

THE 'GADARA REGION PROJECT' IN NORTHERN JORDAN SPRING CAMPAIGN 2005 ON TALL ZAR'A

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Introduction

The Gadara Region Project in northern Jordan has been initiated by Prof. Dr. Dieter Vieweger, Director of the Biblical-Archaeological Institute in Wuppertal, in 2001. The aim of this interdisciplinary project is the investigation of the regional history of the Decapolis city of Gadara. The project is closely linked with the long-term archaeological investigations in Gadara/ Umm Qays conducted by the Deutsches Archäologisches Institut (A. Hoffmann, G. Schauerte, C. Bührig) and the German Protestant Institute of Archaeology (U. Wagner-Lux, K. Vriezen).

After intensive surveys in the Wādī al-'Arab and the Wādī az-Zaḥar south of Gadara in 2001, Tall Zar'a was selected as the most promising excavation site. After a trial excavation by Dr. Karel Vriezen in 2002 the main excavation started in 2003. Since 2004 the project has been conducted in close cooperation between the Biblical-Archaeological Institute in Wuppertal and the German Protestant Institute of Archaeology and directed by the authors.¹

The third excavation campaign took place from March 4 to April 5, 2005. A team of 17 archaeologists, surveyors, architects and students of various disciplines worked on the excavation for five weeks, supported by 20 volunteers who participated for two weeks. Depending on the number of German excavators, between two and ten Jordanian workers were recruited for the excavation.

In order to interpret excavated architectural remains of the Roman-Byzantine, Iron Age, and Late Bronze Age periods in a better way, the area

of excavation (Area I on the northwest side of the tall) was enlarged in the north (AP 118, AP 119) and the south (AI 115, AI 116, AH 115, AH 116) by six squares of 5 x 5m each so that the excavation area now measures a total of 625m². Those squares that had been opened during the previous years were to be excavated to the Late Bronze Age stratum. The deepest square is now located at 4m below the tall surface. In order to have a larger area to work on, the balks were excavated systematically.

Five strata — designated by numbers beginning with 1 from top to bottom — were identified in the excavation campaigns of 2003 and 2004. They can be dated from the Roman-Byzantine period to the Early Bronze Age. The architectural remains of the Early Bronze Age are currently only visible on the western slope in the form of the outer edge of the city wall. The other remains of this stratum as well as the remains of an expected Middle Bronze Age stratum are still covered by layers of later periods.

