from 1.50 to 2 m long as demonstrated by perpendicular “joints” between particular “blocks”, traced in all of the foundations. The end effect was a homogenous, concrete-hard base for the brick superstructure.

The technique explains the presence of archaeological material in the *pisé* foundation core. Artifacts comprised post-Akkadian sherds, some of considerable size, but seldom joining into larger fragments or whole vessels. Second millennium BC sherds were poorly represented in the *pisé*.

The considerable depth of the foundation trenches caused a lot of damage to post-Akkadian structures, especially under House II, where the trenches penetrated below the floor level of the Extension 1 structure, and stopped only a few centimeters above the topmost floor of the Main Building.

### GRAVES AND CEMETERIES

Graves from the Khabur Ware period, a considerable number of which were explored during the season, formed four clusters in four separate areas of Sector P [see *Fig. 1*]. With the exception of the two graves described above, they were located in open areas, mostly in the near vicinity of the houses. Each cluster can be termed a small cemetery. One was located in the northern part of the sector (squares 35/60–35/61), while another lay on another terrace higher up on the slope to the west of House II (squares 36/59–60). A third

cemetery was found under a courtyard east of House II and the fourth in an area south of House II (partly under House IV).

Two vaulted graves were excavated in the northern of the cemeteries, the chamber of grave G2-35/61 for the most part in 2008, that of G1-35/61 this season when the trench was extended into squares 36/60 and 35/60 (a corner of the brick-made chamber had been recorded in the northwestern corner of square 36/61 in 1999). The grave was composed of a rectangular burial chamber entered from a shaft, the structure filling the bottom of a pit measuring 3.65 m by 1.95 m and 2.35 m deep. The pit was angular at the eastern end and rounded at the western one where the shaft was located. The grave chamber was constructed in the eastern and central part of the pit. First, two parallel walls of four rows of bricks were built along the longer sides of the pit. The vaulted roof of the chamber was supported on these walls. Once the roof had been finished, a wall was added under the eastern end of the vault, while the western end served as an entrance to the chamber and its opening was blocked with bricks set without mortar after the burial had been deposited inside the tomb. This way a grave chamber of inside dimensions 1.85 m by 1.15 m was formed. A retaining brick wall, which reached to the surface of the tell, was constructed over the entrance to the chamber. It served a number of purposes, not the least being to keep the shaft clear even as earth was dumped into the eastern part of the grave pit to cover the tomb structure. It also served as a tomb marker used in the ancestor cult, that is, *kispum* rituals (Tsukimoto 1985) and to enable further burials in the tomb, in which case it protected against earth slides when the grave shaft was being re-excavated.



Both graves in this cemetery had been robbed in antiquity, the thieves entering through a round hole in the vaulting positioned in the eastern end of the chamber. Not all the grave goods were plundered, those still remaining in the chamber comprising two Khabur Ware vessels in the southwestern corner and the tip of a bronze pin in the center of the floor. A simple Kitchen Ware bowl, also found on the chamber floor, bore traces of fire in a single place on the rim. It may have been used as a lamp, most likely by the robbers, as it was found lying upside down, near a pile of earth which had fallen through the opening in the roof. The skeleton deposited in the grave, belonging to an adult female, was disturbed. Its lower part (legs, pelvis and part of spine) was found in anatomical order, lying by the north wall of the chamber, indicating that the body had been deposited in constricted position, aligned east–west, the head to the west and facing south. The upper part (upper spine, ribs, arms with collarbones) lay partly in the northeastern corner of the chamber and partly over a pile of earth in the southeastern corner. The skull was missing [*Fig. 3*].

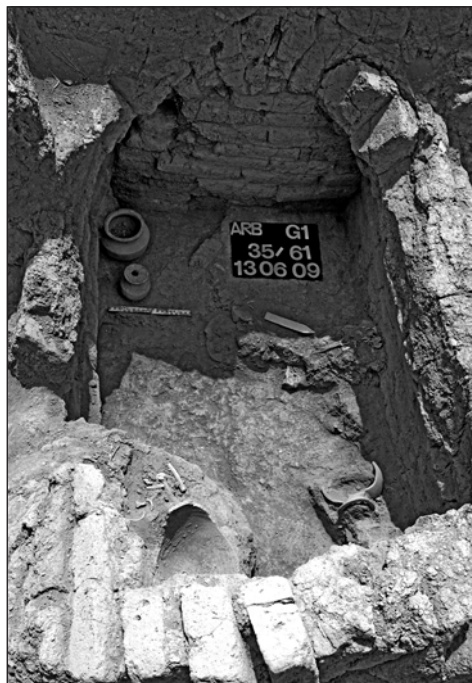
A shaft and retaining wall belonging to grave G2-35/61 were discovered in a west extension (measuring 3 m by 3 m) of the old trench next to the chamber. The shaft had a semi-circular outline and its width corresponded to the width of the grave structure. A second pit, as wide as the entrance to the grave chamber, was observed within the outer pit [*Fig. 4*]. It has been interpreted tentatively as a secondary shaft dug for the purposes of the latest burial in the tomb; presumably to spare work or time, a narrow shaft leading straight to the door was dug instead of all of the earth fill being removed from the original shaft.

The fill of the shafts of both graves contained nothing of interest. No other burials were discovered in the vicinity, which is exceptional, considering that there were accompanying graves of other kinds in all excavated areas of Tell Arbid where chamber graves were located (Wygnańska 2006: vol. 1, 69). Since the exposed area around these two chamber graves is limited, it is still possible that other graves will be discovered in the course of further work.

