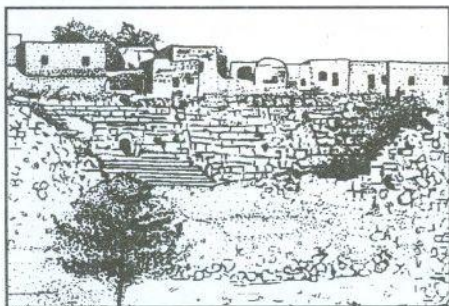


OCCIDENT & ORIENT

Newsletter of the German Protestant Institute of Archaeology in Amman



THE GERMAN PROTESTANT INSTITUTE OF ARCHAEOLOGY IN AMMAN (DEI) *News and Changes*

Vol. 6, No. 1&2, September 2001

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This is the sixth volume of our Newsletter *Occident & Orient*, but the first volume under a new editorship. As most of our valued readers already know, Dr. Hans-Dieter Bienert left the institute and Jordan at the end of March 2001. He was succeeded by Dr. Roland Lamprichs, who took office in April and was introduced by the church on September, 16th 2001.

The institute's varied activities since then have included, for example, logistical support for several visiting scholars and excavation teams working in Tell Zera' a and Umm Qais, among others. In cooperation with the Orient Section of the German Archaeological Institute (DAI) and the Department of Antiquities (DoA), the signposting in Umm Qais was almost completed by the time of printing this newsletter. Thanks to the financial support of the German embassy in Amman, a new signpost for the so called "Rujm al-Malfuf", situated just opposite the Department (DoA) building in Amman, is also due to be inaugurated shortly.

A workshop concerning scientific restoration of different materials was prepared in close cooperation with the

Goethe-Institute, Amman, the Vorderasiatisches Museum, Berlin, the Department of Antiquities of Jordan, Amman, and Yarmouk University, Irbid.

The annual "Lehrkurs" (a group of scholars holding a travel scholarship from the DEI) spent three weeks in Jordan. They were guided to many archaeological sites by the director of the DEI-Amman and enjoyed the assistance and support of several organizations, authorities and institutes within Jordan.

A further, very important event in recent months was the participation of the institute in the Eighth International Conference on the History and Archaeology of Jordan. It was held at the University of Sydney under the patronage of HRH Prince al-Hassan Bin Talal and

HE Dr. Marie Bashir, Governor of New South Wales. The conference was truly international in scope with around 90 presentations and 125 participants from 15 countries. The German Protestant Institute in Amman was represented by its new director, Dr. Roland Lamprichs, who presented a paper entitled "Tell Johfiyeh and neighbouring sites. Part of an Iron Age defence, trade or communication network?" ■



The Sydney Conference: Dr. Fawwaz Khraysheh (left) and Dr. Roland Lamprichs in front of the Power House Museum, Sydney.

Late Roman Belt Buckles from Gadara/Umm Qais

By: Christoph Eger, German Archaeological Institute, Madrid (Spain)

Jewellery and metal dress-accessories like brooches and belt buckles are important aspects of late Roman and Byzantine study, yet they have very rarely been taken into account up to now. As grave-goods or - less common - as settlement-waste, these finds provide important chronological evidence; also, they have to be considered as significant elements of late Roman and Byzantine culture.

In the course of a two-year research-scholarship from the Deutsche Forschungsgemeinschaft (DFG), finds from Jordan, particularly belt buckles, will be studied and registered. The Department of Antiquities Amman kindly gave its agreement to this project. My gratitude goes especially to its Director General, Dr. Fawwaz Khraysheh.

Taking stock of the collection in the store-room of the Department of Antiquities in Amman, I came across some old finds from Umm Qais that reached the National Museum of Amman in the first half of the 20th century. Particularly noteworthy are two crossbow-brooches and the three belt buckles described below:

1. Belt buckle with hinged, wide rectangular plate. At the back of the fitting are two rivets. The loop is grooved to accommodate the tip of

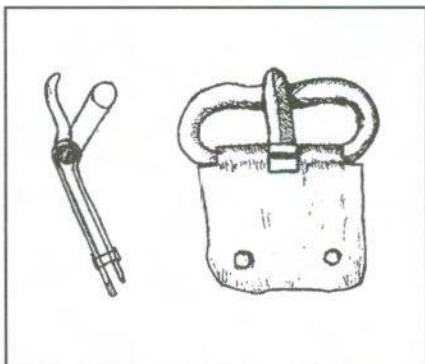


Fig. 2: Gadara/Umm Qais. Strap with rectangular fitting and bent bow.

the tongue. At the base of the loop, a flat, wide, lightly roof-shaped tongue is secured; the rectangular tongue-neck is notched (Fig. 1b and 2).

2. Belt buckle with hinged, triangular plate. The fitting ends in a circular "appendix", on which a rivet is secured. The loop is D-shaped. The tongue is flat-wide and like no. 1, it is rectangularly shaped and bent (Fig. 1c).

3. Belt buckle with hinged narrow triangular plate and a rounded loop that was renewed at the tongue base. The plate is broken at the base of the strap, probably recently. Flat-wide tongue (Fig. 1a).

Apart from general provenance, more information on the finds context is not available at the moment. All three straps are in exceptional state of preservation, disregarding the usual grade of corrosion and the recently broken fitting in the third strip. The reason for the good condition of these buckles is probably that they were originally found in graves.

The buckle with wide rectangular plate and bent bow (no. 1) is a widely spread type that covers the whole Roman empire. This type is found in the European part of the empire (i. e. Keller 1971; Vago/Bona 1977) as well as in North Africa, where parallels to the buckle with bent bow and rectangular plate, are known from Tamuda, Morocco, (Boube-Piccot 1994, table 17, 171-174). The evidence in the Near East is less frequent. Two examples of this buckle-type were found, for example, in the excavations of the place of pilgrimage "dominus flevit" in Jerusalem (Bagatti/Milik 1958). Widely spread counter-pieces to the buckle with tri-



Fig. 1: a-c (right to left) Gadara/Umm Qais (By courtesy of the Department of Antiquities, Amman).

angular plate are specified within the Roman empire (Schnurbein 1977, 91f.; occurrence in North Africa: Boube-Piccot 1994; to the variants with the firm fitting: Swoboda 1986). In Umm Qais itself an unpublished fitting-fragment of that type was found (kind information of PD Dr. Th. Weber, Mainz).