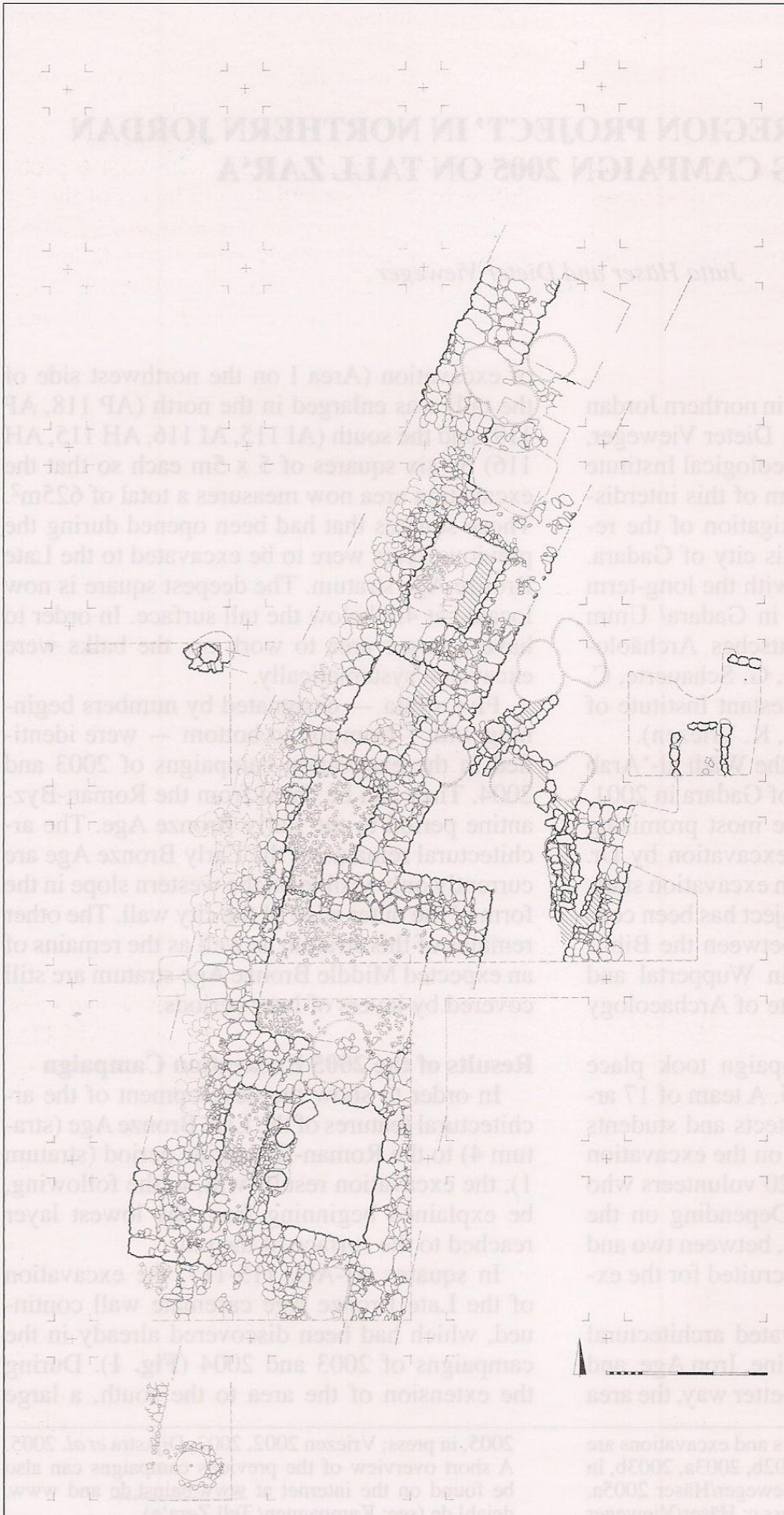
Results of the 2005 Excavation Campaign

In order to show the development of the architectural features of the Late Bronze Age (stratum 4) to the Roman-Byzantine period (stratum 1), the excavation results will, in the following, be explained beginning from the lowest layer reached to the surface of the tall.

In squares AI-AO, 115-117, the excavation of the Late Bronze Age casemate wall continued, which had been discovered already in the campaigns of 2003 and 2004 (**Fig. 1**). During the extension of the area to the south, a large

1. The results of the previous surveys and excavations are published in: Vieweger 2002a, 2002b, 2003a, 2003b, in press a, in press b, in press c; Vieweger/Häser 2005a, 2005b, in press a, in press b, in press c; Häser/Vieweger

2005, in press; Vriezen 2002, 2003; Dijkstra *et al.* 2005. A short overview of the previous campaigns can also be found on the internet at www.bainst.de and www.deiahl.de (see: Kampagnen/ Tell Zera'a).



1. Plan of the architectural features in the Late Bronze Age stratum (drawing: J. Kröpsch).

room with a separating wall was uncovered in squares AK/AI 115/116. This room measures 6 x 4m. The floor was covered with small pebble stones (context 1537). A 20cm layer of debris was found above this floor. It was covered with a 3cm thick lime screed (context 1504). A wall was constructed above this lime screed, separating off the western part of the room. Two column bases were erected on the wall (context 1483), which probably carried wooden columns originally. It turned out that the eastern and western walls of this large room were the direct continuation of the walls of a room flanking the former to the north (AL/AK 116/117). This had been uncovered in the 2003 and 2004 campaigns and was interpreted as a tower of the city wall. According to the new excavation results, a large building can be reconstructed that was part of the city wall. Four steps have been discovered in squares AI 115/116. They can be interpreted as a small gate to the wells at the base of the wall. In this case, the large building can be interpreted as gateway. The special construction of the southern room with the two column bases and the small, separate room could point to a small gate sanctuary. However, there are no finds that definitely confirm this interpretation. A large stone — worked on its base and tapered at the top — found in this room might be a *mazzebe* (cultic stone). A charcoal sample² was taken in the debris layer of the Late Bronze Age casemate wall in square AI 115, giving a date between 1450 and 1300BC with 95.4 % probability.

The entrance to the city at this point consists of four steps with a width of 2.75m. To the south, the entrance was bordered by a room of which only the northwest corner has been excavated for the time being. A bell-shaped pit — surrounded by a paved floor — is situated in this room (square AH 115, context 1444). This is carefully lined with large stones and covered with a round carefully hewn stone, measuring 1m in diameter and with a 15cm diameter hole in the middle. The pit was filled with layers of soil and has been excavated to a depth of 2.60m. However the bottom has not been reached as yet. The function of the pit is still unclear. Since it is not sealed, its interpretation as a cistern is

