

ARCHAEOLOGICAL SURVEY AND EXCAVATIONS AT WĀDĪ AL-YUTUM AND THE AL-MAGAŞŞ AREA, 'AQABA (ASEYM): A PRELIMINARY REPORT ON THE EXCAVATIONS AT TALL HĪJAYRAT AL-GHUZLĀN IN 2008 AND 2010

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Introduction

The ASEYM project was established in 1998 as a joint project between the Institute of Archaeology, University of Jordan and the Oriental Department of the German Archaeological Institute in Berlin. Since 2002, field work has been focused on the site of Tall Hujayrat al-Ghuzlān and surrounding areas. The survey and excavation results of the 1985 and 1990 seasons at Tall al-Magaşş, as well as those of the 1998, 2000, 2002, 2003, 2004 and 2005 seasons, have recently all been published (Khalil and Schmidt 2009).

The 2008 excavations took place between 21 January and 12 March; the 2010 season took place between 26 January and 18 March. The team during both seasons included the above-mentioned authors and contributors. I. al-Zabn and M. Bosouni represented the Department of Antiquities in 2008, and M. Basouni and S. al-Fakhri in 2010. U. Siegel was the architect in both seasons, supported by J. Sempff (2010) and M. Merz and A. Pieritz (2008). M. Ady was part-time photographer (2008 and 2010), N. Jetawih and F. Höflmeyer participated in the 2010 season on a part-time basis.

The principal aims of the 2008 and 2010 seasons were as follows:

1. To continue to excavate in the squares of previous seasons in order to reach the lowest occupation layers lying directly over the natural alluvial sand and pebbles of Wādī al-Yutum, and to understand the various phases of occupation.
2. To extend the excavation horizontally in order to:

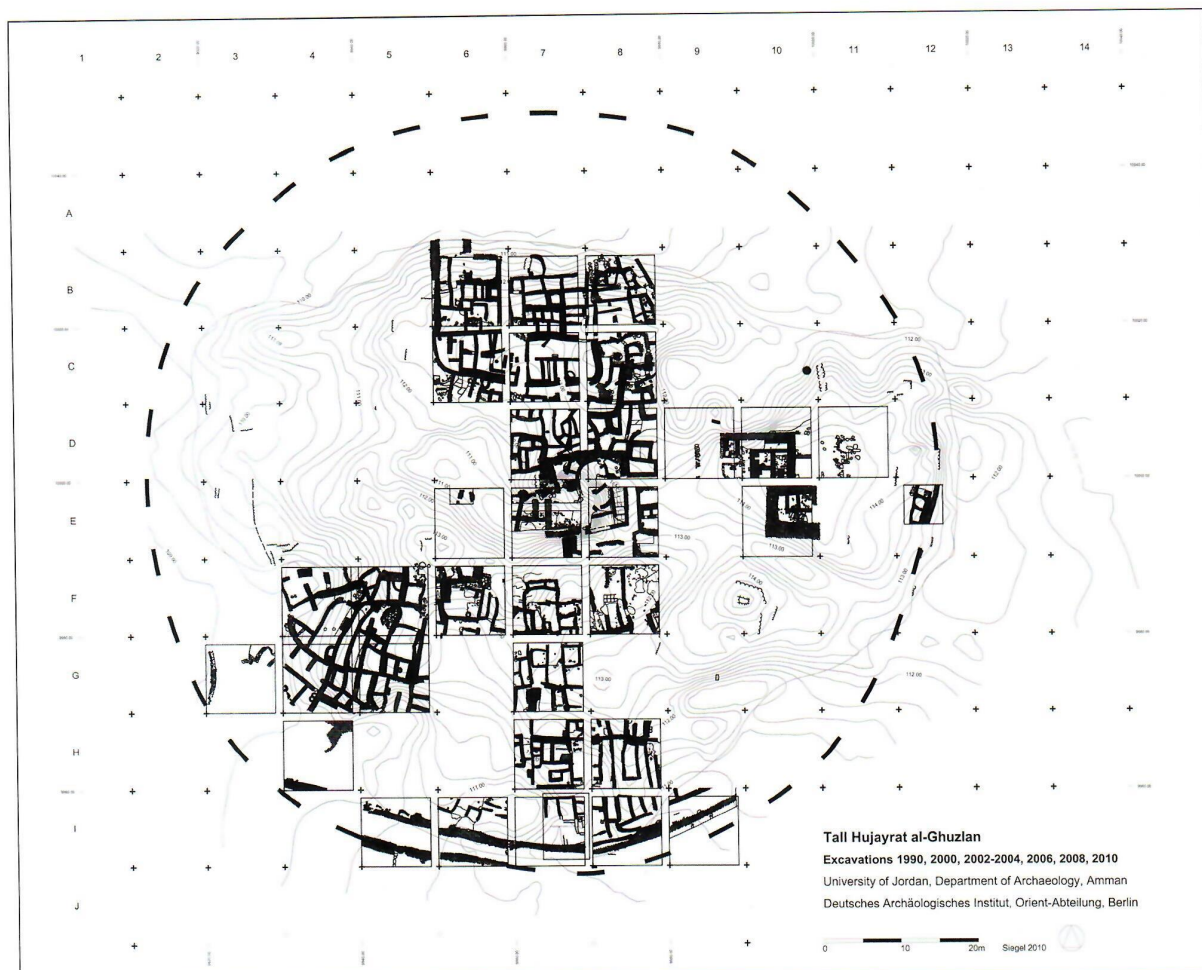
- A. Expose more architectural features in the vicinity of Building D in the western part of the site.
 - B. To trace the 'town wall' in the southern part of the site.
3. To examine the center of the site for architectural correlations between stone-built Building A and mud-brick walls.