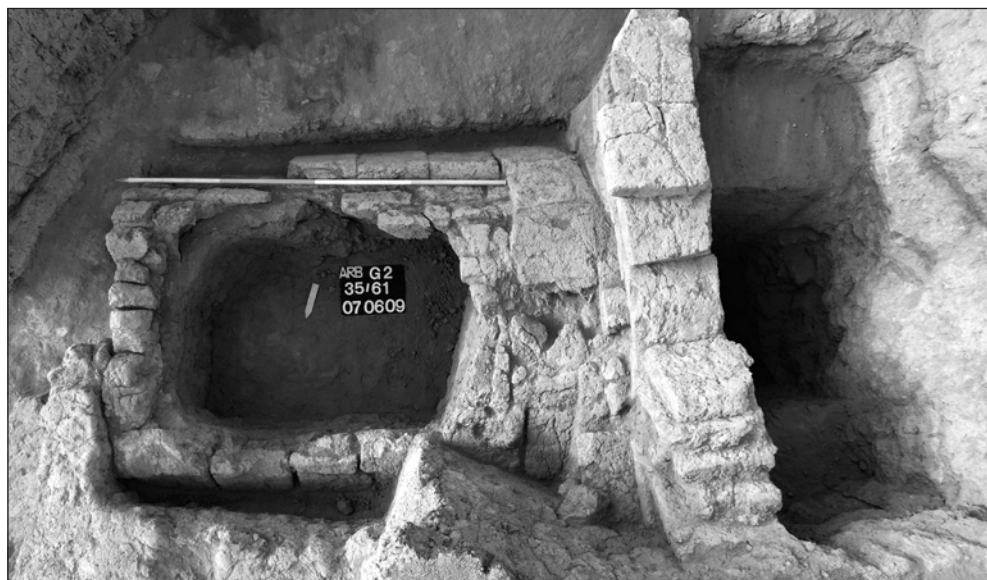
The western cemetery comprised 10 graves, two of which, G1 and G2 located in square 36/59, were excavated in 1998 (Bieliński 1999: 209–210; Wygnańska 2006: vol. 2, 25–26), G1-37/60 in 2001 (Bieliński 2002; Wygnańska 2006: vol. 2, 24), and graves G2, G4 and G5, all in square 37/60, in 2008 (Koliński 2011a; 2011b; 2012). After the previous field season it became clear that the cemetery stretched westward, as the rest of grave G2-37/60 and two more graves were concealed in the western trench wall. The trench was now extended westward into square 37/59, but only one more grave of the Khabur Ware period, a child burial in a storage vessel without burial gifts, was located there. Of greater interest were the results of the exploration of the cist graves identified in 2008. These belonged to the category of chamber graves closed by a row of squarish bricks set in a “diamond” arrangement, that is, set vertically on a corner.

Cleaning of the western part of G2-37/59–60) revealed seven of the bricks, which had closed the grave chamber from the top, this despite their being found just 10 cm under the ground surface [*Fig. 5*]. They were set vertically, indicating a “diamond” construction. The lower part of a skeleton of a juvenile male was

cleared in the western and central part of the chamber. It lay in anatomical position, the head toward the east, facing south. Two small beads of stone were found at hip level and a pottery vessel stood beside the knees. A shaft leading to the chamber was located on the western side of the grave. This shaft, measuring approximately 0.50 m in width, corresponded to the width of the grave. A plain-ware pottery jug was found lying on the side at the bottom of the shaft. The shaft seems to have been secondary for the purposes of a different burial made in this grave. Bones belonging to a fully grown male had been found in 2008, lying in a pile by the east wall of the chamber. It is thus clear that a successive burial occurred some time after the first one and the bones



*Fig. 3. Grave G1-35/61 after excavations  
(Photo M. Szablowski)*



*Fig. 4. Grave G2-35/61 after cleaning of the shaft  
(Photo M. Szablowski)*



of the first were pushed to the far end of the chamber, exactly as was the case with the burials in the vaulted chamber graves (G2-35/61 and G7-37/62, see below).

Grave G4-37/59 was located parallel to G2-37/59–60, about 2 m south of it. The grave chamber, built of mud bricks, measured approximately 1.50 m by 0.40 m. It had been covered with a single row of bricks, which were found between the walls of the chamber. No entrance shaft was identified. The grave contained the skeleton of an adult female, clearly a secondary burial, as the bones were

found unarticulated in a heap, with a skull placed on top. The grave contained neither meat offerings nor burial gifts. A jar burial (G3-37/59) was discovered in the fill of grave pit G4-37/59, above its chamber. It contained the bones of an infant (less than one year of age).

The last of the series of mud-brick cist graves in this area was G5-37/59, located immediately to the north of G4-37/59. It was probably a bit later than the latter as its pit cut into the northern side of the chamber wall of G4-37/59. The construction of both graves was very



*Fig. 5. Western part of grave G2-37/59–60  
(Photo R. Koliński)*

similar, with a rectangular chamber closed from the top with a single row of bricks set vertically on the corber in a “diamond” arrangement. A relatively well-preserved skeleton of an adult female was found in the grave, lying in a crouched position by the south wall of the chamber, head towards the west, facing north. The accompanying grave goods consisted of a single vessel of common ware bearing incised decoration, a melon-head pin of bronze, about 120 small beads of black and white frit (?) and a meat offering placed by the head.

