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- Newsletter logo above by Samir Shraydeh.

Tell Johfiyeh: An Iron Age farmstead in north Jordan. Report on the second field season

Under the joint directorship of Dr. Ziad al-Sa´ad (IAA-Irbid) and Dr. Roland Lamprichs (DEI-Amman) the Institute of Archaeology and Anthropology in Irbid (IAA) and the German Protestant Institute of Archaeology in Amman (DEI) conducted a second season of archaeological excavations at Tell Johfiyeh from May 24th to June 14th 2003. This years season aimed at clearing the stratigraphy and recording of architectural remains. For this we continued the plateau excavation and started a deep sounding (Fig. 1).

The excavation was carried out with the constant support of the Department of Antiquities of Jordan (DoA) and we would like to express our gratitude to its Director General, Dr. Fawwaz Khraysheh. We are also thankful for the help of Mr. Ibrahim Zoubi, head of the Department of Antiquities, Irbid-office, and our representative Dia Tawalbeh who did again an excellent job in the field. Important logistic support was given to us by Dr. Ziad Talafeha (Johfiyeh), the inhabitants of the village of Johfiyeh and our excellent team members and local workmen. Thanks are due to all of them.

In a three weeks campaign more than 400sqm of the summit area were newly opened. Alltogether more than 600sqm have been unearthed and investigated within 12 squares (10m x 10m) in 2002 and 2003. This means: 2/3 of the summit area are already excavated (Fig. 2). Our knowledge concerning the site and its history was increased by the following new results:

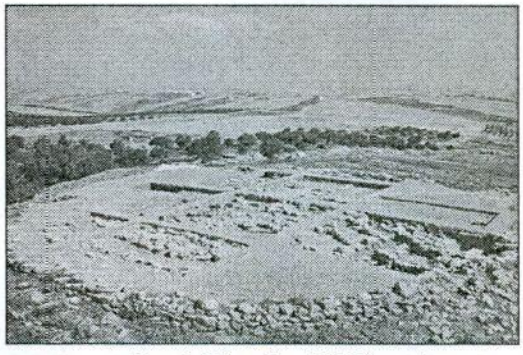

Fig. 1: Situation 2003 (post excavation)

Stratigraphy, pottery, small-finds

The phases of occupation worked out in 2002 were confirmed by this years results. Beside some poor remains of a Late Byzantine/ Omayyad occupation and a few sherds from the Hellenistic period the material excavated at Tell Johfiyeh date back almost exclusively to the Late Iron Age II (IIC and IIB). Almost 80% of the more than 23000 registered pottery sherds belong to the Iron Age IIC. The remaining pieces date to the Omayyad period, Hellenistic times and Iron Age IIB. Pieces belonging to the latter phase were found

mainly within the deep sounding conducted in the west (square 3) of the plateau. The last layer excavated here so far (c. 4m below surface) contains, however, a few body sherds which may be dated to the Iron Age I. Beside a huge amount of storage jars and cooking pots many jars, jugs, bowls, pot stands and oil lamps were found at Tell Johfiyeh (Figs. 3, 4).

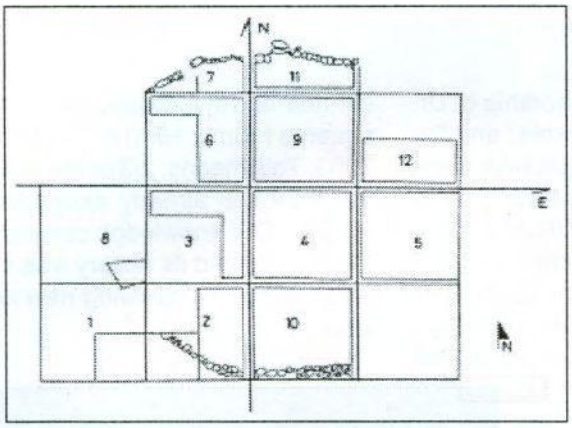

Fig. 2: Excavated areas 2002/3

The excavated remains of the Iron Age belong again mainly to domestic activities within an agricultural world. The assemblage is dominated by pieces used for transportation, processing and storage of agricultural products: Apart from numerous fire-places, cooking spots and „taboons" a great variety of querns, pestles (round, cornered, conical), scrapers, mortars, bowls (round, cornered) and rubbers made of basalt (Figs. 5, 6), as well as many weaving-weights, spinning whorls, „buttons", pot-stoppers and stone-vessels were registered.

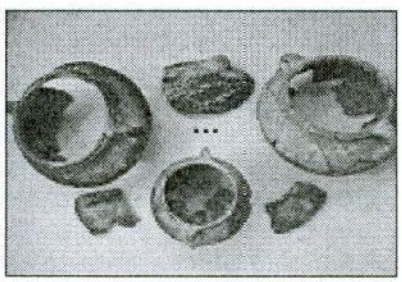

Fig. 3: A selection of Iron Age cooking-pots

Furthermore the activities of 2003 at Tell Johfiyeh produced for the first time some pieces of „luxury goods". These are remains of jewellery made of beads (carnelian), pierced stone discs and shells as well as a tooth of a comb (ivory?), a fibula made of bronze, two (decorated) cosmetic-palettes made of limestone, a small complete basalt morter (tripod) for the preparation of cosmetics or spices and some arrow-heads and a chisel made of iron (Fig. 7).

Architecture

The architectural remains together with the finds made in 2003 give a first clue concerning the structure, social and political setting of an Iron Age farmstead in north Jordan. Based on the available information about the site at least two main units have to be seperated within the surrounding perimeter wall:

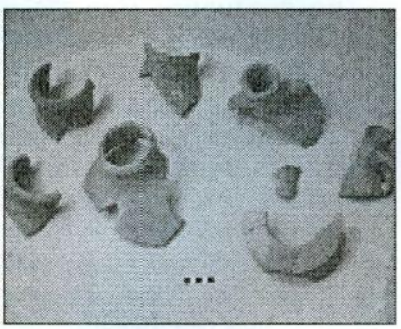

Fig. 4: A selection of Iron Age pottery

1. MAIN BUILDING (="farmstead building") situated in the northern part of the tell consisting most probably of a courtyard house (c.12m x 9m) which is characterized by large rooms, domestic installations and „luxury goods" found in situ (Fig.8).

2. STORAGE and PROCESSING units for agricultural goods situated in the southern and eastern parts of the tell. They are characterized by (very) small rooms which are connected to each other by a semicircular passageway (Fig. 9), silos, taboons and numerous storage jars (partly placed upside down).

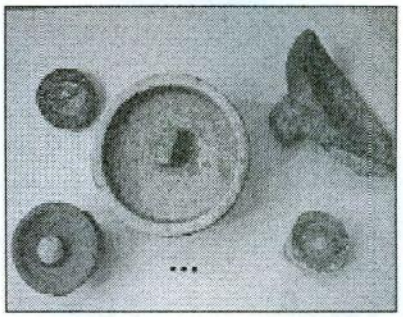

Fig. 5: A selection of basalt bowls/ mortars

Outlook

The finds made within the „farmstead building" suggest that its inhabitants were related socially and politically to some kind of elite leadership. A close link of the farmstead to one of the regional centers, most probably Tell Husn, is very likely and the excavated remains may well represent the penetration of Tell Johfiyeh and its surroundings by an arm of a centre-based administration. The huge amount of pottery sherds and grinding tools found within the „storage and processing unit" fits well with the general association of farmsteads with periods of high intensity land use, demand for specialized economic goods and heightend security conditions. In how far the latter, however, were guaranteed by a local or regional power has to be found out in the future.

Acknowledgements

We would like to thank all members of staff for contributing to the success of our second season in

the field: Nabil Qadi (Irbid/Jordan), Muaffaq Batainah (Irbid/Jordan), Einat Khreis (Irbid/Jordan), Hussein Nawafleh (Irbid/Jordan), Dr. Lutz Martin (Berlin/Germany), Dr. Andreas Kunz (Leipzig/Germany), Ute Koprivc (Bochum/Germany), Katrin Bastert, M.A. (Amman/Jordan), Kai Poenitz (Freiberg/Germany), Gerhard Reimann (Offenbach/Germany), Irmtraud Schmalfuss (Offenbach/Germany). The season 2003 was funded jointly by the German Protestant Institute of Archaeology (DEI), Hannover/ Germany and Yarmouk University, Irbid/Jordan.