In order to achieve the above-mentioned objectives, during the eighth (2008) season, excavations were carried out in several trenches of the previous season, i.e. F4, C6, C8, D7, D8, E7 and I8. In addition, new trenches, i.e. D9, D10, D11, E10, E11, I9 and I10 were opened, as was a 2 x 9 m trench in the center of the mound. During the ninth season (2010), digging continued in seven squares from previous seasons, i.e. F4, F5, G4, G5, I6, I7 and I8, and three new squares were opened, i.e. G3, H4 and I5 (**Fig. 1**).

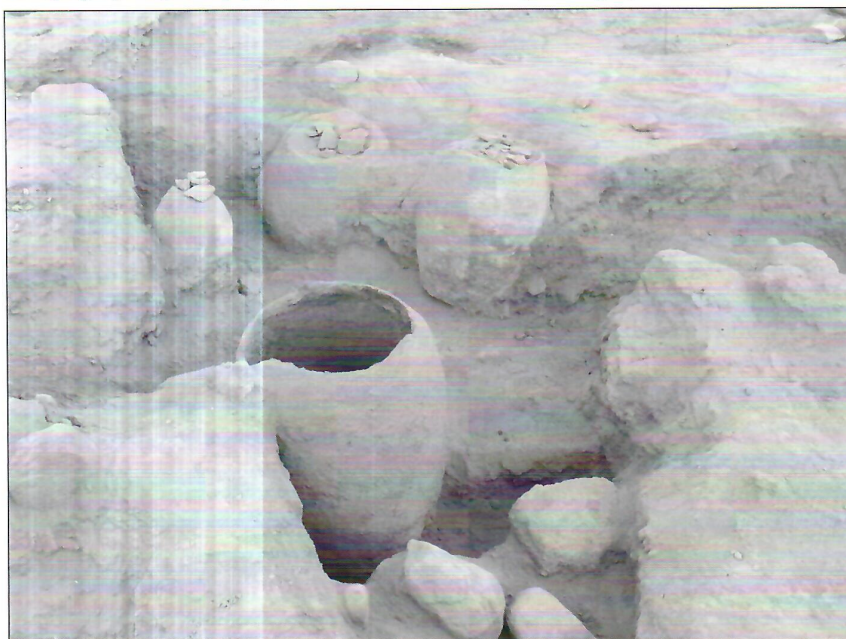
Architecture and Stratigraphy

Excavations were started in squares C6 and C8 during the 2002 season, and these were continued in 2004 (Eichmann *et al.* 2009: 17-77). In 2008, during excavations at the south-west part of square C6, four large vessels (loci 86, 87, 88 and 89) were uncovered *in situ* in room locus 85 (**Fig. 2**). In a nearby room, a major discovery was made, namely a female figurine of baked clay (**Fig. 3**). In the southern part of the square a small wooden beam, covered by a thick layer of clay, was found still adhering to the western and eastern walls of a narrow room (locus 114); this was probably associated with an upper floor of the building.

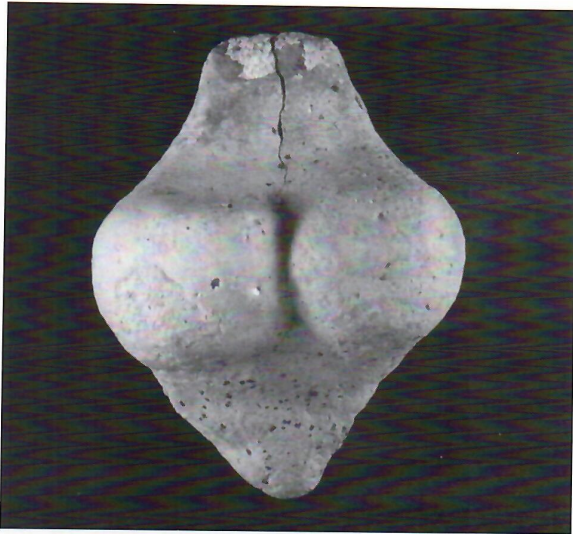
In square C8, excavation revealed a large



1. Topographic plan of Hujayrat al-Ghuzlān showing during squares excavated in various seasons.



2. Pottery vessels (loci 86, 87, 88 and 89) found in situ in square C8.



3. Lower part of female clay figurine.

conical vessel and two heavy stone bowls in association with the bases of massive ceramic vessels. This suggests that an *in situ* assemblage on an upper floor crashed down when an earthquake destroyed the building. In the same room, a hard layer of white gypsum-like material was discovered. In the eastern wall, there was a window-like opening with the remains of soot, which suggests that it may have been used as a niche in which to place a lamp.

In square D8, there was the northern corner of stone-built Building A, a large, rectangular