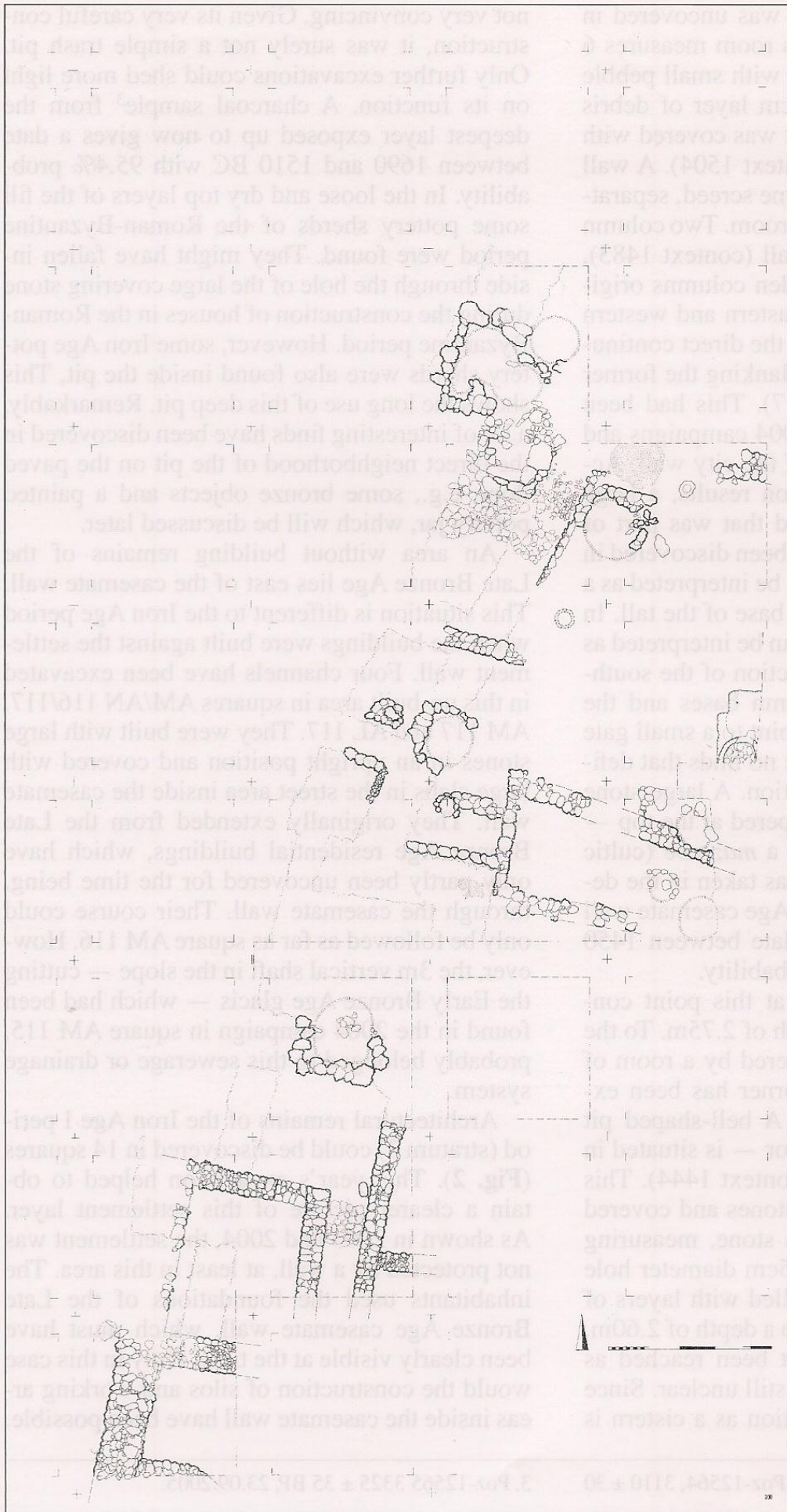
not very convincing. Given its very careful construction, it was surely not a simple trash pit. Only further excavations could shed more light on its function. A charcoal sample³ from the deepest layer exposed up to now gives a date between 1690 and 1510 BC with 95.4% probability. In the loose and dry top layers of the fill some pottery sherds of the Roman-Byzantine period were found. They might have fallen inside through the hole of the large covering stone during the construction of houses in the Roman-Byzantine period. However, some Iron Age pottery sherds were also found inside the pit. This shows the long use of this deep pit. Remarkably, a lot of interesting finds have been discovered in the direct neighborhood of the pit on the paved floor, e.g., some bronze objects and a painted pottery jar, which will be discussed later.

An area without building remains of the Late Bronze Age lies east of the casemate wall. This situation is different to the Iron Age period when the buildings were built against the settlement wall. Four channels have been excavated in this un-built area in squares AM/AN 116/117, AM 117 and AL 117. They were built with large stones in an upright position and covered with large slabs in the street area inside the casemate wall. They originally extended from the Late Bronze Age residential buildings, which have only partly been uncovered for the time being, through the casemate wall. Their course could only be followed as far as square AM 116. However, the 3m vertical shaft in the slope — cutting the Early Bronze Age glacis — which had been found in the 2004 campaign in square AM 115, probably belonged to this sewerage or drainage system.

Architectural remains of the Iron Age I period (stratum 3) could be discovered in 14 squares (Fig. 2). This year's excavation helped to obtain a clearer picture of this settlement layer. As shown in 2003 and 2004, the settlement was not protected by a wall, at least in this area. The inhabitants used the foundations of the Late Bronze Age casemate wall, which must have been clearly visible at the time. Only in this case would the construction of silos and working areas inside the casemate wall have been possible.

2. Poznan Radiocarbon Laboratory Poz-12564, 3110 ± 30 BP, 23.09.2005.

3. Poz-12565 3325 ± 35 BP, 23.09.2005.



2. Plan of the architectural features in the Iron Age I stratum (drawing: J. Kröpsch).

Also, small walls were constructed along the strong Late Bronze Age walls. Not all of these structures can be clearly interpreted as residential buildings. They could also be working areas or storage installations. During the excavation of some new squares to the south of Area I (AI 115, AI 116, AH 115), it turned out that, in addition to these single-line walls, buildings with strong and carefully built walls with two or more lines of mostly small pebble stones were erected. This is the case in the east of the excavation area (AL 117, AL 118) and especially in the south (AI 115, AI 116, AH 115), where three buildings are recognizable. Of the building in the southwest (AI 115, AI 117, AH 115), which is the most clearly visible, two rooms or courtyards have so far been excavated. They were built on the Late Bronze Age casemate wall. A second building (AI 116) is situated further east, separated by a large paved passageway. This consists also of at least two rooms or courtyards. At this stage, only one wall running from north to south and a small part of another wall running from west to east of this building have been uncovered. A wall built of two lines of fieldstones runs in an east-west direction in squares AL 117 and AL 118. About 3m south of this wall, another wall runs parallel to the former. It is heavily damaged. Both walls were limited to the west by a single-line, north-south running wall, forming a ca. 3 x 6m large, not exactly rectangular, room or courtyard. In square AN 117, a charcoal sample⁴ was taken from an ash layer above the Late Bronze Age city wall at the edge of an Early Iron Age I wall giving a date between 1220 and 970BC with 95.4% probability. A charcoal sample⁵ from another Early Iron Age I context gave a date between 1220 and 1040BC with 95.4% probability.