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Fig. 6: Basalt mortar (tripod)

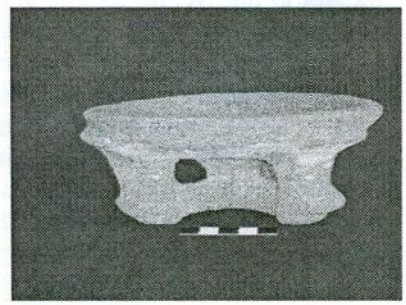

Fig. 7: Small basalt mortar on high legs

Fig. 8. „Main building" from NE

Fig. 9: „Storage and processing units" in square 5 (from S)

Editor's note / Corrections

Due to technical problems in Hannover, Germany, the reproduction of illustrations (drawings, photos, etc.) in the last issue of Occident & Orient (Vol. 8, 1) unfortunately contained some mistakes. Particularly affected were the contributions by U. Hübner, M. Luciani and H.-G. Gebel. A map of Ras Hamra given by Hübner (page 22, fig. 2) was badly distorted and a once square ground plan was reproduced as rectangular. To a lesser extend the same is true for the figures given by M. Luciani (e.g. page 24-25, figs. 1, 2). In Gebel's contribution figure 3 (page 19) was reproduced upside down.

For any inconvenience caused by these mistakes we would like to apologize to the authors affected and to our readers. We will do our best to avoid any inaccuracies in the future.

Enjoy reading the current issue!

A Rolling Door Structure at Umm al-Rasas (Mayfa'a)

By: Ghazi Bisheh and Sabal Zaben (Jordan)

In the summer of 2001, the Department of Antiquities of Jordan excavated a small ruined structure situated c. 400 m to the SE of the well-known, 15 m high, square stylite tower at Umm al-Rasas (ancient Mayfa'a). The excavation, supervised by Sabal Zaben and Hazim Jassir, revealed a 6 m x 6 m square stone structure. The walls are two rows wide and preserved to a height of six courses, except in the NE where the wall had largely collapsed. The outer face of the walls are built of large, roughly shaped rectangular stones chinked with smaller ones to keep them level. The inner face, in contrast, comprises an odd assortment of medium and small sized stones, and was treated to a thick coating of plaster that completely covered the surface. The structure's interior was divided into three aisles by two transverse arches which sprang from attached piers. A thin stone slab extending across from the southern springer of the western arch to the south-western wall indicates the existence of a shelf for storage jars. Removal of collapsed stones from the interior uncovered an underground cistern with a circular mouth, 0.47 m in diameter. The walls of the cistern were made water tight by a thick layer of plaster. An arrow-headed cross was excised (raised relief) on the upper part of the plastered southern wall. Numerous Umayyad and few early Abbasid pottery sherds recovered in the course of cleaning the cistern indicate the last phase of its usage. The south-eastern corner of the structure was taken up by a stairway of eight steps that seems to be a later addition. In the vicinity of the structure, there are three small reservoirs which originally served as quarries. Clearance work carried out outside the structure to the south revealed cup-holes, sumps, small basins of various shapes and sizes with narrow outlets at the base, and channels cut into the smooth and gently sloping rock surface; one channel extended northwards, cut through the southwestern wall of the excavated structure, and led to the cistern. It is likely that these features were associated with the pressing, preparation and storage of wine.

The most salient feature of the structure, which gives it a particular significance, is the doorway in the south-eastern wall. This doorway, 0.67 m wide, has a stone, disc-shaped door 1.48 m in diameter and 0.20 m thick. A wall parallel to the southern half of the enclosing wall in which the doorway was situated had been built, leaving between them a space 0.35 m wide allowing the disc door to be opened and closed by rolling it back and forth in a runnel (Fig. 1,2). Such rolling doors are usually associated with burial tombs from the first century AD. It has even been thought that Jesus' tomb had such a door; the gospels report that when the two Marys arrived at Jesus' tomb, they found the stone sealing the entrance „rolled back" or „rolled away" (Matthew 27:58-60; 28:1-2; Mark 15:45. See, however, the excellent article by Kloner [1999] who gives a different interpretation). Two such rolling stones are known from burial tombs near Tell Hes-ban (Horn, 1972:21-2; Pl. IV : 11; Geraty, 1975:53). This raises the possibility that our rolling door came from a nearby cemetery and was re-used in the excavated structure. It is the only one known in Jordan from a context other than a tomb.

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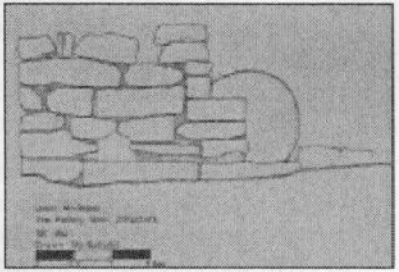

Fig. 1

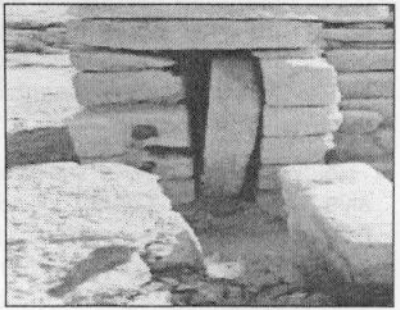

Fig. 2

Pella in Jordan 2003: Continued Excavation in the Bronze Age Temple Precinct

By: Stephen J. Bourke, University of Sydney (Australia)

The discovery and first four seasons of excavation in the southern and western areas of the Pella Migdol or Fortress Temple were reported on in Occident & Orient Vol. 4 (1999). The present report covers the two most recent seasons (2001 and 2003) of excavations in the temple precinct. In the first, much of the north and west/central regions of the temple were explored, and in the second, the remaining areas of the east/central temple, and a series of deep soundings below the MB/LB period 'stone Migdol' floor levels, were the main foci of research.

After removing four phases of Late Iron II domestic architecture from the region of the west/central area of the temple, the east wall of the latest Iron II (c. 900 BC) phase of the temple was exposed, illustrating both the greatly reduced 18 m x 10 m size, and changed orientation (N/S from E/W) of the Iron II temple, which is situated almost exactly over the original Bronze Age Holy of Holies. A large (2.5 m) roughly square stone block located five metres east of the temple may represent the courtyard altar for the structure. This Iron II temple and altar design (if correctly interpreted) indicates a profound change from pre-existing Bronze Age cult practice at Pella, and is reminiscent of the modest Iron Age architectural forms best exemplified at coastal Tell Qasile, and in specific circumstances would seem to mirror Shechem, where the smaller Iron Age Temple 2 overlies the Holy of Holies of the main Fortress Temple.

Below the walls of the Iron II rebuild, the central Pillared Hall of the much larger (18 m x 27 m) Late Bronze II (c. 1300 BC) temple was fully exposed. This LB II reconstruction of the temple is built on top of the walls of the southern two thirds of the original MB/LB structure. In the pillared hall, a single line of polished basalt column bases ran down the centre of the room, and in two places clear fragments of large wooden columns were directly associated with the bases. The pillared hall is associated with the LB II (c.1350 BC) rebuild of the temple, after a severe earthquake levelled the entire northern third of the structure. The addition of a pillared hall to the original Canaanite structure suggests some limited Egyptian architectural influence on the local Canaanite traditions during the Later New Kingdom. It would also suggest that an originally open air central cella was roofed for the first time in this LB II rebuild.

In the northern region of the temple, excavations had to penetrate through ten phases of tightly stratified Late Antique material (c. 400-800 AD) before reaching Iron Age II (c. 900 BC) temple deposits. Here a series of neatly constructed small mudbrick rooms, apparently used for storage of temple produce, were placed against the northern wall of the small Iron II temple. Below the Iron II deposits the area was given over to large refuse pits, suggesting that in the Iron I (c. 1100-1000 BC) period the area north of the LB II temple was given over to domestic rubbish disposal. The many pits badly damaged the earlier LBA structures immediately below. The architectural fragments that were preserved are consistent with a walled

court, apparently associated with a 3 metre deep 2 metre square mud-plaster and stone-lined silo, similar to structures found north of the Shechem temple.