structure with massive walls. In locus 57 a mud-brick bearing the imprint of a left human foot was found; it was extremely fragile, so was left *in situ* and covered over with earth.

Squares D9, D10, D11, E10 and E11 were newly opened in the north-eastern area of the *tall*. A large stone alignment was visible when removing topsoil.

Square E7 is located more or less in the centre of the site, where an area measuring *ca* 4 x 7 m had been damaged by looters. They used a bulldozer to destroy the south-west part of the central, stone-built Building A. A 2 x 9 m sounding was excavated in this area, all the way down to the natural Wādī al-Yutum deposits. In the western part of the sounding, a pit was discovered. This was lined with mud plaster and contained a near-complete jar. Natural was reached at 108.20 m asl, which means that the depth of archaeological deposit was *ca* 4 meters. This had been anticipated, as natural was reached in a small sounding in square E6 during the 2000 season. The new section provides a large (11 m) view of the stratigraphic and architectural sequence in the middle of the site (Fig. 4). Square E8 was opened in 2004; continued excavations during the 2008 season revealed two massive mud-brick walls which form the southern corner of Building A (locus 52). The walls forming Room 1 (loci 3, 5, 6, 8 and 9) were also exca-



4. Section through the middle of the site showing stratigraphic and architectural sequence.

vated.

During the 1990 season, a small, 3 x 3 m sounding -A1- was excavated (Khalil 1995: 77); this was included in the area of square E8 of 2008. In a room-like structure, a greenish-brown deposit containing crushed copper ore and pieces of copper was discovered. This space may therefore have been used for crushing copper ore prior to smelting. Below the greenish-brown layer was a clay floor with a channel-like feature (locus 51). Close to the latter, several vessels were found *in situ*; the lower part of one vessel (locus 30) contained copper slag.