Both belt-buckle forms can be dated by numerous other burials found on the

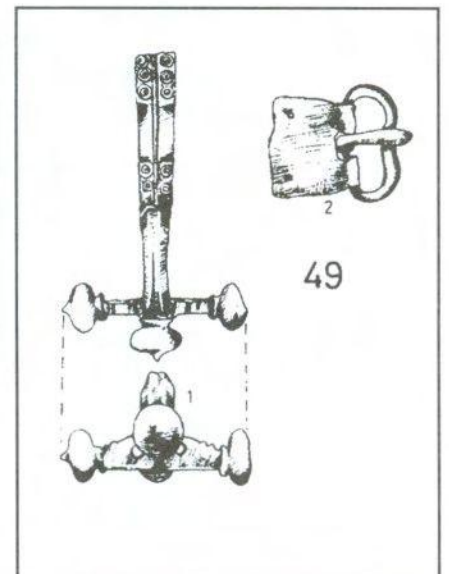


Fig. 3: Intercisa, south-west cemetery, tomb 49. M. 2:3. (Vago/Bona 1976, 215 table 5).

Rhine Valley and the Danubian provinces. Straps with hinged triangular fittings were combined with coins of the 3rd and 4th centuries A.D. and also with crossbow brooches of Keller type 2 (Schnurbein 1977, 92; for brooches Keller type 2 see also Pröttel 1991). The form belongs mainly to the first half and the middle of the 4th century. The strap with the rectangular fitting is also a form of the 4th century A.D. Regarding the variants with bent bows there are combinations with crossbow brooches of types 4 and 5, for example, in the late Roman cemetery of Intercisa, Hungary (Fig. 3). These strap-forms accordingly can be dated mainly to the second half of the 4th century and early 5th century (Keller 1971, 61f.; Konrad 1997, 47).

It is rather more difficult to classify the last mentioned belt-buckle no. 3, for which only some single parallels came to my attention. One example was found in Volubilis, Morocco (Boube-Piccot 1994, table 78.180); similar pieces with oval bow and wider plates were published by Konrad (1997, 45f). In terms of typology these examples appear to be forerunners of the belt-buckles with round, thickened bows and club-like tongues, which are typical features of the first half of the 5th century and certainly of barbaric context, especially in the Carpathic basin (Tejral 1988, 18f. Fig. 5-6). The piece from Gadara may be classified into the late 4th or early 5th century A.D.

The three belt-buckles described above are some good examples of late antique dress-accessories from Gadara/Umm Qais. Their rare occurrence in graves shows that they were not common belt-fittings worn by ordinary persons; in the thoroughly excavated late Roman cemeteries along the Rhine and Danube only a fraction of the male burials were provided with buckles. On the other hand, they were frequently found together with crossbow-brooches, which seem to indicate the special status of their bearers (Kuhnen 1988). Probably only officials with public responsibilities were provided with special brooches and metal cingulum-belt-buckles. The wide distribution of belt-buckle no. 1 shows that they were common all over the Roman Empire during the fourth century A.D. This pa-

per is part of an article about late Roman and Byzantine costume accessories in Jordan which will be published in ADAJ.

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Qanawat

By: Klaus Stefan Freyberger, German Archaeological Institute - Damascus (Syria)

The sixth excavation campaign of the Syro-German joint expedition to Qanawat lasted from the 6th of March to the 30th of April 2000. During this campaign we have resumed the excavations at the Temple of Zeus Megistos in the upper city (Fig.2-3). We have uncovered the western chamber of the naos and the crypt under the adyton.

The foundations consist of three courses of large basalt findings. The walls have two outer faces of well-cut stones. The west wall is pierced by a door that was accessible by means of a staircase in the western side room. Some cut stones of the outer face of the northern side have a profile of a slight curving, which might indicate the start of a vault, presumably a barrel one. On the ba-

sis of this finding it appears that the crypt had been covered by a north-south running barrel-vault with the door of the western side at its top. At the beginning of the 20th century the crypt was converted into a cistern, with the door on the western side closed by the ashlars of the inner wall. All sides of the foundation and the adjacent wall above them were covered with watertight

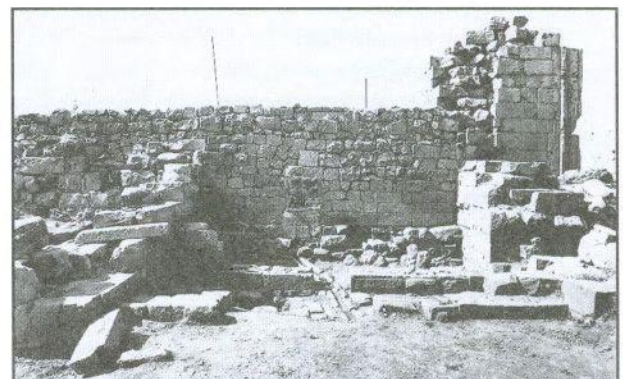


Fig.1: Qanawat, city wall with tower on south-eastern corner.

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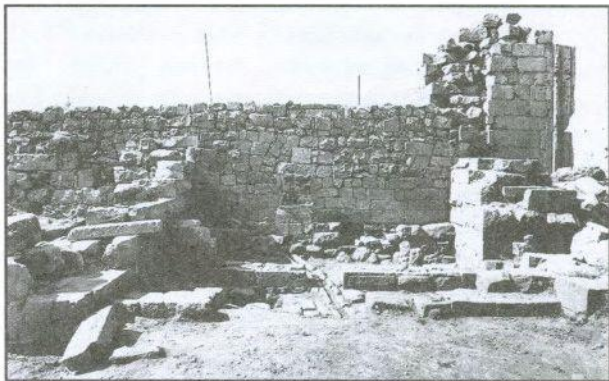


Fig.1: Qanawat, city wall with tower on south-eastern corner.

plaster. The foundation trench, which had been turned into a basin, received plaster flooring. We have resumed and extended the surveying of the architectural elements of the "peripteral temple" that were reused in a present-day garden fence. We were able to register and document more than 1800 fragments. The majority of these can be ascribed to the still standing building that belongs to the 3rd century A.D.