Below the LB II rebuild, the massive 32 m x 24 m MB/LB (c. 1650 BC) 'stone Migdol' temple footings were exposed along the northern third of the original structure, with a massive three metre thick stone north wall neatly mirroring that exposed on the south side of the temple in 1997/99. A 3 m x 3 m sounding against the outer face of the northwest corner of the temple exposed a large and distinct foundation trench for the northern wall, which produced enough material to confirm the MB/LB (c. 1650 BC) date for the original construction of the temple.

Below the central pillared hall of the LB II rebuild, a seven course 'mudbrick podium' floor, associated with the original MB/LB period 'stone Migdol' temple construction, was exposed across the entire central cella. After the mudbrick paving of the 'mudbrick podium' was planned, a 5 m x 5 m sounding was placed into the northeastern cella, beside the massive three-metre thick eastern wall. Perhaps a metre below the floors of the MB/LB 'stone Migdol' phase, a thick white plaster floor and fragmentary mudbrick wall were exposed, much cut about by the deep foundation trenches of the 'stone Migdol' phase. These seem likely to be part of an even earlier MB II period mudbrick temple, although the few fragments exposed to date council caution.

Nonetheless, similar small mudbrick temples are known at Tell Kittan, 20 kilometres northwest, and at Tell Hayyat, a bare five kilometres to the southwest of Pella. These earlier temples are said to date to the MB II (c. 1700 BC) at Kittan, and MB I-II (c. 1800-1700 BC) at Hayyat. Pottery from the 'white plaster' phase structure at Pella is scarce in and about the scrupulously cleaned surface, but enough was recovered to suggest an MB II date (around 1750-1700 BC) for the 'white plaster' phase.

In the light of these discoveries beneath the MB/LB period floors in the east temple region, another 3 m x 3 m sounding below the MB/LB period floor was positioned in the northwestern corner of the central cella, taking advantage of materials removed by two deep Iron Age pits. Here excavations soon detected traces of the 'white plaster' phase, and approximately 30 cm below the white plaster, a second thick 'yellow clay' floor was revealed in association with a fragment of an earlier plaster-faced mudbrick wall. The very few pieces of pottery associated with the 'yellow clay' phase suggest an MB I/II date (c. 1800-1750 BC) for this even earlier structure.

At the end of the 1999 field season, three major phases (MB/LB, c.1650 BC; LB II, c. 1350 BC; Iron II, c. 900 BC) of stone temple building had been detected, although full ground plans had not been exposed. Work over the last two field seasons has exposed as much of these three phases of stone temple architecture as is consistent with preserving the modern cemetery to the northeast of the temple. In addition, at least two phases of earlier MBA mudbrick temple architecture have been exposed below the MB/LB period floors of the central cella, extending the period of sustained religious activity on the site to around a thousand years (c. 1800-800 BC), and the number of major architectural phases present to five. Whether even earlier temples exist below the early plaster and mudbrick structures must await future seasons of work. However, stray finds (such as a greenstone violin figurine) allow one to at least speculate that some form of religious activity may have occurred in the immediate vicinity as far back as the Chalcolithic period.

Historical and Archaeological Study of the Ajlun Area under the Ayyubids and Mamluks

By: Neil D. MacKenzie, ACOR-fellow (U.S.A.)

This project is a combination of historical and archaeological research on the area between Wadi Yabis and Wadi Rajib, centred on Ajlun castle. It is an attempt to produce a comprehensive study of a semi-rural district of greater Syria under the Ayyubids and the Mamluks, as opposed to studies already done on major cities such as Aleppo and Damascus. Of particular importance is the relationship of the castle to its immediate suburbs, as well as to the town of Ajlun itself, and the village of Baun to the north, which was often mentioned in medieval texts as of particular importance in the Mamluk period. Other aspects include 1. economic development - agriculture, industry and commerce; 2. religious aspects - mosques, shrines, centres of religious education and sufism and 3. the development of local town sites in this area with relation to the Byzantine/ Umayyad and Ottoman periods.

My project was funded by two six month grants, NMERTP(2000) and CAORC(2002-3), both administered by ACOR. It is divided,

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My project was funded by two six month grants, NMERTP(2000) and CAORC(2002-3), both administered by ACOR. It is divided,

fundamentally, into two parts. The first, textual, is a study of primary historical and topographical sources (e.g. Ibn Shaddad, Abu al-Feda, Qalqashandi) on the Ajlun area as well as prior archaeological works (Schumacher, Mittmann, Greene). Secondly, a survey was conducted of archaeological sites specifically related to the Ayyubid/Mamluk period, including town sites, places of religious veneration (mosques, shrines), and industrial/agricultural sites (grain mills, mines, iron works).

Although under the Mamluks Ajlun was no more than a sub-district of Damascus, Mamluk texts describe the town as a major commercial centre with numerous markets and manufactories. It was, in addition, a centre of religious learning and sufism; a probable *khanqah* of the Mamluk period remains in the centre of the town. Baün, some ten kilometres to the north, was also a centre of religious learning, but there are no physical remains of the medieval period. While the castle, constructed 1184-85, was the administrative centre of the area, it lost its anti-crusader purpose after the battle of Hattin, and under the Mamluks appears to have served primarily as a garrison and arsenal. Its current name, 'Qal'at al-Rabad' (the citadel with a suburb), although thought to be from Ottoman times, may date back to the fourteenth century. Abu al-Feda refers to Baun as the castle's suburb. More relevant, perhaps, is the extensive medieval village just west of the castle, now generally known as al-Khadr, due to the presence of a ruined shrine of that name. With an extensive network of cisterns, a cemetery and quarry, this settlement ex-tends to the east of the castle as well, where piles of slag suggests a considerable ironworking industry, probably supplied by the mine at Mugharat al-Wardah to the south of Wadi Rajib.

We have, then, two major Ayyubid/Mamluk settlements at Ajlun: a military-industrial-village complex at the castle, as well as a small shrine, and two kilometres east the town of Ajlun proper (current Ajlun) which, under the Mamluks, was a religious and commercial centre, and served as a base for agricultural production as well. This is evidenced by the many water mills of Wadi Kufranjah, which probably date from the late Mamluk/early Ottoman period. This duality, in conjunction with the religious activities of Baun, render at least an outline of the town life of this district during the medieval period, but what of the smaller villages?

In a study of some sixty area sites with Ayyubid/Mamluk remains, I have divided the settlement sites into two categories, wadi hill sites and major town sites. The wadi hill sites, primarily on Wadi Kufranjah, are small hilltop establishments with major Byzantine and early Islamic remains and but scanty sherd cover from the Ayyubid/ Mamluk period, suggesting a possible squatter presence during that time. The major town sites, farther removed from the wadis, while often with pre-Byzantine foundations, generally have the following pattern: a major Byzantine presence with Umayyad and early Abbasid occupation, a hiatus of demonstrable occupation from the mid-eighth to the mid-twelfth centuries, a major occupation during the Ayyubid/Mamluk period, and later occupation and abandonment under the Ottomans. While the lack of evidence for the Abbasid/Seljuk periods may be due in part to a lack of understanding of the ceramics, the increased evidence of Ayyubid/ Mamluk occupation (ceramics, mosques, shrines, industrial activity) does suggest a major revival during this period.

With further analysis of these textual and archaeological materials and the excavation of one stereotypical site (perhaps Qafsah, southwest of Wahadnah), I hope not only to produce a comprehensive study of the Ajlun district under the Ayyubids and Mamluks, but to contribute to a chronology of the Islamic ceramics of northwestern Jordan.