Architectural remains of Iron Age II were uncovered in 11 squares (AM-AP 118/119, AL 118, AK 117, AI 116) (Fig. 3). During the 2003 and 2004 campaigns, it turned out that the settlement of this period was protected by a zigzag-like wall along the northwestern slope. The wall could be traced further to the southwest. Its zigzag course ends at this point and continues straight in a southerly direction (AL

117, AK 116, AI 116). The residential buildings were built adjoining the settlement wall. In all cases only the foundations, constructed without mortar from undressed fieldstones, could be excavated, as in all other strata. There were almost no remains of the mud-brick walls built on top of the foundations.

At this stage, three or four houses can be distinguished in squares AP 118, AN/AO 118/119 and AL/AM 118/119. These houses consist of one or more rooms and one or more courtyards although it is very difficult to decide whether we are dealing with a room or a courtyard. Various modifications in the houses were made so that two building phases (an early and a late one) can be distinguished.

Only the south wall remained of the northernmost building in squares AP 118 and AP 119. North of this wall a pavement of hand-sized stones could be detected. A carefully worked stone table with a height of 30cm, a diameter of 58cm, and with a 2cm high rim stood at the edge of this pavement. The function of this table is unclear. Pottery sherds and a well-made basalt bowl with a ring base were found in its direct neighborhood.

South of this first house lies another in squares AP-AM 118-119. The construction in the northern part will remain unclear until the balks are excavated. A hook-shaped wall diverged from the northern wall in the northwest, forming a room or courtyard with an entrance in the northwest. Two rooms or courtyards measuring 3.5 x 6.5m are situated south of it. They are limited in the east by a third house. A *tābūn* was found in each room or courtyard.

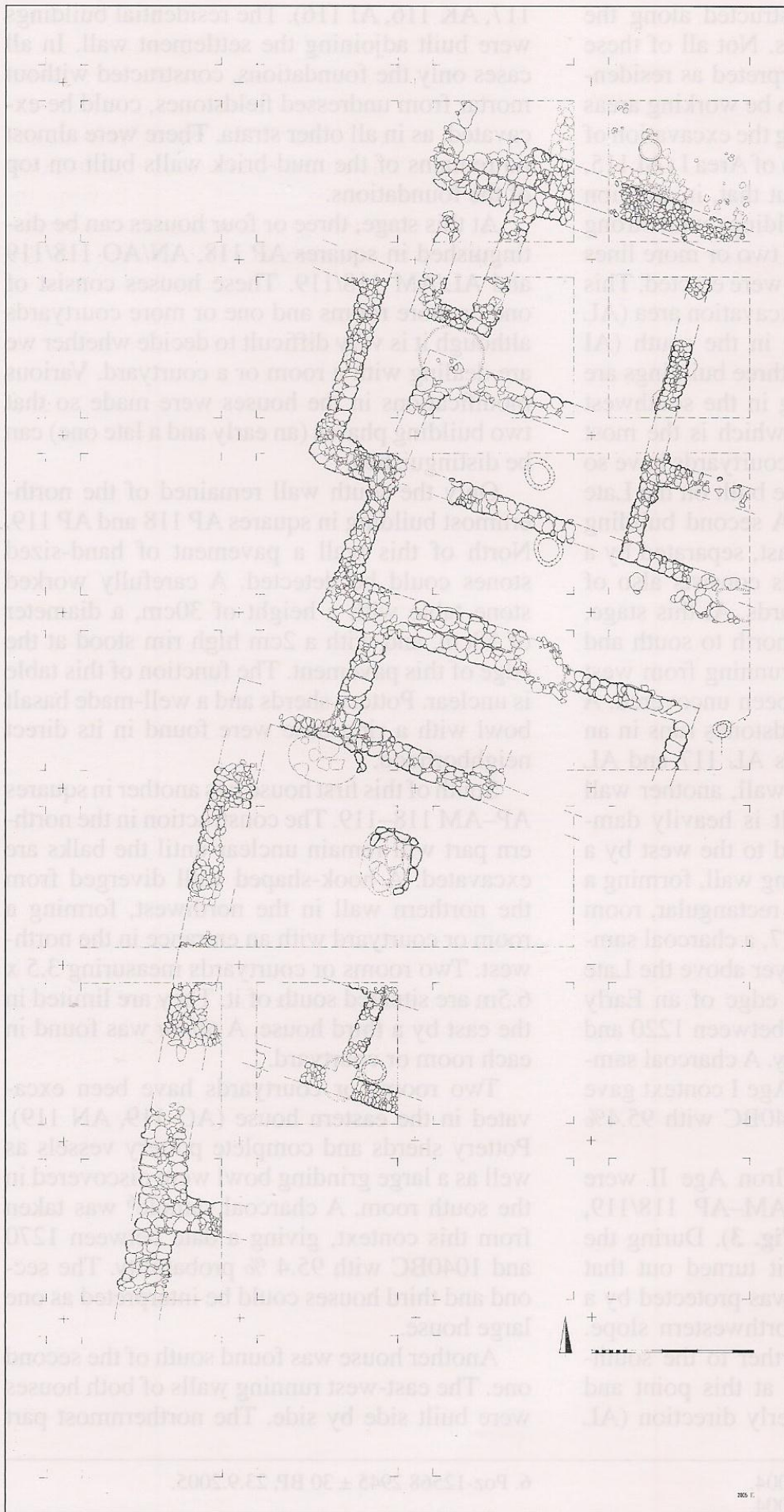
Two rooms or courtyards have been excavated in the eastern house (AO 119, AN 119). Pottery sherds and complete pottery vessels as well as a large grinding bowl were discovered in the south room. A charcoal sample⁶ was taken from this context, giving a date between 1270 and 1040BC with 95.4% probability. The second and third houses could be interpreted as one large house.