In addition to these elements there are further elements of smaller dimensions, which were parts of a predecessor building that belonged to the early Caesarian period. Among this older group there is a relief of a basalt stone, which was sculptured on two parts. They have been uncovered in the area of the southeastern corner of the temple front before the lowest step of the krepis. In the middle of the relief there is a recessed and profiled field containing a Greek inscription of five lines (Fig.4). It is flanked by two framing reliefs of lion-protomes. According to the text, Philippos, son of Alexendros, his wife, Bona of Seeia (?) and the son of Alexendros erected the pronaos and dedicated it to the God of Rabbos. Owing to the names, the dedicators were hellenized local dignitaries from Kanatha or the environs. The letters of the inscription and the style of the reliefs suggest a date back to the early

Caesarian period. Three quarters of the filling between the first intermediate ceiling and the virgin basalt rock inside the eastern tower, which lies to the east of "south temple" (Temple of Zeus Megistos), has been excavated. It has been found that the intermediate ceilings belong to the late Roman period. They were built partially of reused basalt stones, which date back to the time of the construction of the tower itself. The findings of the lower floor (glass, ceramic) can be dated back to late Roman and Byzantine periods. Two coins, were found: Probus (275-282 A.D.), belonging to the end of the 3rd century A.D., and a small coin dating back to the mid-5th century A.D. There was a marble torso of a Venus statuette on the ground of



Fig.2: Qanawat, "South Temple" (Temple of Zeus Megistos) Cella, the excavated eastern half.



Fig.3: Qanawat, "South Temple" (Temple of Zeus Megistos) the crypt.

the northeastern quadrant. Within the area of the eastern gate, which lies in the upper city between the cistern and a modern asphalt road, remains of a city wall and the foundation of the gate have been uncovered running from north to south (Fig. 1). The foundation of the city wall consists of a pack of basalt findlings. There are three courses of ashlars still standing over that foundation. Two walls coming from the west are perpendicular to the city wall. The

city wall intersected the older one, whose foundation is preserved. In the foundation trench we found ceramics, which can be dated back to the middle of the Caesarian period. The second wall, which is more recent than the first one, was built of many reused stones. Its uppermost course superimposes the city wall, whereas the ashlars of the lower courses are merely adjacent to it. Farther to the north of the prolongation of the city wall there appeared the foundations of the pylons of the eastern gate in the north and in the south, in addition to a pavement of basalt square stones before the gate itself.

In 1976, Mr. Ghaleb Amer of the Syrian Department of Antiquities excavated a part of the tomb, Q6, in the northern necropole. We have resumed the excavation there reaching a level lower than the upper edge of the foundation and have cleaned the surface of the stepped structure. This underground structure, a hypogeum of 16 loculi-burials, projects below the stepped structure only a few centimeters along the southern and

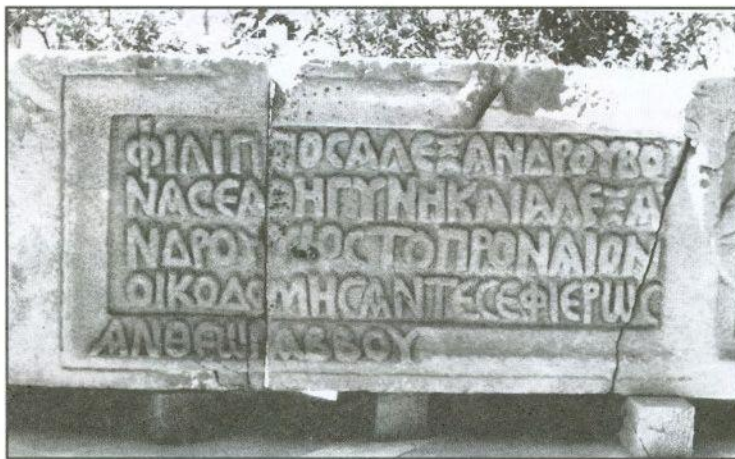


Fig.4: Qanawat, "Peripteral Temple", the predecessor building, construction inscription of Philippos.

northern side, while it projects 70-80 cm above the ground level of the upper structure along the eastern side. In the southern half of the trench, which lies between tomb Q 6 and Q 7, we found eight stone chest graves of different sizes and states of preservation. All tombs were aligned from east to west and repeatedly reused. The graves 4, 6, 7 and 8 contained funerary objects, predominantly rings of glass, iron, bronze and silver, besides beads of glass and semi-precious stone. From preliminary inspection of the materials, we can start dating them between the 4th and 7th centuries A.D. The largest tomb (8) was built of reused materials, part of them taken from the nearby tomb Q 6. From this finding, it appears possible that tomb Q 6 was no longer in use when the area was planned as a cemetery.