Late Acheulian Butchering Stations at Pleistocene Lakeshore Settings in Jordan

By: Gary O. Rollefson, Leslie A. Quintero, and Philip J. Wilke, Lithic Analysis Laboratory, University of California-Riverside (USA)

Introduction

During a visit in 1978 to 'Ain al-Assad, a spring about a kilometre southwest of the pools of the Azraq Shishan area of eastern Jordan, Late Acheulian bifaces were noted eroding from backdirt piles that accumulated from the excavation of a sump for a failed irrigation project undertaken in the 1950s. A collection of these bifaces was made in 1979 and again during excavations in 1980 and 1981 (which located only disturbed Lower Palaeolithic artifacts), and a typological analysis produced a startling result. Bifacial tranchet cleavers, which are tools that had a razor sharp slicing edge traversing the broad end of the tool, accounted for about a third of the bifaces. In the Jordanian highlands and in areas west of the Jordan Valley cleavers normally made up less than 5% of the heavy duty tools in the Late Acheulian period.

The implications of this remarkably high percentage of cleavers were not immediately apparent, nor were the results immediately accepted. In a personal communication, two colleagues stated flatly that the typological exercise was incorrect, that these many cleavers could not have been among the stone tools at a Late Acheulian site. Furthermore, it was possible that even if the typology was correctly undertaken, the results may have represented an anomaly: that these collections from a scattered area around the 1954 sump excavation somehow represented a special activity area and were not typical of Late Acheulian tool production.

A later examination by Lorraine Copeland of a collection of bifaces excavated from C-Spring, about 750 m northeast of 'Ain al-Assad, showed that, in the eyes of another typologist, the Azraq area was characterized by high cleaver percentages (25%). Clearly, the two objections to the original classifications by one of us (GOR) in 1980 were no longer tenable: cleavers were prominent in the Azraq region during the Late Acheulian, and that the high percentages were not the consequence of a sampling problem.

Fig. 1: Light-coloured sand dune with Acheulian butchering layers lies stratigraphically below a Middle Palaeolithic grey sandy area that is beneath a dark-coloured marsh layer dating to the Epipalaeolithic at 'Ain Soda in Azraq Shishan.

The 1997 Excavations at 'Ain Soda

In 1996 considerable numbers of bifaces and fossilized bone were found in disturbed areas at 'Ain Soda in Azraq Shishan, about 1.5 km northeast of 'Ain al-Assad. In 1997 an extensive excavation campaign sampled *in situ* Epipalaeolithic, Upper and Middle Palaeolithic and Late Acheulian deposits. Faunal remains from the Lower Palaeolithic strata included tooth enamel from an extinct elephant, wild camel and rhinoceros, although bone remains were only poorly preserved. Stone tools from the Acheulian layers included high proportions of Levallois points, Levallois blades, and bifaces, including cleavers that accounted for more than 60% of the heavy-duty butchering tools, far exceeding even the stone tools from 'Ain al-Assad.

Fig. 2: In situ butchering layer rich in Acheulian cleavers and camel remains at 'Ain Soda.

Evidence from the original 'Ain al-Assad excavations in the 1950s was not clear about what the landscape resembled, but in the 1980-81 excavations it was readily apparent, based on the sedimentological indications, that the butchering tools from the site were associated with a shoreline setting, probably a relatively shallow lake. Similarly, the excavations at C-Spring also encountered deposits associated with a lakeshore environment. The same situation

was abundantly clear at 'Ain Soda, where lake marls and sandy-silt dune sedi-ments were interdigitated in at least two of the four excavation trenches.

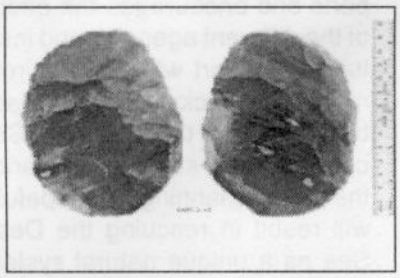

Fig. 3: A large Acheulian bifacial cleaver from 'Ain Soda.

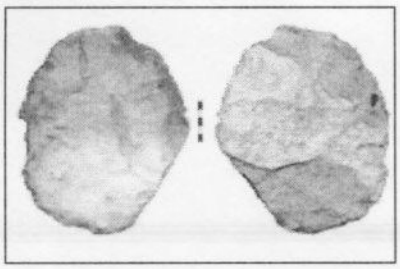

Fig. 4: Jafr 83, a large surface exposure of Acheulian cleavers along the north rim of the Jafr Basin. The person at lower left and the truck at lower right provide scale.

Fig. 5: Large bifacial cleaver from Jafr 25, a butchering station not far from Jafr 83.

The al-Jafr Basin Survey

In 1993, 1998 and 1999 two of us (LQ and PW) conducted an intensive archaeological reconnaissance above and below the escarpment along the northern and northeastern rim of the al-Jafr Basin in southeastern Jordan. Among the sites that were recorded were 19 that included varying numbers of Late Acheulian bifaces. Altogether, bifacial tranchet cleavers made up more than 75% of the bifaces (n = 299), which is unprecedented in the Levant. Average size of the bifaces in some of the clusters is significantly larger than in other Jafr sites, suggesting that there might be a very long time span represented in the basin if the size-age correspondence is applicable here.

the Late Acheulian sites in the al-Jafr Basin ranged from single finds to dense scatters of bifaces across relatively large areas. In one case, several groups of bifacial cleavers were found inside and near the mouth of a box canyon that contained several springs; this appears to be a case of taking advantage of animals that were drawn into a natural trap, where they were killed and butchered. The situation of the larger clusters of bifaces in the al-Jafr Basin appears to be related to former sources of permanent or semi-permanent sources of water, including strong springs and the possibility of an association with Pleistocene lake shores as was the case in the Azraq Basin, although there may be more Pleistocene shores in the southern basin than indicated by research in the 1960s by Huckriede and Wiesemann.

Closing Comments

There is reason to believe that some of the surface sites in the al-Jafr Basin include buried *in situ* deposits, and several sites are the object of planned excavations to determine if undisturbed associations of artifacts and faunal remains can be recovered in association with sedimentological evidence that might help to interpret the local landscape. The correlation of high cleaver percentages with permanent water resources, including Pleistocene lakes, in what was probably a steppic setting, suggests that prime situations were the scene of repeated animal slaughter and butchering, the last activity relying heavily on tools designed specifically for this purpose: bifacial tranchet cleavers.

Safeguard the Dead Sea, a natural system and religious site

By: Elias Salameh, University of Jordan (Jordan)

In academic circles, concerns were expressed in the early eighties about the fate of the Dead Sea as a result of its drop in level caused by diversion of the fresh water within its catchment area for irrigation, municipal and industrial purposes. These water resources used, in the pre-development era, to feed the Dead Sea with an average amount of 1980 million m^3/yr, 1207 million m^3/yr of which came from the Jordan River.

In recent years the inflow has gradually decreased to an average of a mere 325 million m^3/yr.

The surface area of the Dead Sea shrank from 985 km^2 in the 1960s to about 645 km^2 in recent years as a result of evaporation, with an annual rate in the 60s of about 2 m.

Currently evaporation losses amount to 1150 million m^3/yr, equivalent to 1.78m/yr which, with an

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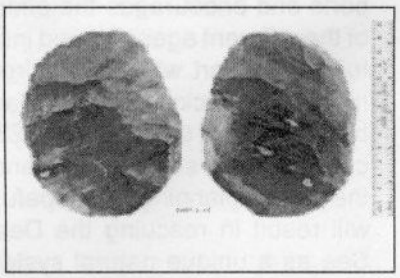

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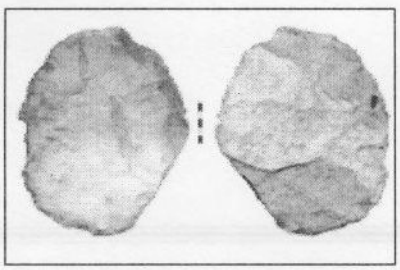

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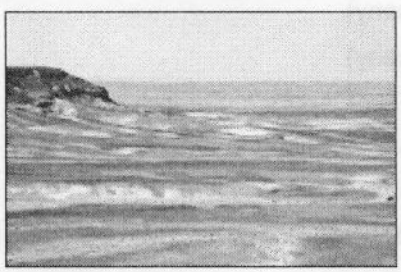

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Currently evaporation losses amount to 1150 million m^3/yr, equivalent to 1.78m/yr which, with an

inflow of only 325 million m^3/yr, leave a deficit of 825 million m^3/yr. Ground water inflow of 342 million m^3/yr reduces this deficit to 483 million m^3/yr, resulting in an actual drop in level of 0.75 m/yr. As the total volume of water in the Dead Sea falls, the salinity of the water increases.