Another house was found south of the second one. The east-west running walls of both houses were built side by side. The northernmost part

4. Poz-8855 2905 ± 35 BP, 13.12.2004.

5. Poz-8856 2930 ± 35 BP, 13.12.2004.

6. Poz-12568 2945 ± 30 BP, 23.9.2005.



3. Plan of the architectural features in the earlier phase of the Iron Age II stratum (drawing: J. Kröpsch).

of the fourth house consists of a 3.5m wide and 8m long room or courtyard (AM 118/119, AL 118/119). The room or courtyard could have been a partition wall; however, few stones of it remain (AM/AL 118). A large, unbuilt area is located south of this room or courtyard. This area has to be designated as a courtyard, because it would have been difficult to roof such a large area. A silo was found here built with large stones measuring 1.5m in diameter. Some walls were uncovered in square AK 117, which served as partition walls for small rooms. A *ṭābūn* was situated in the easternmost room. The connection of these walls with the northern architectural structures has not been determined yet.

In a later phase of Iron Age II, the hook-shaped wall in the northern house (AP/AO 118) was removed, leaving a large, open area (Fig. 4). The southern part of this house (AO–AM 118/119) was divided in small rectangular rooms and a large rectangular room alongside the settlement wall.

In the fourth house the northern large, rectangular room/courtyard remained unaltered. Only in its western part a small partition wall was built which runs parallel to the settlement wall. The silo, situated in the room/courtyard south of it, was covered with a large, oval working stone. The floor around it was paved. A charcoal sample⁷ was taken from the floor of this room or courtyard dating this to between 1120 and 900BC with 95.4 % probability. Walls of this room/courtyard to the east (AL 118) and west (AL 117) are recognizable in this building phase. A wall running in an eastward direction was built against the eastern wall forming a room or courtyard to the north and containing a *ṭābūn*. South of the room/courtyard with the working stone, another room is situated parallel to the settlement wall. Another room had probably been constructed parallel to the city wall as suggested by the remaining walls to the south. An oven measuring 90cm in diameter was found in square AO 118 from which a charcoal sample⁸ was taken, giving a date between 1005 and 915BC with 95.4% probability.

In stratum 1 of the Roman-Byzantine period, a fourth house was uncovered in the southwest of the excavation area in square AI 116 (Fig. 5).

This is recognizable by a wall of large fieldstones running from east to west. A possible connection to the house in squares AN–AK 117–119 to the north has not yet been found, because the square east of it (AI 117) has so far not been excavated. The paved road discovered in 2004, running between the houses and following the contour line of the slope, could be traced further to the north in square AO 119. During the dismantling of the walls of the Roman-Byzantine houses in the west (i.e. on the edge of the slope), it turned out that their foundations were deeper than originally supposed. In several cases, they were built directly on the Iron Age II wall foundations. This construction was probably necessary because the walls had to be protected against sliding down the very steep slope. It is also possible that the Romans constructed their houses in terraces along the slope.

By opening squares AP 118 and AP 119, the extension of the northernmost house could be determined. Four rooms or courtyards are visible, oriented slightly to the northeast. The easternmost ones measure about 5 x 5m. The northeasternmost courtyard is paved with hand-sized stones. The room in the southwest of this house is smaller, with a north-south extension of 3m. The northern wall adjoining the next room or courtyard has slipped like the other walls in the western part of the excavated area due to the very steep slope.