We continued to examine the architectural remains of the thermes in Qanawat. In the southern part of room D, we found hypocausts and a brick wall at the southern wall, which prove the existence of a warm water basin. Fu-

ture investigations will mainly aim to establish a chronology for the different phases of construction, to gain information about the period of use of this public building and to present in writing the history of ancient Kanatha from the Caesarian period through the Islamic period. The nymphaeum in the Wadi of Qanawat has been thoroughly surveyed and precisely measured. Archaeological investigations also have taken place in and around

the monument. The construction technique of the walls and the profiles in this monument are in accordance with those of the Odeon and the "southern temple" of the Severian age in Qanawat. Accordingly we can date this building, whose type is derived from the Italic chamber-nymphaeum, back to the early 3rd century A.D. In all probability, the whole ensemble of the nymphaeum was erected during the Severian period over an older structure. It seems that the whole foundation of the nymphaeum corresponds to an older cult building, be it in the form of a wall or an older edifice. The new building of the nymphaeum offers an illustrious example of the re-activation and the monumentalisation of traditional cult places in Kanatha during the Severian period. The new monumental buildings, to which the temple of Zeus Megistos and the peripteral temple belonged, should be evaluated as a demonstration and a promotion of traditional cults in the region of Jebel al-Arab. ■

Words of Appreciation to Dr. Hans-Dieter Bienert

By: Johannes Achilles EKD Hannover, Siegfried Mittmann, University of Tübingen and Dieter Vieweger, Kirchliche Hochschule Wuppertal (Germany)

It was certainly fortunate that the Administrators of the German Protestant Institute named Dr. Hans-Dieter Bienert as Director of the Institute in Amman in the spring of 1996. In him, a superior researcher and an experienced organizer assumed leadership of the Institute.

Born on the 15th of July, 1962 in Backnang, Rems-Murr-Kreis, Dr. Bienert studied Prehistory and Ancient History in Tübingen (after 1982) and Oxford (1989). He earned his Doctor of Philosophy degree with the predicate "summa cum laude" from the University of Tübingen (1991-1995) publishing as his dissertation, "Cult and Religion in Prehistoric Times: A Study Based on the Material Findings of Epipaleolithic and Early Neolithic Societies/Cultures of South West Asia (12-6 Millennia BCE)".

The directorship of the German Protestant Institute, Amman, was the first great challenge of his professional career, one which he mastered brilliantly, even at a time when the entire Institute found itself in deep financial straits. Dr. Hans-Dieter Bienert deserves credit, for taking decisive steps toward consolidating and putting the budget in order, and also for expanding the scientific prestige of the Institute through his superior leadership of noteworthy research projects:

Archaeological excavation in Neolithic esh-Shallaf (10/1998 and 3-4/1999; in co-operation with Prof. Dr. Dr. Dieter Vieweger, Biblisch-Archäologisches Institut Wuppertal). (Preliminary reports in ADAJ, Occident & Orient, Neo-Lithics and AJA (see references).

Archaeological survey and excavations in the Ba'ja-region (10/1999 in co-ope-

ration with Prof. Dr. Dr. Dieter Vieweger, Biblisch-Archäologisches Institut Wuppertal, and Dr. Roland Lamprichs, Dresden). (Preliminary reports in ADAJ, Occident & Orient, Neo-Lithics, UF and AJA (see references).

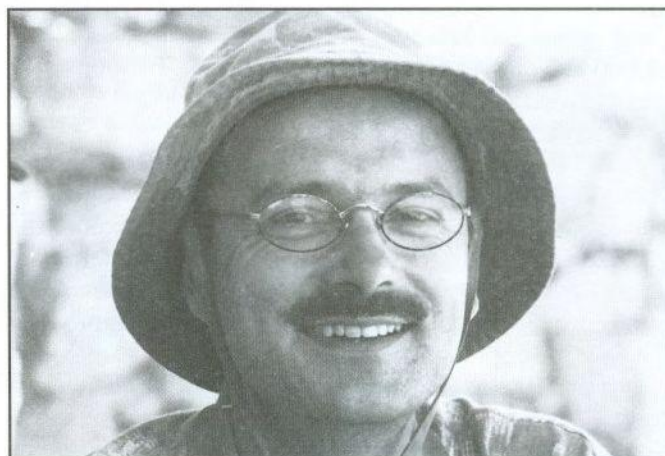
Dr. Bienert has achieved an excellent reputation in the field of Palestinian archaeology. Scientific exchanges among renowned scholars from Jordan, the Arab world, Europe and North America were advanced through numerous symposia and conferences under the excellent organization of Dr. Bienert, in conjunction with other research institutions.

Only the most important are listed here:

"Central Settlements in Neolithic Jordan" – a five day-symposium in Petra/Wadi Musa (July 1997).

"Crossroads of Civilizations - More Than 100 Years of German Archaeological Research in Jordan" – a two-week exhibition in Amman (November 1998; in co-operation with the Petra Stone Preservation Project of the Deutschen Gesellschaft für Technische Zusammenarbeit).

"Men of Dikes and Canals" – a five day-symposium in Petra/Wadi Musa (June 1999) about water in the past and present in the Near East (in co-operation with the Orientabteilung des Deutschen Archäologischen Instituts).



"Ancient Trade and Trade Routes: Forging New Links For Archaeological Research" – five-day-symposium in Amman (November 2000) – part of the 25th anniversary of the German Protestant Institute of Archaeology, Amman.

In addition, over the course of recent years, Dr. Bienert has championed a closer relationship between the German-speaking Protestant congregation in Amman and the German Protestant Institute.

He deserves our heart-felt thanks for his diligent and successful work in Amman. Personally, we have especially cherished his collegiality and his steady and trustworthy co-operation.

Dr. Bienert left the German Protestant Institute, Amman, at the end of March, to assume a responsible position with the Deutsche Forschungsgemeinschaft (German Research Society) in Bonn, Germany. On behalf of the Administration, we heartily wish him every possible success in his career.

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In recognition of his scholarly achievements, we list his publications:

Hans-Dieter Bienert und Dieter Vieweger: Die jungsteinzeitliche Siedlung von Esh-Shallaf in Nordjordanien. Wiesbaden: Harrassowitz (Abhandlungen des Deutschen Palästina-Vereins) (in preparation).

Hans-Dieter Bienert, Roland Lamprichs und Dieter Vieweger: Ba'ja – Archäologie einer Kleinregion. Archäologische Forschungen im Umfeld des antiken Petra. Rahden: Marie Leidorf GmbH (Orient-Archäologie) (in preparation).

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Hans-Dieter Bienert, Hans Georg K. Gebel and Reinder Neef (eds.): Central Settlements in Neolithic Jordan. Studies in Early Near Eastern Production, Subsistence and Environment 5. Berlin: ex oriente 2001 (in print).