The drop in level results in groundwater losses to the shoreline countries of about 450 million m^3 per metre drop of the Dead Sea level. This will eventually result in a new state of equilibrium between the fresh groundwater resources in the surrounding areas and the level of the Dead Sea itself.

Visitors to the Dead Sea started to notice the drop in its level in the early 1980s and were hoping that rain-rich years would bring back the level to its former elevation.

Officials, due to unavailability of feasible solutions at that time, tried to ignore the problem. But, nature did not wait. Land collapses started to affect roads, farms and tourist facilities. Sinkholes along the shorelines, with diameters and depths of 20 and more metres, developed and caused damage to roads, farms and small houses. Water holding structures, such as weirs belonging to the Potash Company, collapsed causing tens of millions of cubic metres of water to flow back into the Dead Sea.

The solutions to the dropping level of the Dead Sea are restricted to: either the reversal of all development to allow the water to flow back into it, which is not a practicable option, or bring water to the Dead Sea, which could come from the Red Sea.

The Red Sea/Dead Sea conduit has in the last few years crystallized into a possible solution to the problem, which may, if not resolved, develop into a catastrophe.

It is time that every one of us supports and encourages the efforts of the different agencies and institutions to start with the environmental and socio-economic feasibility studies of the Red/Dead Sea conduit. Such steps will enhance the project planning and hopefully will result in rescuing the Dead Sea as a unique natural system and a place of great religious and historic significance.

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- Nadine Riedl, M.A., Museum of the Ancient Near East, Berlin (Germany)
- Dr. Ralf B. Wartke, Museum of the Ancient Near East, Berlin (Germany)
- Holger Zahn, trainee at the German Technical Cooperation Office (GTZ), Amman (Jordan)
- Prof. Dr. Ricardo Eichmann, German Archaeological Institute, Berlin (Germany)
- Bernd Müller-Neuhof, M.A., German Archaeological Institute, Berlin (Germany)
- Juliane Wappler, medical trainee at the Jordan University Hospital, Amman (Jordan)
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- Stefan Weber, Orient Institute Beirut, Beirut (Libanon)
- Dr. Julia Gunnella, Museum of Islamic Art, Berlin (Germany)

Excavations at Tell el-Madash (Jordan Valley)

By: Mohammed Waheeb, Hashemite University, Zerka (Jordan)

Following is a brief summary of field operations conducted at the site of Tell el-Madash under the supervision of the author.

The site is located on the northern bank of Wadi Nimrin, approximately 13 km to the north of the Dead Sea and just less than 1 km to the east of the Jordan River, not far from the main road which links the King Hussein Bridge on the Jordan River with the modern village of South Shuneh.

The site is on a sandy hill rising on the northern bank of the wadi, which was known from previous investigations as Tell el-Madash and has more recently been called Tell el-Dhab. Running water in the Nimrin valley made it a favourable area for settlement and there is clear evidence for exploitation in the Chalcolithic from the nearby site of Ghrubba, dated back to 4000 BC.

The first season of archaeological survey of the area aimed at clarifying several questions. The surface survey revealed the presence of numerous pottery sherds scattered across the top and slopes of the tell, as well as many tumbled small and medium, undressed building stones. The southern part slopes sharply down towards the wadi and there were heaps of gravel around from the nearby modern quarry. Robber pits were noted on the northern part of the tell and modern military activities in the area have affected the cultural layers of the site in various locations. The only route to the tell comes from the north.

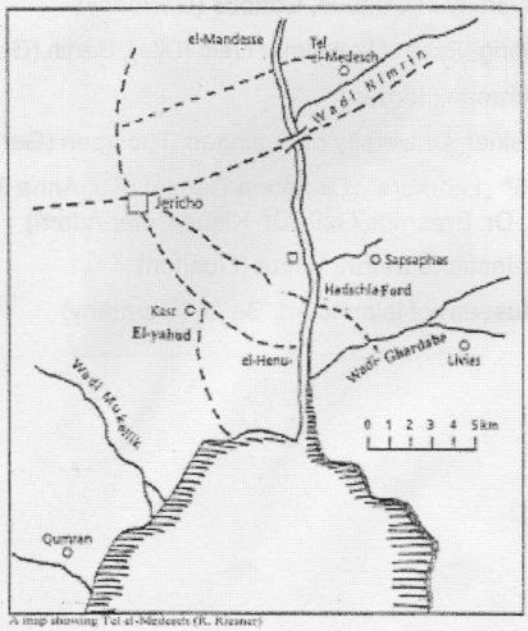
Intensive field survey around the tell revealed more small and medium sites on its north and east sides.

Some surface features, such as remains of walls and damaged cisterns made of undressed blocks of sandstone and limestone, were visible in the area that was chosen for excavation. Within the excavation stone ashlars were found, along with stratified pottery dating to the Roman period. In addition to systematic excavation, section-clearing and test trenches were also undertaken at the tell. There are remains of only one complete structure on the site; its rectangular foundations are still in situ along with the remains of the roof pillars and this building dates to the second half of the sixth century AD.

In addition to the work on the tell, the team also investigated some nearby sites, particularly those to the north-east and north-west. In the trench 100 m to the north-east of the tell, a partly rectangular structure with a scatter of pottery was revealed. Preliminary analysis shows these sherds to be of Roman and Byzantine date. To the north-west, also about 100m away from the tell, more clearance and limited excavations were carried out. A square structure was found, which dates to the second half of the sixth century AD, that can be related to the tell, but it is too early to assign a function to it.

The materials recovered from these field operations revealed a continuation of settlement from the Roman period into the late Byzantine. However, because the excavations were limited, it is too early to reconstruct the nature of the settlement on the tell and in the surrounding area.

Tell el-Madash is a focal point in the Wadi Nimrin area and the archaeological excavations on and near the tell will shed light on the recently discovered Baptism Site as well as helping to clarify the situation on the eastern bank of the Jordan River during the Roman and Byzantine periods.



A map showing Tel el-Medeseh (R. Riesner)

Fig. 1

Orient and Occident: Towards a Better Understanding - What Can Archaeology Contribute?

The Idea of a „John the Baptist Regional Park"

By: Stefan Jakob Wimmer, University of Munich and Friends of Abraham Society (Germany)

Only a few years ago, the discovery and identification of al-Maghtas, the Baptismal Site „Bethany beyond the Jordan" in Wadi al-Kharrar, by Mohammad Waheeb (Waheeb 2001a, 2001b), attracted world wide media attention to Jordan's share of Biblical heritage sites. The visit by Pope John Paul II in March 2000 has further enhanced the importance of the site for pilgrims and tourists in general. This came at a time when hopes for a brighter future in the region were still flourishing.

Since then, a second intifada and disastrous politics have crippled Jordan's neighbour to the west almost beyond recognition; its eastern neighbour is experiencing war and occupation. The September crimes of 2001, subsequent terror attacks all over the world, so called anti-terror campaigning and monstrous ideological constructs like „clash of civilizations", have sparked off an atmosphere of confrontation that seems to have gripped the whole globe. It seems more urgent than ever to promote a deeper understanding between the world's different cultures, in all available fields. Archaeology may not come to the mind immediately in this respect, but there is a very real potential for ancient sites in Jordan to help promote learning about each other.

Millions of tourists have been visiting the Kingdom, and are thrilled by its historic heritage, its natural attractions and the hospitality and warmth of its people. They return home, impressed and enriched - but usually without having even noticed the intimate proximity that is there between Christianity and Islam. Rarely do tourist schedules provide opportunities for closer insights into the religious background of the host country. The prominent Biblical and Quranic figure of John the Baptist, respectively Naby Yahya (pbuh), could open such a valuable opportunity for inter-religious education.