Squares F4, F5 and F6 are located in the western part of the site, where wall decorations had previously been discovered (Schmidt 2009; Gebel and Mahasneh 2009).

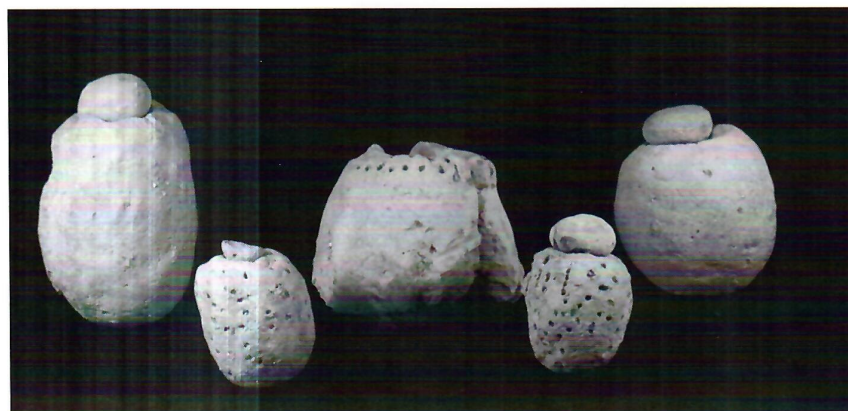
The 2008 excavations in F4 started with the removal of *ca* 30 cm of sand that had been hurriedly dumped into the square during the February 2006 floods. This was done to prevent too-rapid drying out, which may have caused damage to the decorated walls located in the square. The aim of the renewed work in F4 was to expose the floors of the so-called room-like structures, the mud-brick walls of which are the same decorated walls discovered in previous seasons. Under the west wall of one room-like structure, five miniature pottery vessels were discovered. These were hand-made, crude and unfired; each miniature jar had a ball-shaped lid of the same clay as the jar. It is possible that these jars may have been deposited under one of the walls of Building D as a foundation deposit (Fig. 5). In addition, a large number of horncores still attached to skull fragments were found in the same room-like structure. Zooar-

chaeological studies will be undertaken in due course, but for now at least two different taxa can be identified. The larger horncores may be of *Capra ibex*, and the smaller of domestic goats or possibly gazelle. As the miniature jars and horncores are both associated with Building D, of the decorated walls, it may be suggested that they had some ritual function. Excavation in the north-west part of square F4 reached the floor of the so-called room at 107.40 m asl, which rested on the natural alluvial sands of Wādi al-Yutum.

Square H7 was mainly excavated during the 2003 and 2004 seasons, with only its south-western part being excavated in 2008.

Squares I8, I9 and I10 are located in the southern part of the site, where parts of the 'town wall' were discovered. Approximately 0.5 m of 2006 flood deposits were removed from the southern part of square I8. The northern part of the square, closer to the summit of the site, was not affected by the flooding. Excavation in the three above-mentioned squares exposed more of the 'town wall' structure. It extends south to south-west, which may indicate that it was built to protect the town from the floodwaters of Wādi al-Yutum.

During the 2010 season, excavations in squares I5, I6, I7 and I8 exposed *ca* 50 metres of the 'town wall' (Fig. 6). The wall consists of multiple courses of medium-sized undressed stones. There are actually two walls with a space between them, which could be interpreted as being part of a system of retaining walls designed to protect the town against flooding. If, for example, the water flooded over the outer of the two walls, it would drain into the channel be-