The central cemetery appeared in a courtyard between houses, limited on the north by the south wall of House I, on the west by the east wall of House II, and on the south partly by the north wall of House IV [see *Fig. 1*]. The graves (G1, G2, G5, and G6 from square 37/62) were discovered under a later structure composed of a single square room (Locus 6-36/62), which occupied part of this area. Grave G5 located beneath a wall of this structure left no doubt as to the

preceding nature of burials in this area. The core of the cemetery consisted of a vaulted chamber grave (G7-37/62) with the other graves spreading out to the north and east of it. Two of these were pit graves (G1-36/62, excavated in 1998, and G5-36/62) and the remaining five belonged to a class of shaft graves with lateral niche. G1-37/62 and G2-37/62 were discovered in the 2008 season (Koliński forthcoming 2011a; 2011b; 2012). The shaft of grave G5-37/62 was partly disturbed by G2-37/62. It was rectangular in outline with a niche cut into the west wall of the shaft. The niche was blocked with a single brick, closing the mouth of a burial vessel and of the niche at the same time. Inside the bucket-shaped pot there were the bones of a two-year-old child, together with three Khabur Ware vessels: a cup with banded decoration standing in the shaft, a miniature cup with running zigzag decoration, and a small jug with banded decoration. The shape of the burial vessel, as well as the size and character of the pottery deposited within the grave closely resemble those discovered



*Fig. 6. Pottery from grave G4/36/62 (Photo M. Szablowski)*

in grave G2-37/62. Shaft grave G6-37/62, located to the south of G1-37/62, had a rectangular shaft with lateral niche, this time cut into the south wall. The niche was rather shallow, consequently the burial vessel (a storage jar without bottom) was protected with bricks from three sides. It contained the bones of a two-year-old child, laid east–west with the head towards the east. No pottery vessels accompanied this burial, but the deceased child was found with two simple copper-alloy bracelets on the forearms. The last of the shaft graves belonging to the central cemetery, G4-36/62, was also furnished with a rectangular shaft dug into the soil and a niche in the west wall with a large storage vessel fitted into it. The mouth of the vessel, which faced the shaft, was blocked with two bricks set on the side. A single, medium-sized Khabur Ware jar with banded decoration was found standing in the shaft, by the mouth of the vessel. The skeleton deposited in this vessel was very poorly preserved but most likely belonged to a child aged three. The body was accompanied by an extremely rich collection of burial gifts: three bowls and nine miniature jugs, all painted, a fragment of a corroded copper alloy artifact and 13 beads made of semi-precious stones (rock crystal, carnelian and agate) and frit [Fig. 6]. Grave G4-36/62 contained the richest collection of burial gifts from a single Khabur Ware period grave discovered at Tell Arbid.

The richness of G4-36/62 equipment contrasted vividly with a pit inhumation (G5-36/62) discovered immediately south of it. The body, most likely of an adolescent female, was found in a contracted position, probably squeezed into a much too small pit dug in the ground. Probably for this

reason the position of the body does not follow the east–west orientation kept by all the other burials of the same period. However it seems that it had been intended to, with its head towards the east facing south. The body was accompanied by a single miniature jug with a painted, banded decoration. The jug was held in a hand close to the mouth of the deceased.

Chamber grave G7-37/62 was by all means the most interesting discovery of the season. This large structure was built on the bottom of a substantial pit, of east–west orientation, dug to a depth of approximately 2.50 m below the original ground level. The chamber was built in the west–central part of the pit, while the eastern part of the pit was left empty, serving as an entrance shaft. Exactly as in the case of the vaulted chamber graves of square 35/61, G7-37/62 was provided with a retention wall over the entrance. The wall had been observed already during the 2001 season and once more in 2008, but was misinterpreted then. Its highest level, registered during the 2001 season, was 387.10 m a.s.l., which means that it had been raised approximately 1 m over the top of the chamber entrance. The grave chamber was covered with a regular vault constructed of square bricks, well preserved in the western part, but broken in the east. The cause of the damage is not clear, as the grave was not robbed. Most of the fill of the chamber was composed of broken bricks and a very soft, dusty brown earth, probably washed into the grave by rain water. Only the level immediately over the bones was of a different composition, consisting of very compact, fine-grained clay. Its hardness made the excavation of the grave very difficult, especially combined with the relatively bad state of preservation of the bones.

Two distinct functional zones were recognized inside the chamber [Fig. 7]. The eastern part of the chamber contained the bones of a young female, articulated, lying by the south wall. The body was contracted, its back to the wall, head westwards and facing north. Personal accessories included a single bronze pin with nail head, found under the chest, and a small pointed fragment of bronze sheet, covering one of the fingers. Four beads of agate were found close to the body. On the opposite side of the chamber two Khabur Ware jars with painted decoration were found, standing by the north wall<sup>2</sup>. The entire western part of the chamber was filled with human bones, mixed with some animal ones, forming a layer from 15 to 25 cm thick, covering the inside of the grave. Numerous artifacts were discovered

among the bones: potsherds, stone mortar, bronze weaponry, bronze jewelry, numerous stone and shell beads and some other items of unknown purpose. It seems that the artifacts discovered in this part of the chamber had been deposited with earlier burials and were all, including the bones, carelessly pushed to the far end of the chamber (the only exception being the two vessels found by the west wall, one laid in the mouth of the other) when space for a new burial was needed. The number of skeletons is difficult to evaluate pending full anthropological analysis, but it appears that there were from six to eight adult individuals, suggesting a prolonged usage period for the grave.