In addition to the Baptismal Site near the river Jordan, the mountain fortress of Machaerus, Qala'at al-Mishnaqa near Mukawer, is also related to the legacy of the same prophet (Corbo 1978, 1979, 1980). It lies a few kilometres north of the Dead Sea, half an hour south-east of Madaba. There, the courtyard of Herod Antipas' palace is the traditional setting for the famous dance of Salome, which resulted in John's beheading. The ruins overlook the Dead Sea and provide a sensational panoramic view. Right down from Machaerus at the Dead Sea shore, at a distance of ca. 5 km and 1200 metres below, a further Herodian site has been explored and excavated in recent decades by the German Protestant Institute and the Department of Antiquities (Strobel/ Wimmer 2003; Wimmer 1997): In Callirrhoë, 'Ain ez-Zara, amidst lush vegetation, supported by numerous thermal springs with healing qualities, Herod the Great built a palatial villa complex and a harbour. Callirrhoë was linked with Machaerus by a scenic road that can still be traced by experienced hikers, in an exhausting half day tour.

Donors to the Library

We would like to express our thanks to the following institutions and persons who have made donations to our library:

Institut Français du Proche Orient (IFPO), Amman; German Archaeological Institute (DAI), Berlin (Germany); German Embassy, Amman (Jordan); Prof. Dr. Ulrich Hübner, University of Kiel, Kiel (Germany); Prof. Dr. Manfried Dietrich, Ugarit-Verlag Münster, Münster (Germany); Council for British Research in the Levant (CBRL), Amman (Jordan); Deutscher Palästina Verein (1000,-EUR); Prof. Dr. Dr. Dieter Vieweger, BAI-Wuppertal (Germany); Prof. Dr. Udo Worschech, Theologische Hochschule Friedensau, (Germany).

All three sites, clustered around the northern and eastern Dead Sea shore, played a prominent role around the beginning of the Christian era, and, more specifically, can be linked to Naby Yahya (pbuh)/John the Baptist. Linking these three sites under a common heading, like „John the Baptist Regional Park", could produce a synergetic effect and further enhance the potential of all three sites. (The project idea was first introduced to the Seventh International Seminar Forum UNESCO University & Heritage, on December 15, 2002, in Petra, Jordan (Wimmer, forthcoming). A project exposé-brochure may be obtained from the author, or at: freunde-abrahams@lycos.de. For the Friends of Abraham Society consult www.freunde-abrahams.de. Moreover, a dimension beyond the considerable archaeological and also natural attractiveness of the area could then be approached: Inter-religious education would be a major component of the project. The program for visitors to the park would include competent information on the role John the Baptist holds in Islam. That in turn could open deeper insights into the fact that many other Biblical personalities and stories as well, are familiar, and highly esteemed, by Muslims—a fact still widely unrecognised in the so called Western world. Naturally, such inter-religious education would work in both directions. Visitors' programs to the park should be designed to attract foreign tourists, but also embrace the home population as well. As Jordan's nation has a significant Christian component, the linking function would extend over Muslims and Christians from inside Jordan, too, and could foster the ties between Jordanians of different faiths.

Ways that could be thought of, in order to incorporate interfaith information in the tour, are obviously numerous. A visitors centre to the park could possibly be envisaged at Callirrhoë /'Ain ez-Zara. Lectures, films, scripture reading (Quranic and/or Biblical), or probably better: encounters and discussions with competent parties from the complementary religion could be offered there and become a highlight of the tour program.

The necessary infrastructure for the park is to a very large extent already existing. All three sites can already be reached by roads. A circular tour that would enable visitors to combine and tour them easily in a one day program, is however not possible at present, because a direct connection between Callirrhoë and Machaerus is missing. Instead of considering a road through the difficult, mountainous terrain, which would also considerably impact on the beauty of the environment, the feasibility of a cable car might be studied. Its valley station, at the upper outskirts of the 'En ez-Zâra oasis, could be combined with the visitors centre. The cable car, if realised, could become a major attraction for the proposed park, enhance even more the attractiveness of the whole area, and compete with tourist attractions in the whole Middle Eastern region.

Based on the results of archaeological research and site management, the project combines the potentials of tourism, cultural heritage and natural surroundings that are already extant, with the ambition for peace education. If millions of western tourists find, as a by-product of their visit to Jordan, the chance for a more profound and positive understanding of Islam, the impact for the societies they come from may indeed become a considerable one.

What would be needed to implement the project are interested parties in Jordan ready to initiate, support and operate the park. The cable car sub-project aside, the necessary financial requirements are modest. Once qualified personnel for the educational part would be obtained, the project could be launched in the near future.

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A Summary of Moab, Moabite Place Names and Moabite Kings in Egyptian and Assyro-Babylonian Inscriptions

By: Udo Worschech, Friedensau Adventist University (Germany)

On the west side of the western statue of Ramses II (1279-1212 BC) at Luxor there are a number of Asiatic toponyms of which Moab is one name among other well-known and important places in the Ancient Near East. Hatti, Naharina and Assur are mentioned, followed by Moab (*m[w]-j-b = m'b*). Since Moab is followed by the determinative for „region" or „country, state" it was known to Ramses II as a territorial or political entity. It is not clear if Moab also has an ethnic connotation here.

Another occurrence of „Moab" in Egyptian sources is among Ramses II's geographical list on the south wall of the temple in Amara West, which is derived from a list from the temple of Amenophis III in Soleb as well as from the temple of Ramses II at Aksha. The relevant names here are Qatna (*el-Mishrife* on the Orontes), Pella (*Tabaqat Fahl*), Punt, Shasu, Taita, Arrapkha, Ge[z]er and Moab (*m[w]-j-ib-3*), followed by Takhshi and Damascus. Again Moab is defined by the sign connoting a region or state. However, since Moab is already mentioned by Amenophis III (1392-1354 BC) in the 14th century as a geographic or political unit, the region of Moab was already known in Egypt close to the end of the Late Bronze Age. The find of a scarab dating to the time of Thutmose III (1479-1426 BC) would at least suggest that Moab had come to the knowledge of the Egyptian pharaohs as early as the 15th century. A scarab of Amenophis III has also been found near Petra (Ward 1973), which supports the view that Moab was not a backwater at the end of the Late Bronze Age.

A military campaign under Ramses II is mentioned on the eastern wall of the large courtyard of the temple of Amun in Luxor. In a comment describing the conquest of a Moabite city it is the „Land of Moab" (*t3 n m[w]-j-b[w]*) and the town of „Butarta" (*b[w]-t-r-t*) which are considered to be enemies of the pharaoh. Another place name is also mentioned which is generally accepted as referring to the town of Dibon in the territory of Moab. Although Dibon (*tj-bw-jn[jw]*) is not written with a determinative indicating „land" or „region" it is agreed that „*Tbn* should be left in Moab alongside *Bwtrt*" (Kitchen 1976). I have suggested the region of *Jebel Batra* c. 17 km southeast of Kerak to be the site of *bwtrt* for linguistic reasons and because early Iron Age pottery sherds were picked up there (Worschech 1990).

The three inscriptions mentioning Moab in the 14th and 13th centuries BC clearly indicate that Moab stood, as far as political importance is concerned, alongside the empire states of the Hittites, Assyrians and the Mitanni. The nomadic (?) Shasu are also mentioned in this context but Moab is not one of them. At this point of our discussion the question still remains open whether or not Moab and the city of „Dibon" are referred to in the inscription of Thutmoses III as *t3-pw-nw*. But as long as the dispute over the question of a possible b/p-shift is not settled the location of this town in Moab is still questionable. However, the find of a scarab with the name of Thutmose III at *el-Balu'* (Worschech 2002) and the identification of the Egyptian *y-r-t-w* with the village of Yarut c. 20 km north of Kerak should not be ignored in future considerations of this problem, also because near Yarut early Iron Age as well as Late Bronze sherds have been collected (Worschech 1990).