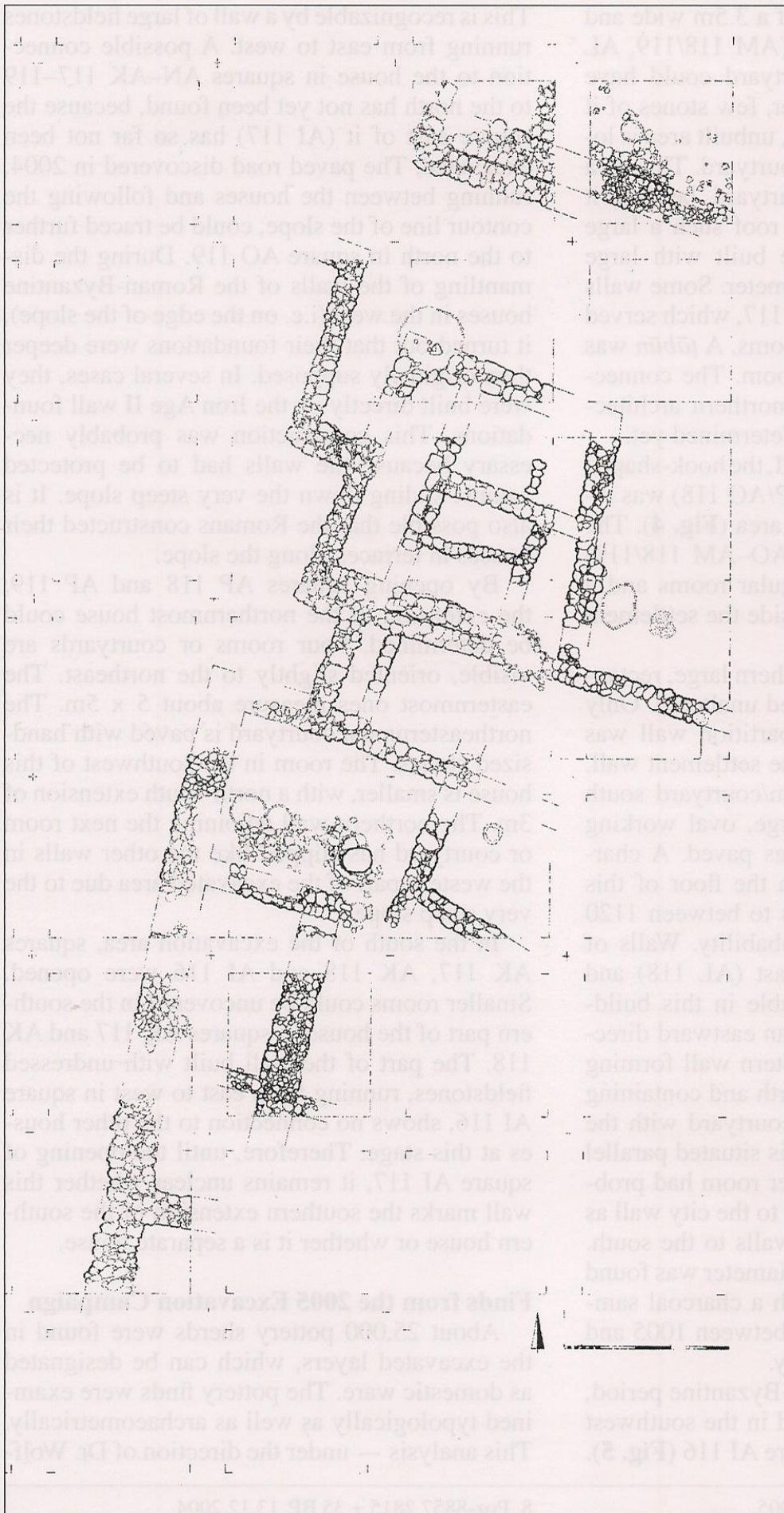
In the south of the excavation area, squares AK 117, AK 118 and AI 116 were opened. Smaller rooms could be uncovered in the southern part of the house in squares AK 117 and AK 118. The part of the wall built with undressed fieldstones, running from east to west in square AI 116, shows no connection to the other houses at this stage. Therefore, until the opening of square AI 117, it remains unclear whether this wall marks the southern extension of the southern house or whether it is a separate house.

Finds from the 2005 Excavation Campaign

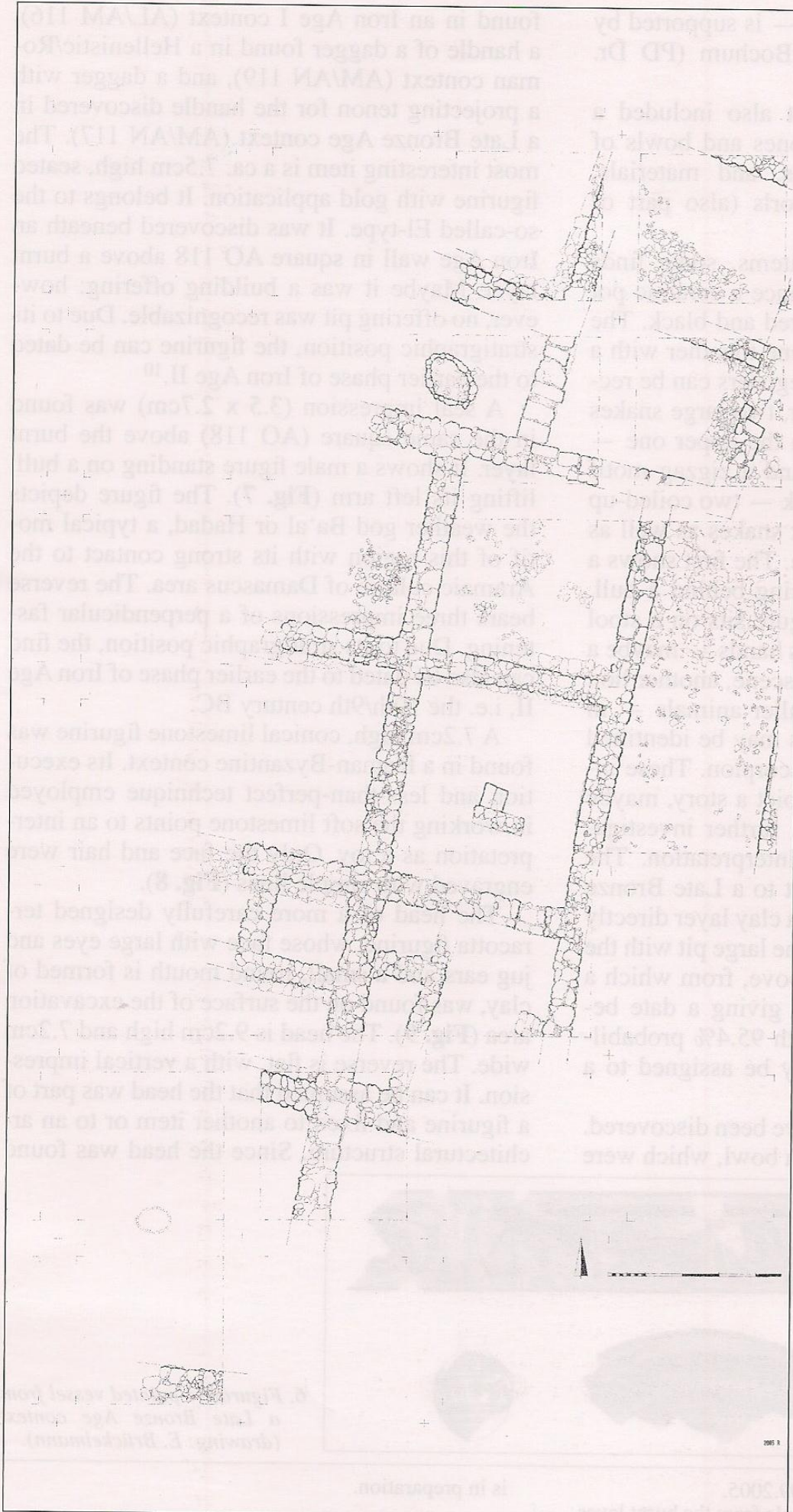
About 25,000 pottery sherds were found in the excavated layers, which can be designated as domestic ware. The pottery finds were examined typologically as well as archaeometrically. This analysis — under the direction of Dr. Wolf-