No grave discovered at Tell Arbid till now has yielded such a rich and diversified collection of burial gifts. The most

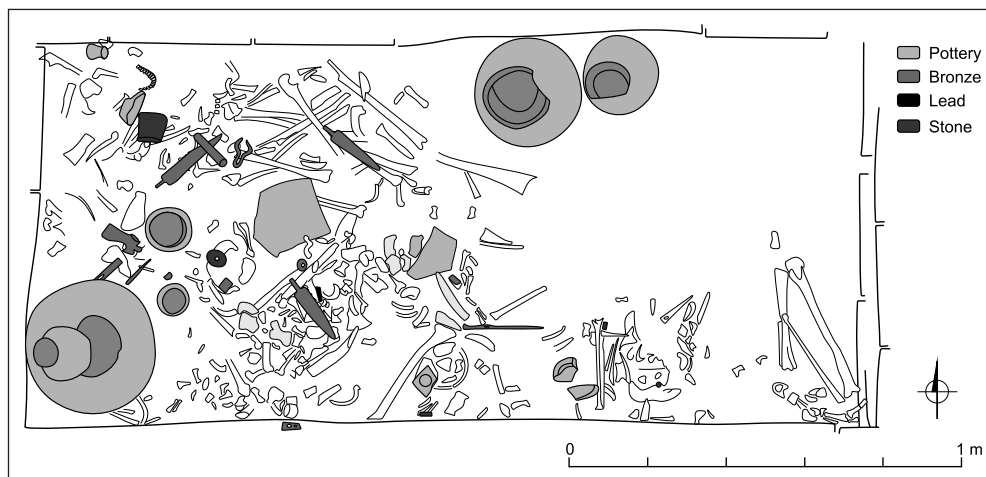


Fig. 7. Distribution of finds in the chamber of vaulted grave G7-37/62  
(Drawing M. Momot)

<sup>2</sup> Anne Wissing observed a similar feature in MBA chamber graves at Tell Mozan and hypothesized that a pair of jars standing close to the entrance to a grave chamber may have been used to make offerings to family members previously buried in the grave (Wissing, forthcoming).



impressive item was a socketed axe (length 11.7 cm) [Fig. 8, top right] with a knob on the butt. Two slightly larger axes of a very similar shape were found in Ashur, one in a hoard dated to the Akkadian or post-Akkadian period (Haller 1955: 12, Pl. 27a) and the other in a post-Akkadian grave Ass. 2305 (Andrae 1922: Pl. 80). The elaborate shape of the axe makes it a status object and its presence hints at the

prestigious social position of at least one of the individuals buried in the grave. The impression is strengthened by the presence of three bronze daggers [Fig. 8, left], belonging to Type 37 in Graham Philip's classification (Philip 1989). Two endings of wooden sticks covered with bronze sheet [Fig. 8, bottom right] may have been rods or scepters. The grave fill also yielded three nail-head pins, a pincer, and a number of

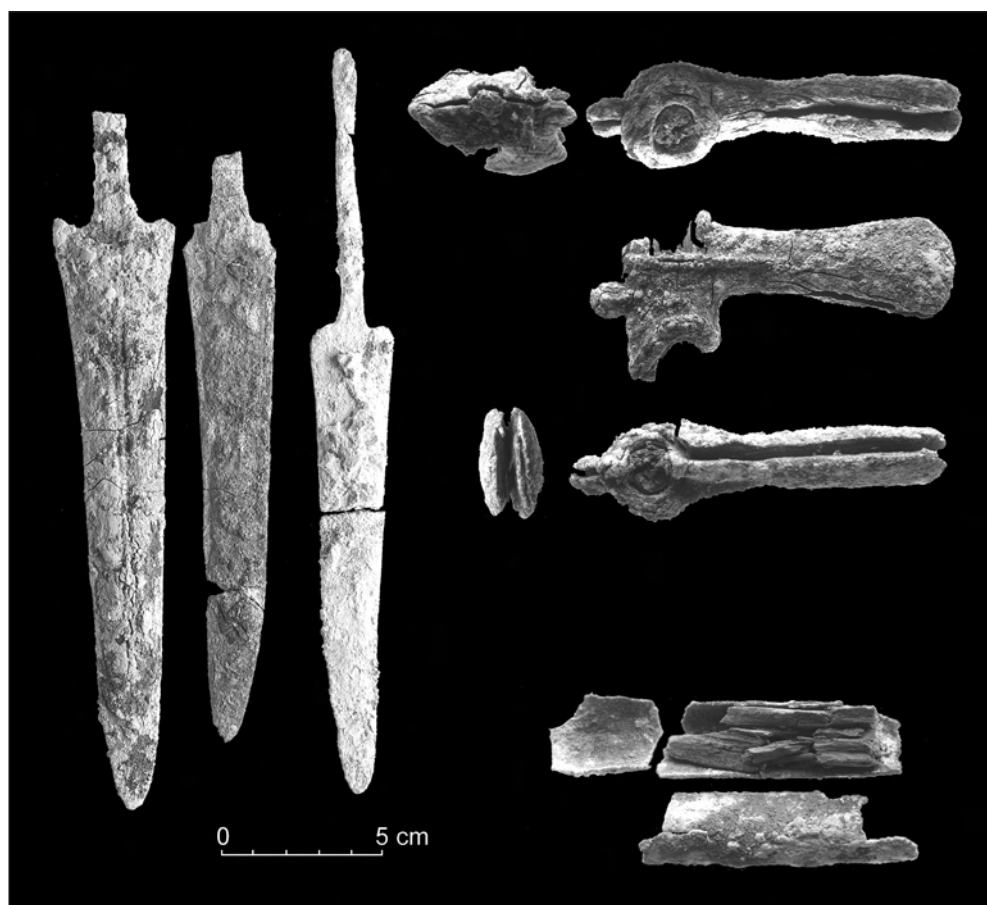


Fig. 8. Bronze axe with remains of a wooden shaft (top right), fragment of wooden stick with bronze sheet plating (bottom right) and three bronze daggers from grave G7-37/63 (Photo M. Szablowski)