5. Miniature clay jars from square F4.



6. Aerial view of the 'town wall'.

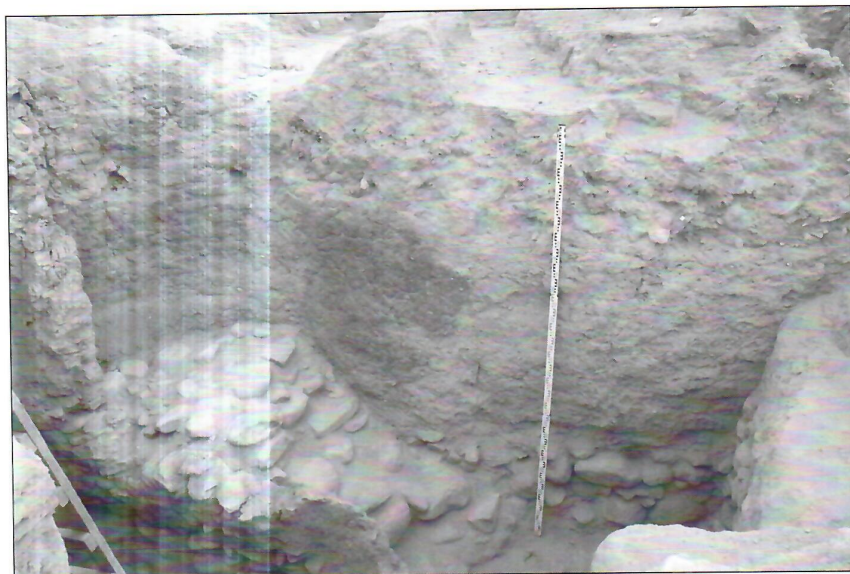
hind and be diverted away from the town.

The aim of the 2010 excavations at the south-west part of the site was to investigate Building D in squares F4, F5, G3, G4, G5 and H4. Many mud-brick walls were discovered; they were built on top of walls of medium and large boulders which were used as foundations. These stone foundations were sitting directly on top of the underlying natural deposits.

The mud-brick walls formed many rooms, some of which were large in size with doorways

and windows. Door lintels consisted of wooden beams, some of where were still well-preserved owing to the dry, hot climate of the Aqaba area. Other lintels were made of stones and mud.

Digging in the northern part of square F5 revealed a platform-like structure with five stone steps, possibly a sanctuary altar (**Fig. 7**). A number of unusual artifacts were discovered around the lowest step, including decorated stones, ochre and an unusual sealed jar containing a large number of beads.



7. Stepped, platform-like structure in northern part of square F5.

Pottery and Small Finds

Rich assemblages of pottery and small finds were recovered during the 2008 and 2010 seasons, especially from Building D. These included common types of pottery, flint, stone, shell, bone and archaeometallurgical remains.

A number of complete pottery vessels and a large number of sherds were discovered, primarily of hand-made coarse wares. The common types are v-shaped bowls, cups, platters and small, medium and large jars (Fig. 8A-E); unusual ring-shaped pot stands were also discovered (Fig. 8D). Copper pot stands are known from Nahal Mishmar (Bar Adon 1980: 24, 'copper crowns' esp. nos 11-16). Further analysis of pottery from the lower layers is required, in order to assess potential differences in forms, fabrics and decoration across the site.

A large number of lithic artifacts were recovered, including cortex tools, sickles, plain blades and Canaanite blades (Fig. 9). Several categories of ground stone tool were found, including grinding slabs, mortars, hammers and mace heads (Fig. 10A-C). Mace heads were also made from the heavy shells of giant clams (*Tridacna gigas*); a few unfinished examples were discovered, which indicates that they were manufactured at the site. Shell ornaments, mainly on spider conch (*Lambis lambis*) shells, and bone awls and points were also recovered.