Hans-Dieter Bienert and Bernd Müller-Neuhof (eds.): At the Crossroads. Essays on the Archaeology, History and Current Affairs of the Middle East. Amman: Al Kutba 2000.

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Welcome to the new Director Dr. Roland Lamprichs

By: **Jamil Amira (Abu Hassan), Bernd Müller-Neuhof, Nadia Shugair**

The staff of the German Protestant Institute of Archaeology in Amman welcomes Dr. Roland Lamprichs as the new director of the institute. He took office in April and was introduced by the church on 16 September 2001.

Dr. Roland Lamprichs, born near Cologne, Germany in 1961 received his university training in Near Eastern Archaeology, Ancient Middle Eastern languages and Religious studies in Berlin and London. He earned his MA and Doctor of Philosophy degrees ("summa cum laude") at Free University in Berlin, Germany. Dr. Lamprichs' M.A. dissertation is entitled "Pottery of the Ur-III period: a correlation of archaeological and philological sources". His doctoral thesis is entitled "The expansion of the Assyrian empire to the west: a structural analysis". Furthermore, among others, he published the first volume of the Abu Snesleh final reports,

entitled "Abu Snesleh – stratigraphy and architecture".

Before being named director of the German Protestant Institute in Amman he served for several years as lecturer at Freiburg University. During his career he has been, among others, a Humboldt-fellow (Feodor-Lynen program) at Yarmouk University in Irbid and part time lecturer at Münster and Dresden universities. His archaeological field experience included work at Tell Shech Hamad (Syria), Basta (Jordan), Assur (Iraq), Kar Tukulti-Ninurta (Iraq), Abu Snesleh (Jordan), Wadi Qattar (Jordan) and Ba'ja III (Jordan).

During the last decade he spent several months each year in Jordan doing research in the areas of Irbid and Petra. He is already familiar with the country and well known to the local archaeology community. His wife Katrin is also an archaeologist.



Dr. Lamprichs is going to continue the work of his predecessors and has expressed the desire to promote even deeper links and cooperation with the Department of Antiquities, Jordanian universities and the international archaeological centers in Jordan. ■

Fellows in Residence and Associated Fellows (December 2000 - September 2001)

- Mr. Lothar Herling, M.A., University of Heidelberg (Germany), "Survey at Wadi el-Yutum and Tell el-Magass area", ASEYM-Project directed by Prof. Dr. Lutfi Khalil (University of Jordan, Amman, Jordan) and Prof. Dr. Ricardo Eichmann (German Archaeological Institute, Orient Department, Berlin, Germany).
- Prof. Dr. Dr. Dieter Vieweger, Kirchliche Hochschule Wuppertal (Germany), "Preparing his excavation at Tell Zera'a".
- Mr. Dimitrios Maniatis, Eschborn (Germany), "Trainee of the GTZ".
- Dr. Roland Lamprichs, Dresden (Germany), "Research on finds from archaeological excavations at Ba'ja III and Fersh".
- Mr. Jens Eichner, Kirchliche Hochschule Wuppertal (Germany), "Pottery reading and analysis from Ba'ja I (Ayyubid-Mamluke) and preparation – in cooperation with the excavators – of the final report on the pottery".
- Mrs. Katrin Bastert-Lamprichs, M.A., Dresden (Germany), "Pottery reading and analysis from Late Neolithic esh-Shallaf and preparation – in cooperation with the excavators – of the final report on the pottery".
- Dr. Margarete van Ess, German Archaeological Institute Berlin, Orient Section (Germany), "Uruk-expedition (Iraq)".
- Scholars holding one-year travel scholarships from the German Archaeological Institute (DAI): Mr. Hennemeyer, Mrs. Koch, Mr. Hoffmann (Germany).
- John Meadows, M.A., University of Melbourne (Australia).
- Scholars holding two-month travel scholarships from German Protestant Institute of Archaeology ("Lehrkurs of the DEI"): Prof. Dr. Siegfried Zimmer, Remseck (Germany), Dr. Stefan Fischer, Morija (Lesotho), Mrs. Gabriella Gelardini, Basel (Switzerland), Dr. Rolf Schäfer, Reutlingen (Germany), Mr. Matthias Vosseler, Aldingen (Germany), Mrs. Christine Stelling, Braunschweig (Germany).
- Dr. Hans-Wulf Bloedhorn, German Protestant Institute of Archaeology in Jerusalem, "Accompanying the Lehrkurs".
- Mr. Jens Ochtrop, Mrs. Christine Peter, Mrs. Alexandra Roth, Mrs. Maja Tampe, Mr. Arvid Türkner, Trainees of the German Institute of Development Politics (DIE) from February until April 2001.
- Dr. Michael Müller-Karpe, Römisch Germanisches Zentralmuseum Mainz (Germany).
- Mr. Wolfram Spreer, University of Hohenheim (Germany). "Research for his Master-thesis in cooperation with the GTZ".
- Prof. Dr. Warland and Mrs. Warland, University of Freiburg (Germany).
- Prof. Dr. Hans Nissen and Mrs. Magret Nissen, Free University of Berlin (Germany).
- Prof Dr. Robert McAdams, La Jolla (USA).
- Phillip Rassmann, M.A., State University of Washington, Seattle (USA), "Research on the lithic artifacts from the Wadi Qattar survey", directed by Dr. R. Bernbeck, Dr. S. Kerner, Dr. R. Lamprichs and Dr. G. Lehmann.
- Mrs. Karen Gerleman, University of Lund (Sweden), "Arabic Language Studies at University of Jordan, Amman."
- Dr. Susanne Kerner, German Archaeological Institute, Berlin (Germany), "Pottery-Reading". ASEYM-Project directed by Prof. Dr. Lutfi Khalil (University of Jordan, Amman, Jordan) and Prof. Dr. Ricardo Eichmann (German Archaeological Institute, Orient Section, Berlin, Germany).
- Hans-Georg Gebel, M.A., Free University of Berlin (Germany), "Research on lithic artifacts from the survey at Ba'ja 5 (Jordan)".
- Prof. Dr. Robert Wenning, University of Bonn (Germany) and his team, "Research in Petra".
- Klaus Schwarz, Berlin (Germany), "Preparing a Multivision of ancient Jordan History" in cooperation with Goethe-Institute Amman and German Protestant Institute in Amman.
- Prof. Dr. Dr. Dieter Vieweger, Kirchliche Hochschule Wuppertal (Germany) and team, "Excavation in Tell Zera'a".
- Mr. OKR Johannes Achilles, Secretary general of the German Protestant Institute, Hannover (Germany), "Introducing the new director".
- Dr. Günther Schauerte, Stiftung Preußischer Kulturbesitz, Berlin (Germany) and team, "Excavations in Umm Qais".
- Dipl. Ing. Claudia Bührig, German Archaeological Institute, Berlin (Germany), "Completion of the sign-post project in Umm Qeis" in cooperation with the German Protestant Institute of Archaeology in Amman and the Department of Antiquities of Jordan.
- Dr. Thomas Weber, Mainz (Germany).
- Students of the Baghdad University, Baghdad (Iraq), "Holding a DAAD scholarship on their way to Germany".
- Students of the Baghdad University, Baghdad (Iraq), "Participating in excavations in Jerash (Jordan)".