smaller objects of copper alloy. Jewelry was represented by more than 400 beads, found mixed with the bones. A few were made of lapis lazuli, rock crystal and sea shell, but there was a substantial number of beads of various shapes and sizes made of carnelian, agate and frit. The grave held also two objects of stone: a basalt mortar, and a disc of a pinkish, translucent stone, with a narrow hole in the middle. Several Khabur Ware vessels were found by the jumbled bones: a Gray Ware bowl, two bowls of common ware (one of which may have served as a lamp), a miniature jug and two medium-sized jars.

Surprisingly, the fill of the shaft leading to the chamber contained a number of finds. An independent child burial, G8-

37/62, was discovered at the bottom of the shaft in its northern corner. The body was buried in a pit and was accompanied by two Khabur Ware vessels showing archaic features [Fig. 9], a tin bracelet and a number of beads made of marine shells. The relation of this grave to the other burials deposited in G7-37/62 is not clear. Three large storage vessels were found on a slightly higher level in the fill of the shaft. One of the vessels stood in the southern corner of the shaft, the others lay on their sides in the other part of the shaft. One bore incised decoration, the remaining two were plain, but all clearly represented a Khabur Ware assemblage. A complete skeleton of a dog was discovered deposited in the central part of the shaft, positioned slightly below the rim of the standing jar. The bones were undisturbed, hence they should be connected with the last burial as it would have been very difficult to reopen the grave without moving them. The intention behind this burial is unclear: was it a pet or meant to guard the grave?<sup>3</sup>

Grave G7-37/62 evidently belonged to a relatively important and wealthy family. At Tell Arbid weaponry has been found only in some of the vaulted chamber graves (Wygnańska 2006), corroborating the assumption that its presence was a marker of elevated position and/or high economic status of the deceased. In this case, however, the axe of elaborate shape should be considered a luxury item, a marker of especially elevated position (village chief or tribal sheikh), which could have been passed from hand to hand before being buried with the last wielder.

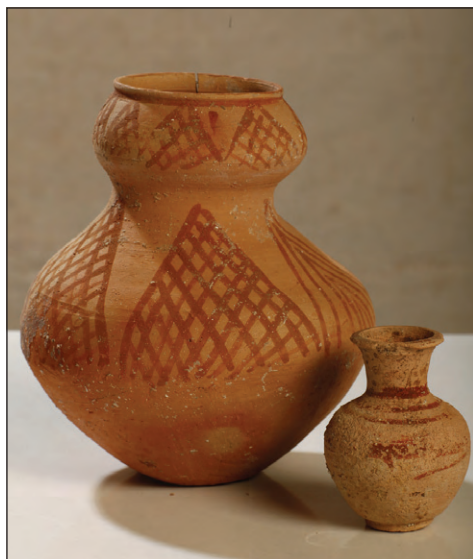


Fig. 9. Early Khabur Ware vessels from grave G8-37/62 (Photo M. Szabłowski)

<sup>3</sup> A complete skeleton of a dog was found in the entrance shaft of grave G8-37/54, see Piątkowska-Małecka, Wygnańska 2006.

## EARLY KHABUR WARE

Khabur Ware sherds and vessels bearing decoration of an archaic character were discovered already in the previous season, for instance, in Grave G5-37/60. This particular assemblage grew in number this season with some pieces coming from graves (G5-37/62, G8-37/62), but most being found in mixed contexts or in pits. However, the stratigraphical position of some of the pits (for instance Locus 14-37/62, which cut into post-Akkadian

walls, and was itself cut by grave shafts and partly sealed by walls belonging to Khabur Ware period structures) demonstrates clearly that this material postdated the post-Akkadian period, but was earlier than houses which yielded classical Khabur Ware pottery. This discovery is of particular importance because pottery dated to 2000–1800 BC is hardly known from North Mesopotamia, the sole exception so far being Tell Barri (Bacelli, Manuelli 2008).

## POST-AKKADIAN PERIOD

Post-Akkadian remains were explored in the central, southern and western parts of the sector. The main task was to explore the main hall of the Main Building (Locus 13-37/62) and the rooms located to the west of it, as well as the extensions identified to the south and west of it (see Koliński 2011a; 2011b; 2012) [Fig. 11].

## MAIN BUILDING

Removal of *pisé* foundations forming the southeastern corner of the Khabur Ware-period House II enabled two rooms (Loci 24 and 10 in square 37/61) to be excavated in the western part of the Main Building. The rooms were square in outline and quite small (approximately 2 m square). A narrow doorway pierced in the north wall led from Locus 24 to Locus 10. A kind of cupboard of mud-bricks was constructed by the east wall. The floor of the room, poorly preserved, was made of a thin layer of clay. Lying on this floor was a 24.5 cm-long sickle made of bronze. The sickle, which has a pointed tip and a straight tang set at right angle to the blade [Fig. 10],