7. Poz-12567 2850 ± 35 BP, 23.9.2005.

8. Poz-8857 2815 ± 35 BP, 13.12.2004.



4. Plan of the architectural features in the later phase of the Iron Age II stratum (drawing: J. Kröpsch).



5. Plan of the architectural features in the Roman-Byzantine stratum (drawing: J. Kröpsch).

gang Auge (BAI Wuppertal) — is supported by Deutsches Bergbaumuseum Bochum (PD Dr. Andreas Hauptmann).

The household equipment also included a large amount of grinding stones and bowls of different shapes, dimensions, and materials, loom weights, and spin whorls (also part of home inventories).

Beside these household items, some finds are of special value, for instance a ceramic pot with two handles painted in red and black. The painting shows an animal scene together with a human figure (**Fig. 6**). Two registers can be recognized. In the lower register, two large snakes lie opposite to each other. In the upper one — framed by horizontal lines and a zigzag motif on the pot's shoulder and neck — two coiled-up snakes and two stretched-out snakes as well as two further scenes are visible. The first shows a lion with upraised mane pacing behind a bull. Behind the bull, a human figure sits on a stool holding up something with its hands — maybe a child or a lyre. In the second scene, another lion walks behind a flock of smaller animals — in addition, two further animals may be identified as a cat-like creature and a scorpion. These interesting scenes probably depict a story, maybe a legend or myth. However, further investigations are necessary for an interpretation. The vessel belongs without doubt to a Late Bronze Age context. It was found in a clay layer directly above the pavement around the large pit with the covering stone mentioned above, from which a charcoal sample⁹ was taken giving a date between 1440 and 1300BC with 95.4% probability. The vessel can definitely be assigned to a Late Bronze Age context.

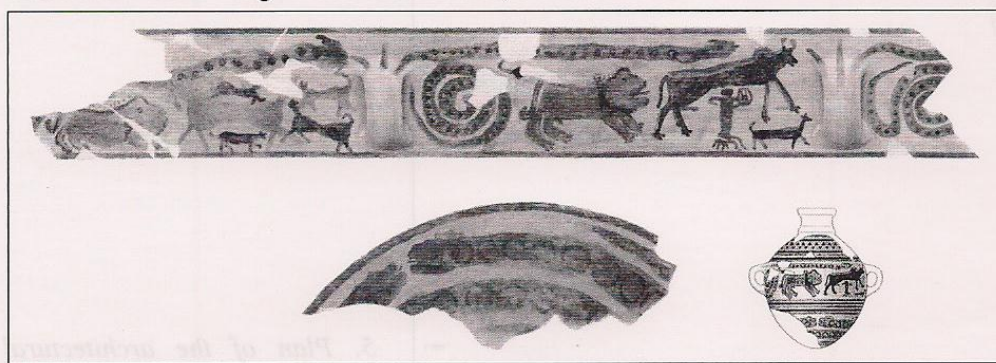
Several bronze objects have been discovered. These are four fragments of a bowl, which were

found in an Iron Age I context (AL/AM 116), a handle of a dagger found in a Hellenistic/Roman context (AM/AN 119), and a dagger with a projecting tenon for the handle discovered in a Late Bronze Age context (AM/AN 117). The most interesting item is a ca. 7.5cm high, seated figurine with gold application. It belongs to the so-called EI-type. It was discovered beneath an Iron Age wall in square AO 118 above a burnt layer. Maybe it was a building offering; however, no offering pit was recognizable. Due to its stratigraphic position, the figurine can be dated to the earlier phase of Iron Age II.¹⁰

A seal impression (3.5 x 2.7cm) was found in the same square (AO 118) above the burnt layer. It shows a male figure standing on a bull, lifting its left arm (**Fig. 7**). The figure depicts the weather god Ba'al or Hadad, a typical motif of this region with its strong contact to the Aramaic culture of Damascus area. The reverse bears three impressions of a perpendicular fastening. Due to its stratigraphic position, the find can also be dated to the earlier phase of Iron Age II, i.e. the 10th/9th century BC.