It is remarkable that after the early Iron Age period Egyptian references to Moab do not exist, although Egyptian scarabs, seals, statuettes and other paraphernalia have come to light in several excavations in Moab. There must have been a strong trade relationship between Egypt and Palestine of which Moab also got its share. The inscriptional evidence changed, however, when the Assyrians, under Tiglath-Pileser III (745-727 BC), entered the scene. (For a comprehensive and detailed discussion of the Assyrian connection with Moab see Timm 1989).

The Assyrians never made Moab a province, but were mainly interested in receiving tribute from the smaller Palestinian sheikhdoms. Besides Israel, Judah, Ammon, Edom and Aram, Moab is first mentioned as paying tribute to Tiglath-Pileser III in 732 BC. The Moabite king is called by his name *Shalamanu*. It is possible that he was named after a Moabite deity of that name, for which there are parallels in other Semitic names. It is also possible that this king may be referred to in Hos. 10,14, although the town of Bet-Arbel is unknown.

Still enigmatic is the location and identification of the „land of Dabil" and the „Gidirites" who attacked Moab, referred to in Letter 14 from Nimrud. It is unfortunate that the well-preserved letter which dates

to the time of Tiglath-Pileser III does not give any hints with regards to the event of the attack and the origin of the attackers, the Gidirites. Timm suggests an area of the steppe in the Nuqra region where a territory is called *__d_r.* (See Timm 1989: 328. See also Mittmann 1973 and Weippert 1987).

Twenty years later, when Sargon II (722-705 BC) invaded Palestine, Moab is mentioned again but no king is referred to. During several campaigns by Sanherib (705-681 BC) the king *Kamoshnadbi* of Moab appears on the inscriptions in 703 BC. The incursions of the Assyrian kings into Palestine did not ignore the country east of the Jordan particularly under Assarhaddon (681-669 BC), who mentioned king *Musuri* of Moab twice within eight years in 676/5 and 668 BC. Several times in the inscriptions Moabite military representatives are mentioned as LÚ.MAH.ME_ (*s_r_n_*), who were either representing their country in Assyria or were taking part in coalitions against Assyria. The Assyrian diplomacy was intent on presenting Assurbanipal (669-ca. 630 BC) as a successful king on the eve of the downfall of Assyria. So the successful campaign in 652 BC of the Moabite king *Kamashchalta* (or *Kemosch'asa*) against the Qedarite king *'Ammuladin* was presented as a victory of Assurbanipal over the Qedarites, despite the fact that it was *Kamashchalta* who had captured and taken *'Ammuladin* to Nineveh and had personally handed him over to the Assyrian monarch. This and the context in which Moab is referred to indicates the interest of the Assyrian kings to keep Moab and the other Palestinian states as paying tribute to the Mesopotamian power, which in turn would be willing to leave a high degree of independence to the Syro-Palestinian regimes.

It appears that Moab was able to withstand the political and military pressure the Assyrians had put on the smaller Palestinian states. So far we have no evidence for a strong military presence of Assyria in Moab, as for instance in Edom or Ammon or Israel/Judah. Up till now only few Assyrian type vessel forms have been found in the excavations of *el-Balu'*. It is possible that a courtyard house in Area C may have been influenced by Assyrian architecture. Later the only reference to Moab during the kingship of Nebuchadnezzar II (605-562 BC) is found in Jer. 27,3 when the Judean king Zedekia formed an alliance with the king of Moab against the Babylonian monarch. The name of the Moabite king is not mentioned. But Moab seemed to have been a safe place, at least in the eyes of the Judeans, who fled there in 587 BC when Nebuchadnezzar II destroyed Jerusalem (Jer. 40,11). If we follow Josephus (Ant. X 9.7) Nebuchadnezzar II finally put an end to Moab and Ammon in 582 BC. Archaeological evidence for this event is not entirely convincing, but it is evident that during the Iron III/Persian period the country of Moab, as well as the other states east of the Jordan, gradually changed their socio-economic character by shifting into a more or less nomadic kind of society. Probably this was due to the absence of a central governing power in all of Palestine. Moab became a backwater of small interest to the Persian kings. However, evidence of pottery production of the typical late forms of the Iron Age III/Persian period came to light during the excavations in *el-Balu'*.

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Short Report of the Excavations at Savi Höyük in 2000-2001

By: Reinhard Dittmann, University of Münster (Germany)

After a short survey campaign at Savi Höyük in 1999 the Turkish authorities gave the permission to a small team of the Westfälische-Wilhelms-University/Münster to conduct excavations at the site in cooperation with the museum of Sanliurfa. Today we know of at least seven archaeological sites in the eastern vicinity of the modern village of Adacik, province Sanliurfa, situated about 11 km to the south of Birecik, on the eastern border of the Euphrates. The sites are numbered Savi I to VII from south to north. Excavations took place at Savi I in 2000 and 2001 and at Savi II in 2000. The rest of the sites have been surveyed in 2000. The oldest remains have been found at Savi II and date to the Palaeolithic period. Similar finds have also been made at the site by a Turkish team under the leadership of Harun Taskiran and Metin Kartal in 1999.

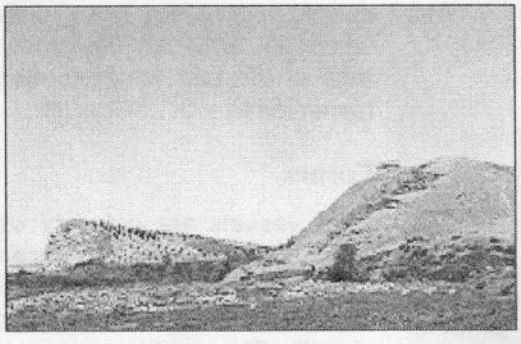

Fig. 1 Savi I (foreground) and II (back)

So far no Aceramic- or early Ceramic-Neolithic material has been found at least in our survey-area.

A small tholos, dating to the late Halaf period with some interesting local (?) sherds has been found just on virgin soil at Savi II, Sondage B (measuring 5 m x 10 m).

A gap separates this from mud brick fragments, which were much destroyed by recent ploughing activities. The walls belong probably to what is called a „Mittelsaalhaus" in German, that means a tripartite structure of the Late Uruk period. This level again is disturbed by several graves of the initial Early Bronze Age and an equally fragmentary preserved structure of the same age. Settlement activities stopped then at Savi II.

Concerning Savi I the results can be summarized as follows:

A sequence of 20 building phases has been excavated at Savi Höyük.

Phase 0 belongs to a sub-recent phase, represented by the former Agha´s house of Adaçik, just under the surface of the tell. Shallow remains of the medieval period have been encountered in Trench AB-O, phases 1-3. Pottery from these levels is extremely rare. Small finds are conspicuous by their absence.

More substantial remains date to the Iron Age and were found in trench AB-S, phases (4-) 6-8. Phase 6 is represented by a small basin like structure, which by its construction had not been used for water, but was perhaps a kind of storage facility. Beneath it, but belonging to phase 7, a canal was found. Just below are the remains of a massive construction belonging to phase 8, re-using the monumental remains of the Middle Bronze Age (phases 9-11). A gap follows in the sequence after phase 8. Concerning the pottery and small finds, the situation is the same as for phases 0-3. The extremely small amount of finds is perhaps due to a planed abandonment of the structures.

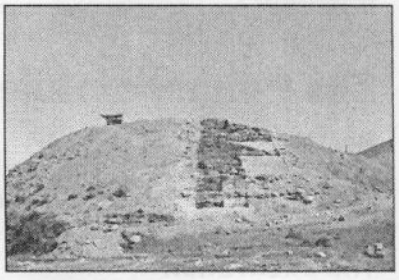

Fig. 2 Savi II from the west

Phases 12-13 are devoid of architecture – at least in our trench. The transition to the Early Bronze Age (Phases 14-16) is caracterized by dense sequence of levels of domestic nature. Massive stonewalls of the end of the Early Bronze Age, phases 18-19 (Fig. 8-9) foreshadow the underlying monumental constructions of phase 20, only excavated on very restricted surface.