belongs to a type popular in the central and eastern part of North Mesopotamia

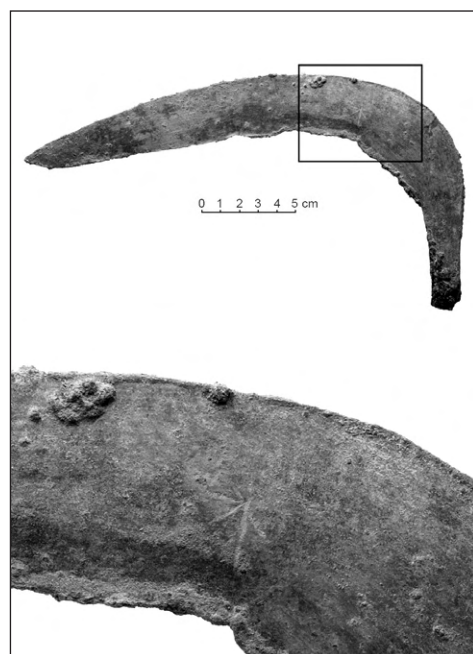


Fig. 10. Bronze sickle with a star sign (*dingir*) etched on the blade, post-Akkadian period (Photo M. Szablowski)

toward the end of the 3rd millennium BC.<sup>4</sup> Cleaning of the blade revealed a star sign (dingir) etched in the metal. Marks of this kind are rare, but have been attested on tools from southern Mesopotamia<sup>5</sup> Some small fragments of scrap bronze, one piece identifiable as the blade part of an axe, were found in the room; they appear to have been kept in store for recasting. Locus 10, located more to the north, communicated

with other parts of the building through doorways in the north, south and most likely also east walls (the lattermost wall was destroyed almost entirely by the foundation trench of House II). The clay floor of the room was cut by a pit. Finds from this area included a fragmentary plate of gypsum featuring three rows of shallow hollows<sup>6</sup> and a high, fenestrated pedestal with marks of bitumen on the



Fig. 11. Remains of post-Akkadian period structures in Sector P  
(Drawing M. Momot)

<sup>4</sup> Sickles of the same type were found in Ashur, Taya, Gawra and Shenshi, see Hauptmann, Pernicka 2004: Nos 122, 241, 242, 823 and 2725.

<sup>5</sup> From Tello and Ur, see Hauptmann, Pernicka 2004: nos 850 and 1312. For signs of other form, see Hauptmann, Pernicka 2004: Nos 823 (Taya), 244–245 (Gawra).

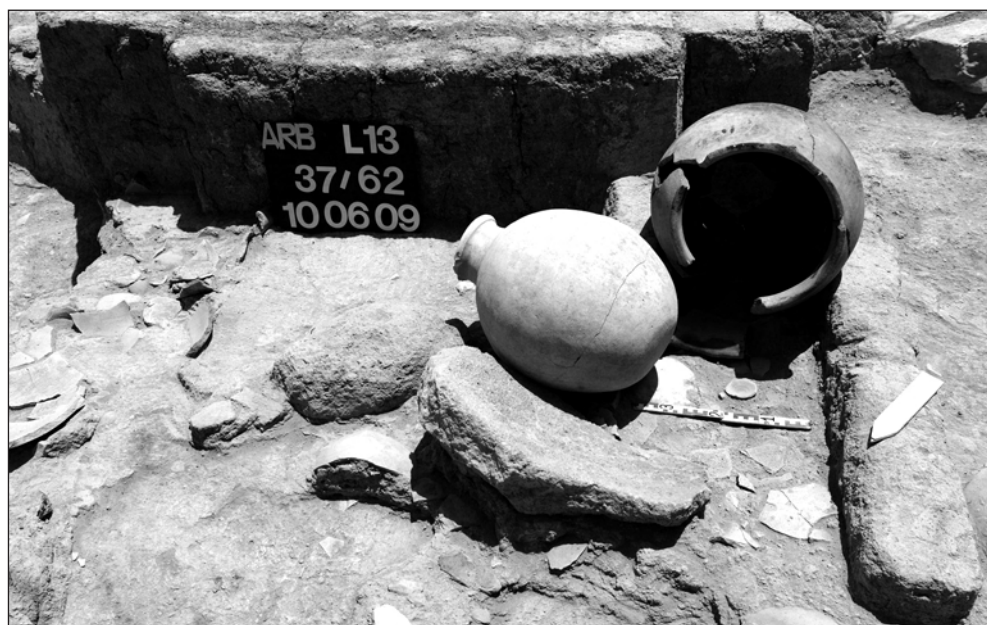
<sup>6</sup> This is most likely a fragment of a gameboard for the “game of 30 fields”, see Romain 2000: 18, Figs 4–5.

upper surface, the bitumen presumably evidencing an effort to fix a bowl or pot to the top of the pedestal.

The chief hall of the Main Building (Locus 13-37/62) was excavated, revealing sections of the original floor in the western and southern ends of the room where it had not been destroyed by a number of later features: grave pit of chamber grave G7-37/62 (in the north), rounded pit (in the center) and large rectangular pit (Locus 14-37/62) from the Early Khabur Ware period (in the east). A large door-socket in the form of a deep bowl made of white limestone was cleared on the inside of the main doorway. To the east of the doorway there was a screen-wall of half-bricks constructed on the floor. Behind this wall there lay a large basalt saddle quern accompanied by two flat basalt grinders, a complete common-

ware jar and a kitchen pot. The floor in this part of the room was littered with potsherds [Fig. 12]. No serious attempt to reconstruct the broken vessels was undertaken, save for one form, a thin-walled jug with high and wide cylindrical neck and rounded body, resembling the vases often depicted on seals and other representations of the period with the “water of life” flowing from them. The walls of the room were covered with a thick (2–4 cm) layer of reddish clay plaster, suggesting long use. The room was square in plan, apparently measuring approximately 5 m square.