Thanks and Farewell to Mr. Johannes Achilles

By: Hans-Dieter Bienert, Bonn (Germany)

The Evangelical Church in Germany (EKD) is a major financial contributor to the German Protestant Institute of Archaeology – both its institutions in Amman and Jerusalem – and also provides the administrative board for the institute. For the past ten years Mr. Achilles headed this board as secretary general.

Mr. Achilles studied theology and sports at the universities of Göttingen and Tübingen (Germany). After having served as priest in different parishes he was seconded to Australia in 1982 where he headed the German speaking congregation in Melbourne until 1991. Returning home to Germany Mr. Achilles took over a senior position at the head office of the Evangelical Church in Hannover in Germany. Beside his main responsibilities for the Far East and Australia he also became the secretary general of the administrative board of the German Protestant Institute of Archaeology.

The administration of the institute has always been challenging. The often tem-



Mr. Achilles at Wadi Yarmuk with (from left to right) Ms. Shugair, Ms. Khubeis, Ms. Schmiedel.

pestuous events in the Middle East over the past 100 years – the institute was founded in Jerusalem in 1903 – have affected the institute in many ways. In 1997 the institute was on the verge of

being closed down. Despite the fact that the institute had been very active in numerous fields severe financial cuts by the Evangelical Church in Germany

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almost led to the closure of the institute. But the active support of many colleagues, friends, distinguished politicians and diplomats, as well as members of the Royal Family of Jordan, prevented the closure. Mr. Achilles was heavily involved in supporting these activities. His courage and commitment to the institute were vital for its survival. Today, the Evangelical Church in Germany still provides financial support and the German Foreign Office – as a “new partner” – adds a considerable sum, so that the institute is able to continue its important role, not only in the

field of Near Eastern Archaeology but also in fostering mutual understanding among the religions and cultures in that region.

During the past ten years, Mr. Achilles has become a true friend of the institute and a real “fighter” for its future. When he retires from his position as secretary general in October this year it is hoped that he will continue to actively support its activities. Mr. Achilles, however, has been far more than just a secretary general taking good care of the administration. He travelled frequently to the region and visited the institute and became

well aware of its needs. The directors of the institutes in Amman and Jerusalem knew, and know, that there is a “friend” in Hannover, open-minded on all matters and concerns. Now, as Mr. Achilles will soon take on a new position, I, as the former director of the institute in Amman, would like to say a very special “thank you” for his great support and courage which he demonstrated over the years. I am sure that I also speak on behalf of all friends – on both sides of the Jordan River. ■

Resafa (Syria)

By: Stephan Westphalen, Göttingen (Germany)

The excavations, which took place between 1997 and 1999, were dedicated to studying the urbanization of the Byzantine town. The Basilica D (Fig. 1) and a Pillar-monument, at which two main streets meet one another, were within the excavation area. Further, we have investigated street arches which are situated in two different places in the city. During the excavations, the historical street system began to appear in outline. Although still meager,

it reveals an urban formation of an ensemble of pilgrimage and processional streets. This type of formation is known at other pilgrimage sites, such as Abu Mena in Egypt or Qalat Siman in Syria. The streets in our ensemble are wide. They were provided with sidewalks paved with stone slabs. It is probable that they were flanked by porticoes. The width of the streets is 15 m. This dimension corresponds to Roman colonnaded streets, such as those of Petra or

Gerasa. The crossing points and ends of the main streets were embellished with single monuments such as arches or the pillar-monument. The layout of the streets is in accordance with the Greco-Roman tradition. These streets also served pilgrims to move from one church to the next throughout the city. Such processional streets had not existed before in Resafa although they were known at Qalat Siman, where such a street pointed in a straight line to the

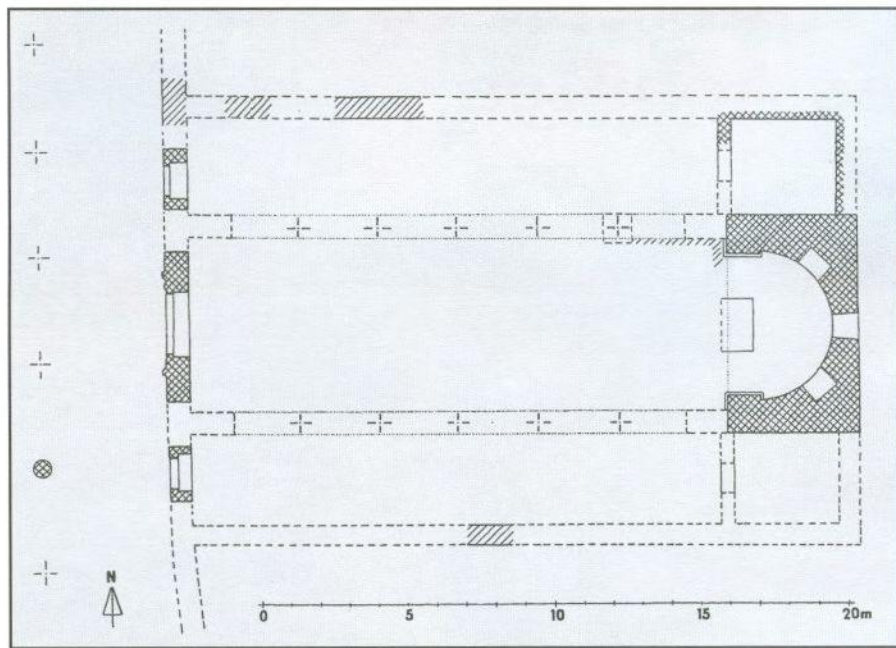


Fig. 1: Resafa, Basilica D. Reconstruction.