A 7.2cm high, conical limestone figurine was found in a Roman-Byzantine context. Its execution and less-than-perfect technique employed in working the soft limestone points to an interpretation as a toy. Only the face and hair were engraved with simple lines (**Fig. 8**).

The head of a more carefully designed terracotta figurine, whose face with large eyes and jug ears and a small, round mouth is formed of clay, was found on the surface of the excavation area (**Fig. 9**). The head is 9.2cm high and 7.2cm wide. The reverse is flat, with a vertical impression. It can be assumed that the head was part of a figurine and fixed to another item or to an architectural structure. Since the head was found

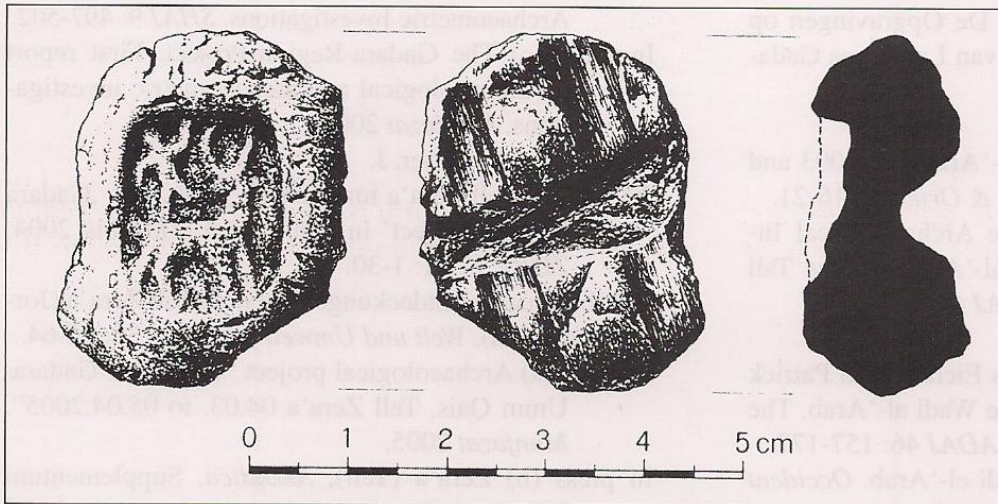


6. Figurative painted vessel from a Late Bronze Age context (drawing: E. Brückelmann).

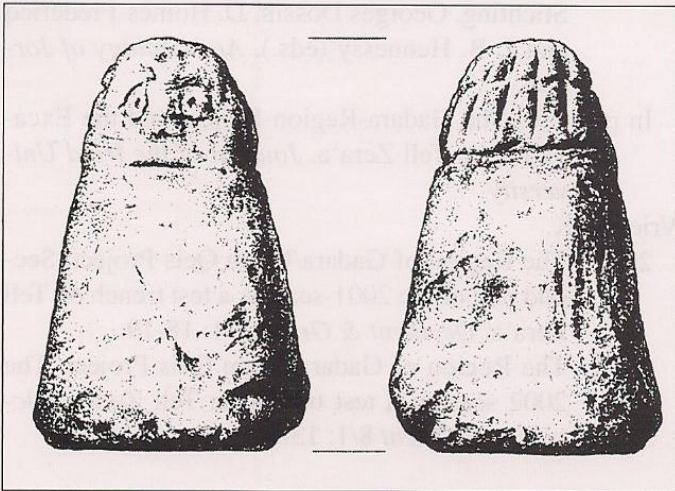
9. Poz-12566 3105 ± 30 BP, 23.09.2005.

10. The dating of the charcoal sample from the burnt layer

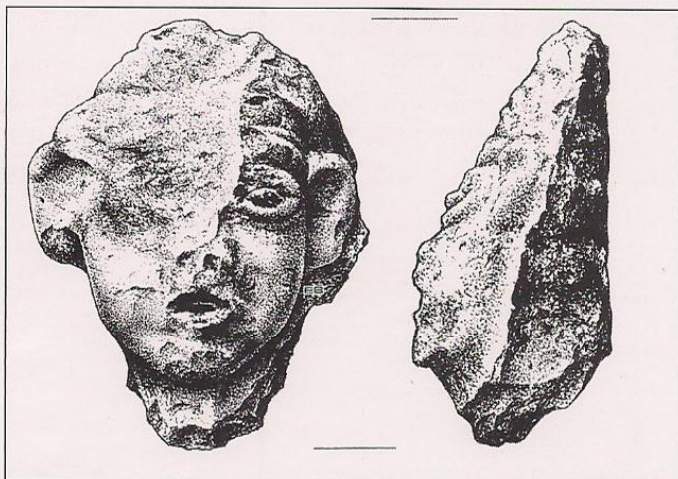
is in preparation.



7. Seal impression depicting the god Ba'al or Hadad found in a context of the earlier phase of the Iron Age II (drawing: E. Brückelmann).



8. Limestone figurine found in a Roman-Byzantine context (drawing: E. Brückelmann).



9. Head of a terracotta figurine found on the surface (drawing: E. Brückelmann).

on the surface its dating is problematic. Up to now we found only a vase with a face (Balensi 1987, 98-99 Nr. 87) which can be compared. This vase can be dated to the Middle Bronze Age II. Further studies are necessary.

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