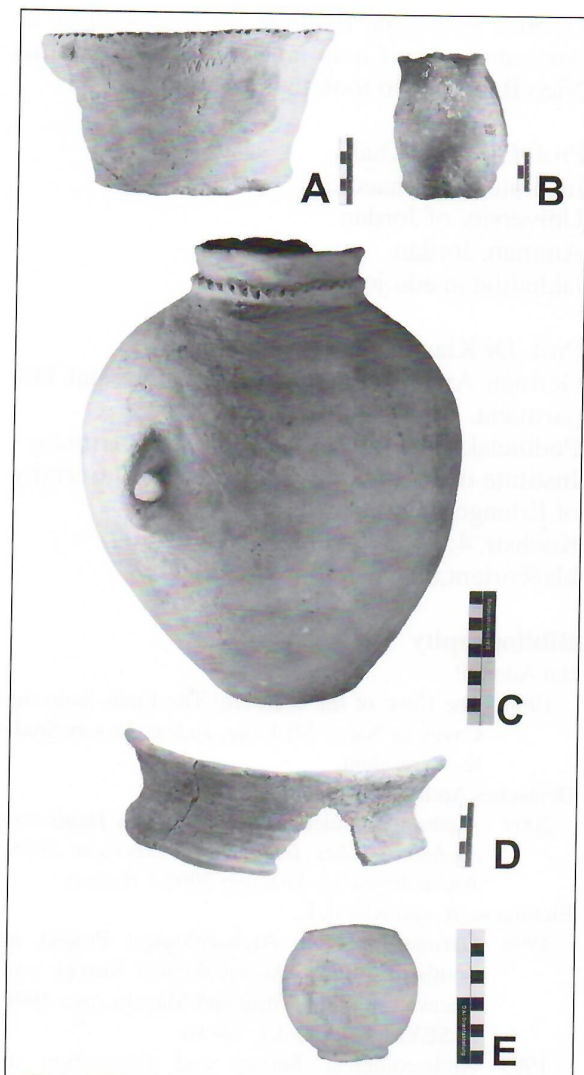
Archaeometallurgical remains from all stages of the copper production process were dis-

covered, including rich copper ores, slag, shapeless copper lumps and a mace-head fragment. In addition, two pottery crucible fragments were also found. The latter are socketed (Magass-type); the socket would have held a wooden shaft to enable the blacksmith to maintain a safe distance from temperatures in excess of 1084°C during the copper smelting process. A large number of mould fragments of various types were discovered, confirming the importance of Tall Hujayrat al-Ghuzlān in the history of copper metallurgy in the southern Levant.

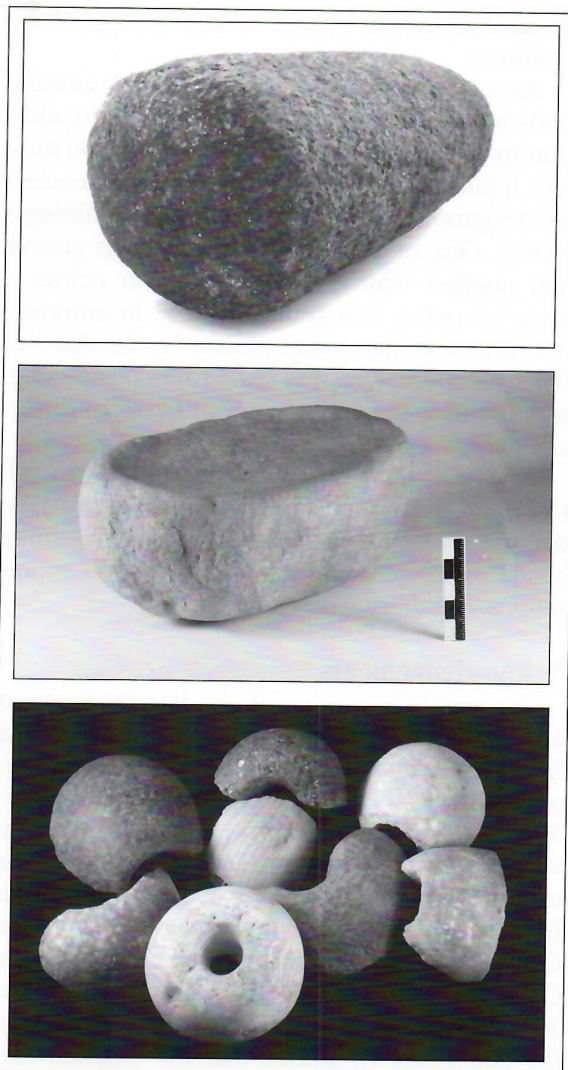
As mentioned above, a female figurine of baked clay was found during cleaning in the northern part of square C6. The figurine's head, arms and breasts are missing (Fig. 3); only the lower part of the body is well-preserved (Deutsches Archäologisches Institut 2009: 294, fig. 8). Female figurines mostly represent fertility; the significance of this symbolism in the ancient Near East was related to agriculture or activities such as storage of cereals (Yakar 1994: 68). A detailed study of the figurine is forthcoming.