sanctuary. Instead, Resafa was characterized by an urban street system, of which only certain streets could also be used for processions. One can also include the richly decorated North Gate

of the city wall in this context. It could have been a gathering and starting place for processions. In the course of a procession, pilgrims were seeking different stations within the town area. A

possible route led, presumably, through a street arch which lies north of the Central-church, where an already published inscription propagated the victory of the Christian faith. The splendor of Resafa was above all directed to the pilgrims (among them Bedouins from both sides of the frontier), either to strengthen their believe or to encourage them to convert to Christianity. One passed through the arch and drew near a holy area, within which stood the Central-church where baptisms probably took place.

The available archaeological data so far permit us to assume that during the 6th century, Resafa developed according to a comprehensive plan, but we still are not in a position to reconstruct it. The excavation of Basilica D demonstrates how limited are the urban investigations of Byzantine Resafa. The area was occupied for more than 700 years, up to the Middle Ages. Only meager remains from Byzantine times have been preserved under more recent layers. Nevertheless, Basilica D is to be reconstructed as a small, three-aisled church (around 24 m long and

15 m wide) that included two side rooms next to the apse. We could not prove the existence of a vestibule in the west. The church probably was erected during the first half of the 6th century, nearly contemporary with the Central-church and Basilicas A, B, and C. Accordingly, it was part of the building program which characterized the city. The church demonstrates above all remarkable technical details of construction. The west facade together with the main portal and the apse were erected

of massive ashlars, whereas the side walls, judging from the meagre remains, were constructed of mudbricks. Only few remains of its architectural sculptures, such as chancel screens (Fig. 2) and a capital of a pillar, have survived.



Fig. 2: Resafa, Chancel screen from Basilica D, 6th century.

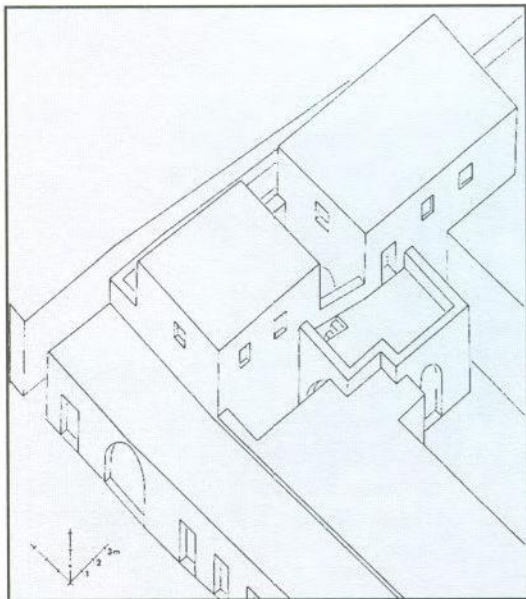


Fig. 3: Resafa, medieval house, built in Basilica D. Reconstruction.

There is evidence that the church was abandoned after it was damaged by an earthquake. Thereafter it appears to have been profaned and turned into a private house. An almost complete ground plan of its last phase in the 12/13th centuries exists (Fig. 3). The building occupies a surface of nearly 260 m². A row of shops extended in front of the western side. The house consisted of habitation and service tracts around a small courtyard. Two staircases prove the existence of an upper storey. The hearths, ovens, latrines and wells render an approximate

impression of daily life. It is evident that urban life in Resafa thrived up to the middle of the 13th century. At that time, the region was abandoned and the inhabitants moved farther west to escape approaching Mongols.

Finally, we uncovered remarkable earlier layers under the apse of Basilica D, which included a water-service and foundation of an older structure. Probably these can be dated to the 4th and 5th century. At that time, Resafa was developing from a frontier castle to a prosperous city as a result of increasing pilgrim traffic. ■

Digital terrain models examples of the wide field for archaeological purposes

By: Christian Schäfer and Marco Hofmann, Department of Geomatics at FH Karlsruhe, (Germany)

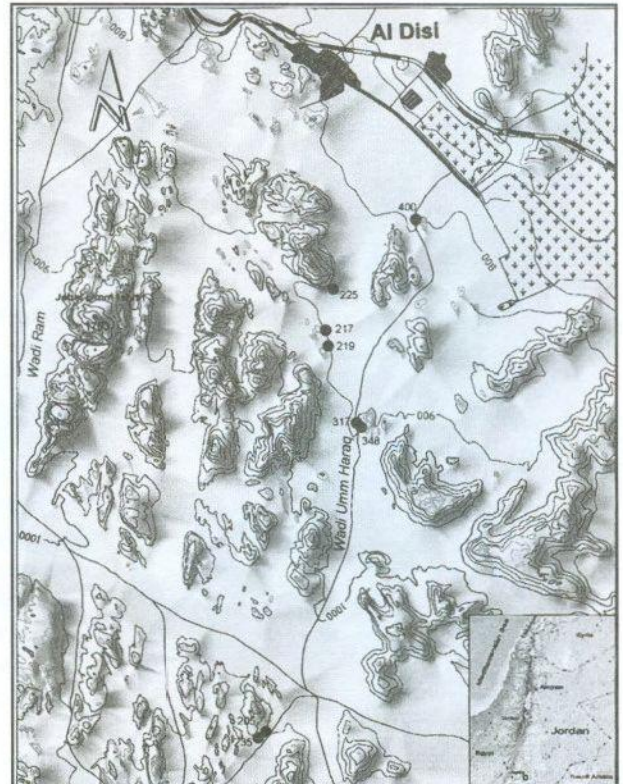
Archaeology and geodesy have always been connected to each other, e.g., in measuring on excavation sites or in large archaeological surveys. Especially in this case the exact positioning of finds places plays is important. Satellite-based measurement methods combined with conventional methods are useful to get complete and precise documentation and plot, even in rough areas. Additionally a variety of methods of computation are offered which facilitate qualitative and quantitative analyses. Virtual representation furthermore can make it possible to present archaeological circumstances to a wider public, and because of that serve to heighten interest, too.