Grave digging related to the use of the central cemetery made it difficult to interpret the situation in the eastern part of the Main Building. Two parallel walls, only a meter apart, discovered in this area, probably bear witness to two



*Fig. 12. Pottery and basalt implements on the preserved part of the floor in Locus 13-37/62 of the Main Building”(Photo M. Szablowski)*



different usage phases. Without tracing the northern or eastern limits of the structure, it has been impossible to reconstruct its full dimensions.

### EXTENSION 1

The remains of a building dubbed Extension 1 could be investigated better once the south wall of House II had been removed. The foundation trenches of House II had cut below not only the floor in Extension 1, but also the foundation level of its walls. Fragments of a clay floor were cleared in Loci 18-37/61 and 19-37/61, but this work did not clarify the purpose of the structure. It is clear that a room (Locus 3A-38/61) was added at a later stage on the southwest. Its walls, raised in the *pisé* technique, formed a small chamber (or enclosure) only

1.80 m by 1.90 m, which accommodated a deep, bell-shaped pit (Locus 17). The opening had a diameter of 0.90 m, but at the bottom (approximately 1.90 m below the floor) the pit was 1.75 m wide. The fill of the pit contained mainly broken bricks and a considerable number of post-Akkadian pottery sherds, but nothing that could suggest the purpose of this installation.

### OPEN AREAS SOUTH OF EXTENSION 1

The area to the south of Extension 1 seems not to have been built over with any permanent structures. Excavations revealed the presence of several installations, such as pits, short and thin walls, a large oven with walls supported by a mud-brick structure, and a few post-Akkadian graves. The burials could be divided into three basic groups: pot graves in Kitchen Ware vessels, graves made of two pottery vessels (or rather fragments of vessels), and pit burials.

The first group (graves G3, G4, G11 and G13 from square 38/61) comprised



Fig. 13. Burial gifts from post-Akkadian grave G9-38/61 (Photo M. Szablowski)



Fig. 14. Set of jewellery from post-Akkadian grave G12-38/61 (Photo M. Szablowski)



burials of newborns buried without any burial gifts. The second group (represented by G8 and G9 from the same square) used large pottery sherds, usually the lower or upper parts of a jar. One such sherd would be laid at the bottom of a pit, then the body of a child would be deposited in it and covered with another, similar sherd. Grave G8 did not contain any finds, whereas G9 yielded two bracelets of copper-alloy and a necklace composed of two stone pendants (one made of a damaged Halaf stamp seal), four frit beads in the shape of birds and nine shells [Fig. 13].<sup>7</sup> Two graves, G10 and G12 from square 38/61, were assigned to the third group. In both of them, the body of the deceased individual had been deposited on its back, at the bottom of a pit. G10 contained a conical cup, while G12 yielded the richest collection of finds discovered to date in a post-Akkadian grave: three pottery vessels, two bracelets, a ring and a crescent-pendant, all made of copper-alloy [Fig. 14].

#### LOCUS 17-37/61

Locus 17 had first been tentatively included in the building dubbed Extension 1 (Koliński 2011a: 314–316), but it became clear after the 2009 season that it had constituted an open space of trapezoid form, presumably a midden, between Extensions 1 and 2. The fill here yielded huge amounts of pottery sherds, animal bones and stones, as well as two fragmentary human figurines and some items of bronze. There was also a tiny cosmetic tool, a kohl-spoon of copper-alloy, furnished with an eye at one end. It was most likely part of a set of cosmetic tools, such as those known, for instance, from the Royal Cemetery at Ur.

#### EXTENSION 2

Work in the western part of Sector P offered insight into the stratigraphy of the post-Akkadian settlement as it was the only place where remains of three building levels were encountered. The topmost one had been excavated already in 2001 (Bieliński 2002: 291). This season the middle layer was investigated (stopping at the third layer). A single square room excavated in its entirety (Locus 33) yielded finds that suggested its function as a foundry. The most significant find was a sandstone casting mould for making two fork-like items. Four or five stone weights were also discovered along with a number of scrap bronze fragments and some finished products: a sickle (with upturned tip), and three pins, each with a different head.

Another small room (Locus 35) was discovered immediately under Locus 33 and following the same plan. The floor level of this room has not been cleared yet.

A *pisé* wall running north–south was cleared west of Extension 2. It may have been the western limit of the settlement. Behind this wall there was a substantial pit dug into the slope of the tell (probably originally over 2 m in diameter), reaching down to the level of the lowest floors in the Extension 2 building. The pit was filled with ashes and rubbish from the settlement discovered in Sector P, mixed with sediments washed down from the top of the tell, and no structural remains. It seems to have been the source of clay for the builders of the settlement complex in Sector P and was used subsequently as a handy dumping ground.

<sup>7</sup> *Engina mendicaria* coming from the Persian Gulf. I am grateful to Mrs. Aldona Kurzawska for their identification.

## FINDS FROM EARLIER PERIODS

A small unit identified as belonging to the Akkadian-period settlement was excavated in the western part of square 38/61. About half of this room was cleared within the trench, including a doorway. Two complete pots discovered on a bench running along one of the walls have confirmed the date. The room was oriented according to the cardinal points and more walls following the same orientation were visible in the same square, below post-Akkadian structures. It seems thus that, at least in this part of the sector, post-Akkadian structures were erected on top of Akkadian-period houses.