Conclusion

During the 8th and 9th seasons of excavation at Tall Hujayrat al-Ghuzlān, systematic documentation of all architectural features was completed. Complete information was recorded in this architectural inventory, which will be an important tool in gaining an understanding



8. Assorted pottery vessels.



10. Assorted stone tools



9. Flint artifacts on cortical flakes.

of the layout and phases of occupation of the buildings.

As mentioned above, a number of unusual finds were concentrated in Building D. In addition to the wall decorations and five miniature jars, a number of stones decorated with geometric designs were found in one of the building's rooms. One of these stones has a deep groove and another drilled dots filled with ochre; a lump of ochre was found nearby. In addition, five fine-ware jars were placed on the floor of the same room. One was sealed and, on opening, was found to contain a hoard of beads of different shapes and sizes (**Fig. 11**).

The wall decorations, stepped platform (altar?) and small finds including miniature jars, decorated stones, ochre and the jar containing beads together suggest that Building D represents a sanctuary with ritual remains.

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Bibliography

- Bar Adon, P.
1980 The Cave of the Treasure. The Finds from the Caves in Nahal Mishmar. Judean Desert Studies. Jerusalem.
- Deutsches Archäologisches Institut
2009 Aqaba (Jordanien). Pp. 293-295 in *Deutsches Archäologisches Institut, Jahresbericht 2008, Archäologischer Anzeiger 2009/1 Beiheft*.
- Eichmann, R. and Khalil, L.
1998 German-Jordanian Archaeological Project in Southern Jordan: Archaeological Survey and Excavation in the Yitim and Magass Area 1998 (ASEYM 98). OO 3.1: 14-16.
- 1999 Archaeological Survey and Excavation at al-Yutum and Tall al-Magass Area - Aqaba (ASEYM). A Preliminary Report on the First Season 1998. *ADAJ* 43: 1-20.



11. Jar containing bead hoard.

L. Khalil and K. Schmidt et al.: Excavations at Tall Hujayrat al-Ghuzlān in 2008 and 2010

- Eichmann, R., Khalil, L. and Schmidt, K.
2009 The Excavations at Tall Hujayrat al-Ghuzlan. Excavations 1998-2005 and Architecture. Pp. 17-77 in L. Khalil, K. Schmidt (eds.), *Prehistoric Aqaba I, Orient-Archäologie*.
- Gebel, H. G. K. and Mahasneh, H. M.
2009 Petroglyphs and Sepulchral Contexts. Preliminary Note on Late Chalcolithic / Early Bronze Age Findings at Qulban Beni Murra, Wadi as-Sahab al-Abyad. *Journal of Epigraphy & Rock Drawings* 3 (2009): 1-9.
- Khalil, L.
1990 The Second Season of Excavation at al-Magass – Aqaba, 1990. *ADAJ* 39: 65-79.
- Khalil, L. and Schmidt K. (eds.)
2009 Prehistoric Aqaba. I. Excavations at Tall Hujayrat al-Ghuzlan 2002-2008. *Orient-Archäologie* 23. Leidorf, Rahden.
- Schmidt, K.
2009 Tall Hujayrat al-Ghuzlan – the Wall Decorations. Pp. 99-112 in L. Khalil and K. Schmidt (eds.), *Prehistoric Aqaba I, Orient-Archäologie*.
- Yakar, J.
1994 *Prehistoric Anatolia. The Neolithic Transformation and the Early Chalcolithic Period*. Supplement No. I, Tel Aviv University: Sonia and Marco Nadler Institute of Archaeology. Monograph Series. Number 9a.