As to the date of these phases the following remarks can be made: In phase 9 plates with almost horizontal out-turned rims occur. They are typical for the beginning of the Late Bronze Age, even though our pottery, contrary to the Late Bronze Age material at Lidar Höyük in the Atatürk-Barrage area for example, remains always mineral tempered – vegetal temper is extremely rare at Savi Höyük I. To mention are also two sherds, which show a wine-red highly polished thick slip, which I consider to be perhaps Central Anatolian Imports or which are at least influenced by such products. It has been speculated elsewhere, if the destruction of phase 9 was not due to the hostilities of the ear-

ly Hittite kings. Later Late Bronze Age material is missing at Savi Höyük.

Phases 10-13 date to the Middle Bronze Age, to be paralleled to Lidar, Middle Bronze Age, and Tell Hadidi Middle Bronze I-IIc. Some pottery types are also found in the final phase of Kurban Höyük III.

Phases 14-16 mark a transition between the end of the Early Bronze and the beginning of the Middle Bronze IA. Similar material is also present at Kurban Höyük III. According to our understanding of the chronology, this transition dates to the early part of the Old Assyrian period.

Phases 20-17are of end Early Bronze date. The material is a little different from Kurban III but is not of Kurban IV- date, since painted pottery and rim types of the so-called „Syrian Baroque-Type" are completely missing in our sequence (with the exception of one such a rim in phase 12).

The Pottery of Hujeirat al-Ghuzlan 1998 to 2003 - A First Impression

By: Susanne Kerner, German Archaeological Institute, Berlin (Germany)

The Excavation

The excavation at Hujeirat al-Ghuzlan (and Tell Magass) had been started by Dr. L. Khalil (Amman University) and is now continued as a joint project with R. Eichmann and K. Schmidt (Orient-Department of the German Archaeological Institute). The site can expect a certain interest due to the numerous proofs of metallurgical processing there, which is documented in metal finds, slag, crucibles and moulds (for further details see Occident & Orient 8.1 2003). In the excavation seasons of 2000, 2002 and 2003 a large body of pottery has also been found, with around 33000 pieces so far and an increasing amount of complete vessels and larger sherds allowing a more certain reconstruction of the vessel shapes. The overwhelming characteristic of the ceramics from Hujeirat al-Ghuzlan (and also of Tell Magass) is its coarseness and low quality manufacturing.

Fabric

The definition of the wares or fabrics in Hujeirat al-Ghuzlan is difficult, because colour, quantity of temper and surface finishing seem not to be closely defined, but vary strongly. A large amount of the sherds are very coarse and so badly made and low fired that they disintegrate when touched.

There are two large ware-groups: I) more reddish wares, which are mainly tempered with grits and even small pebbles and II) more buff ware, which are tempered mostly with straw. The first group varies from very coarse wares with a large percentage of gritty temper (from local conglomerate stone) and hardly any surface finishing to fine wares with very small sandy temper and smooth surfaces. The second group includes a variety of fabrics from a coarse straw and grit tempered ware with a rough surface finishing to a very finely straw tempered ware with perfectly smoothed surfaces. A third group consists of very hard, reddish-grey sherds, which seem to date earlier then the bulk of the other material (see Brückner et al. 2002: 244-256).

All the pottery is handmade and shows clear signs of the production techniques, not only are the coils very recognizable, it can also be seen, how handles and necks got made separately and then fixed to the main body. The bases were also manufactured independently; the connection between base and wall still often shows the finger imprints on the soft clay when both pieces were pressed together.

The wares show a greater similarity with Chalcolithic material than with Early Bronze Age material, there is not a single piece of the so-called typical *Proto-Urban* material. But some of the pottery can be compared with the particular kind of buff as well as red Chalcolithic pottery (e.g. from Tuleilat Ghassul), although the percentage of the buff wares is much higher in Hujeirat al-Ghuzlan.

Forms

Most vessels are not very well made and have irregular rims and bases. It is therefore very difficult to measure the diameter of small sherds. The profiles are quite simple, with the exception of the already mentioned hard, red ware. There are more open than closed vessels in Hujeirat al-Ghuzlan, a characteristic connecting the material again closer to the Chalcolithic than the Early Bronze Age, although the shapes itself are not necessarily „typical" Late Chalcolithic and can only be compared with those in very general terms.

The open shapes include wide, open bowls with ledge handles and a large diameter, and very straight walled, deep bowls, while shallow dishes are rather uncommon. Interesting is one form, a completely flat dish, which seems to had contact with heat on the lower side, so one is inclined to think about bread-preparation as a function for this particular form.

The closed shapes consist of hole-mouth vessels, jars and pots with wide necks and small rims. The hole-mouth-jars vary widely in diameter and shape, while the majority is smaller and had been used as cooking-pots, indicated by the large amount of ash still sticking to the outside, the larger ones (up to 40 cm diameter at the opening) must have been used as storage vessels. The same function can be assumed for large pithoi with a short wide neck, a wide opening (35-50 cm), and nearly always a rope-decoration at the neck.

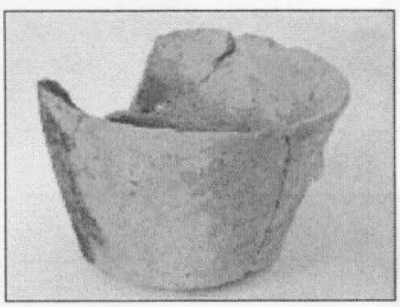

Fig. 1: Pottery Jar from Hujeirat al-Ghuzlan

Some of the jars and the cooking-pots have loop handles, while bowls have mainly ledge handles, which are often decorated with impressions (see Amiran 1969: Plate 8.12).

Tubular spouts do not exist at all, but spouts at the lip of the vessel appear quite regularly and seem to belong mainly to larger, straight-sided bowls. Spoons, a regular but infrequent find in roughly contemporary sites, have come up in different shapes and forms.

Other ceramic finds include crucibles and moulds for the metal processing.

The best comparisons of the pottery material can be drawn with Wadi Fidan 4 and Wadi Feinan 100 (Adams, Genz 1994; Wright et al. 1998), while the roughly contemporary site of Nahal Tillah (Levy et al. 1997) brought so far no close comparisons.

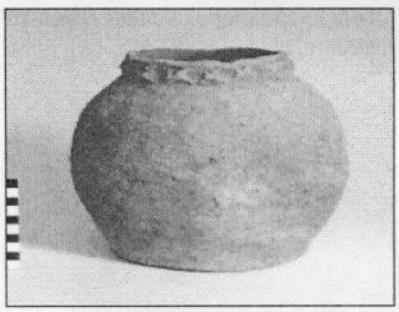

Fig. 2: One of the large bowls from Hujeirat al-Ghuzlan

Chronological Questions

The end of the Chalcolithic and the beginning of the Early Bronze Age period in the Southern Levant, and particularly in its southernmost area, are not clear (Kerner 2000, Kerner 2001). The initial idea that foreign intruders brought the entire change has been abandoned at least since Hennessy's influential study (Hennessy 1967). The transition between both periods leaves us with a number of questions (see also Gophna 1995), such as: Is there a chronological gap between the Late Chalcolithic and the EBA Ia, or do both periods overlap partly or in some regions? How can the change be explained, only through internal change or with external influence (e.g. such as trade with Egypt)?

One of the problems is the very limited amount of sites, which are continuously settled from the Chalcolithic to the EBA I; even the preferred regions of settlement change from one period to the other. This is particularly true for the southern part of the region, where very few sites of these periods have been excavated at all. Most Early Bronze Age settlements are newly founded or appear after a hiatus (like Arad), while the areas with the fullest Chalcolithic settlement activities (like the Judean desert or the southern Jordanian plateau) have not been settled in the Early Bronze Age I. Hujeirat al-Ghuzlan is therefore one of the first sites, which might give us an insight into the internal development and at the same time at regional trade with Egypt.

It will also be very interesting to see, how this site fits into the model of more prestigious metal production in the Chalcolithic and more functionally oriented metal production of the Early Bronze Age. It could also fill a gap between the complex, but small sites of the Chalcolithic and the larger, so-called „city states" of the Early Bronze Age II and III. Philip has lately tried to describe the socio-political model of the EBA as based on „*corporate villages*" (Philip 2001, 166-167), a model worth testing in Hujeirat al-Ghuzlan.

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