Finds from the earlier part of the 3rd millennium BC encountered during work in post-Akkadian levels included several *bullae* bearing seal impressions. Some of them, representing the so-called Piedmont Style, belonged to the early 3rd millennium BC, while others could be dated tentatively to the EJ III or EJ IV period. The most remarkable one bears a fragmentary depiction of the Anzu-bird resting on the backs of lions [Fig. 15]. This motif was extremely popular in the art of mid-3rd millennium BC Mesopotamia, although “northern” seals fall mostly into the “Anzu bird and ruminants” variant

(Fuhr-Jöppelt 1972). Another interesting find from this category is a white alabaster cylinder seal with decoration of crossing diagonal lines. It is paralleled by a seal found in Mari, in the earliest settlement, where it was dated to between 2900 and 2750 BC (Parrot 1956: No. 586).



Fig. 15. Seal impression showing the Anzu bird mounted on lions  
(Photo M. Szablowski)

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## REFERENCES

- Andrae, W.  
1922 *Die archaischen Ishtar-Tempel in Assur* [=WVDOG 39], Leipzig: J.C. Hinrichs
- Bacelli, G., Manuelli, F.  
2008 Middle Bronze Khabur Ware from Tell Barri/Kahat [in:] J. Córdoba *et alii* (eds), *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East, Madrid, April 3–8 2006*, I, Madrid: Universidad Autónoma de Madrid, 187–206
- Bieliński, P.  
1999 Tell Arbid. Preliminary report, 1998, *PAM* 10 (*Reports* 1998), 205–216  
2001 Tell Arbid. Interim report of the fifth season, *PAM* 12 (*Reports* 2000), 315–326  
2002 Tell Arbid. The sixth campaign of excavations, preliminary report, *PAM* 13 (*Reports* 2001), 279–294
- Fuhr-Jaepelt, I.  
1972 *Materialien zur Ikonographie des Löwenadlers Anzu-Imdugud*, Munich: Selbstverlag
- Haller, A.  
1955 *Die Heiligtümer des Gottes Assur und der Sin-Šamaš-Tempel in Assur* [=WVDOG 67], Berlin: Mann
- Hauptmann, H., Pernicka, E.  
2004 *Die Metallindustrie Mesopotamiens von den Anfängen bis zum 2. Jahrtausend v. Chr.* [=Orient-Archäologie 3], Rahden: Leidorf
- Koliński, R.  
2011a Tell Arbid. Adam Mickiewicz University Excavations in Sector P. Spring season of 2008, *PAM* 20 (*Research* 2008), 303–319  
2011b Report on the activities of the Polish-Syrian Mission to Tell Arbid, governorate of Hasake, spring season of 2008, *Chronique Archéologique en Syrie* 4  
2012 Badania Instytutu Prahistorii UAM w Poznaniu na Tell Arbid (północno-wschodnia Syria) w latach 2008–2009, *Folia Archaeologica Posnaniensia* 16, 215–250
- Parrot, A.  
1956 *Mission archéologique de Mari I. Le Temple d'Ishtar* [=BAH 65], Paris: P. Geuthner
- Philip, G.  
1989 *Metal Weapons of the Early and Middle Bronze Ages in Syria-Palestine* [=BAR International Series 526], Oxford: British Archaeological Reports
- Piątkowska-Małecka, J., Wygnańska, Z.  
2006 Szczątki zwierzęce z grobowca chaburskiego na stanowisku Tell Arbid (Syria) jako przejaw wierzeń i rytuałów pogrzebowych [in:] L. Kostuch, K. Ryszevska (eds), *Zwierzę jako sacrum w pradziejach i starożytności* I, Kielce: Wydawnictwo Akademii Świętokrzyskiej im. Jana Kochanowskiego, 77–99
- Romain, P.  
2000 Les représentations des jeux de pions dans le Proche-Orient ancien et leur signification, *Board Games Studies* 3, 11–38

Tsukimoto, A.

- 1985 *Untersuchungen zur Totenpflege (kispum) im alten Mesopotamien* [=Alter Orient und Altes Testament 216], Neukirchen-Vluyn: Neukirchener Verlag

Wissing, A.

- Forthcoming Ritual aspects of intramural burial practice in Tall Mozan (3rd and 2nd mill. BC) [in:] H. Niehr, P. Pfälzner (eds), *(Re-)Constructing Funerary Rituals in the Ancient Near East, Akten eines internationalen Symposiums in Tübingen im Mai 2009*

Wygnańska, Z.

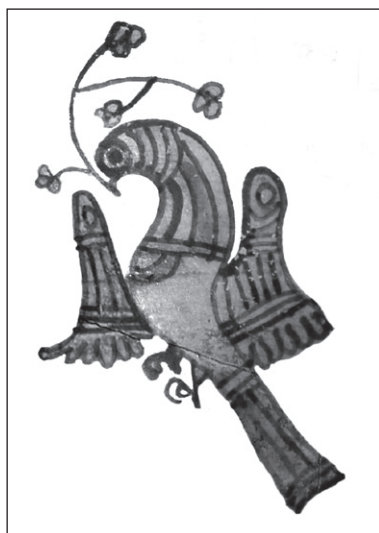
- 2006 *Obrządkie grzebalne i związane z nimi rytuały w Mezopotamii i Syrii północnej w pierwszej połowie II tysiąclecia p.n.e.* [Burial customs and related rituals in Mesopotamia and North Syria in the First Half of the 2nd Millennium BC], unpublished Ph.D. diss. (in Polish)

POLISH CENTRE OF MEDITERRANEAN ARCHAEOLOGY  
UNIVERSITY OF WARSAW

# POLISH ARCHAEOLOGY IN THE MEDITERRANEAN

## XXI

RESEARCH 2009





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