In the framework of the ASEYM2000 project, the University of Applied Sciences shows the change in the field of activity of surveyors. This project is realized in cooperation of the Near East Section of the DAI and the Archaeology Department of the University of Jordan, Amman, as well as the Department of Geomatics at the University of

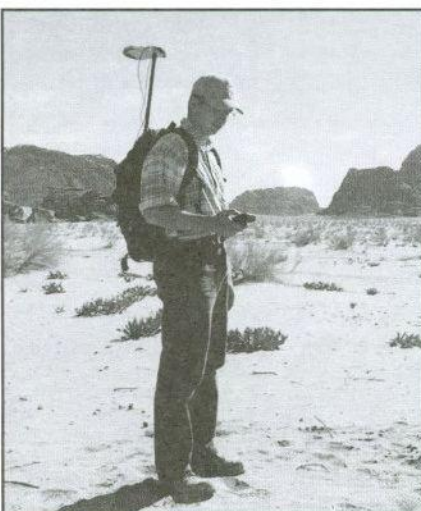
Applied Sciences, Karlsruhe. Within the diploma thesis of Marco Hofmann and Christian Schäfer modern geomatic technologies were used, but also conventional surveying.

Various topographic detail maps, based on terrestrial measurements, were linked up to a homogenous network by the use of satellite-based measurements with the Global Positioning System. Several special maps for archeological use and a virtual three-dimensional animation constituted the main focus of the continuous computer-based dissertations.

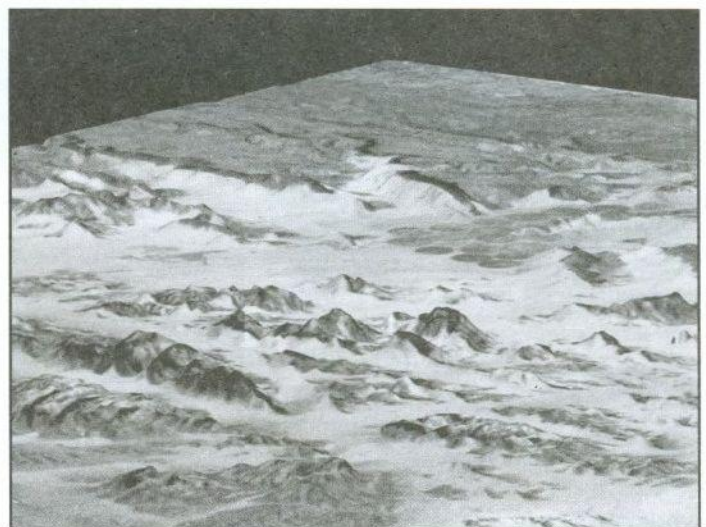
Those special maps were a digital shaded relief map and a satellite image map, both in a scale of 1:100,000. Their origin was a digital terrain model generated with animation software, 3D-Studio MAX, which is mostly used in the film industry and computer-game programming. Thus, the ter-



Detail of the shaded relief map.



Marco Hofmann collecting positions with OmniStar-GPS Equipment.



North-east corner of the model with Disi village.

rain model used for the digital shaded relief map was virtually illuminated with a defined angle and intensity, so that natural looking shadows and light were created. It is due to this shadow that an impression of this mountainous region looks like a relief.

The second special map uses a satellite image for creating an even more realistic impression. The technical data showed that at this point of time the images of LANDSAT 7 were the best choice. After the use of different methods of digital image processing, a faithful graphic representation of the desert region with a resolving power of 15 m was at last achieved.

Both the digital shaded relief map and the satellite image map served as background to the map generation, on which topographic features like contour lines, roads and settlement areas were portrayed. The archaeological classified finds places (tomb, rock-drawing, Neolithic site, ex-

cavation) were plotted into the digital shaded relief map and serve as an over-view map.



Aqaba, bird's eye view of the virtual three-dimensional digital terrain.

At the end of the diploma thesis a virtual three-dimensional animation based on the terrain model and the satellite data was drawn up. Impressive was the rendering time of several days at a high-end workstation, which is not

exceptional for high-quality animation. To make the representation as realistic as possible the satellite image was projected on the digital terrain model, allowing both laymen and experts to get an idea of this especially geologically interesting region and its archaeological treasures via a virtual fly-over.

The three-dimensional visualization can show spatial discoveries more clearly. Especially for archeology this creates the chance of virtual reconstruction, like some of the examples of our institute prove. On the other hand this offers the possibility of presentations of concrete results for the public, e.g., museums. And last but not least this can create more interest, accept-

ance and support among all participating groups of natives and foreigners. ■

Celebrating the Amman Institute Comments on its 25th Anniversary (*continuation*)

As a continuation of the congratulations published in Occident & Orient 1&2 2000, remaining congratulations on the 25th anniversary of the German Protestant Institute of Archaeology in Amman are published here.

"I still have fond memories of my visit, competently guided by Hans-Dieter Bienert, through the excavation sites in Umm Qais during my stay in Jordan in

November 1999. In the last twenty-five years, the German Protestant Institute of Archaeology in Amman has rendered an invaluable service in recovering and restoring treasures belonging to the world cultural heritage and in the field of archaeological research.

It thus forges important links between cultures, not least thanks to its commendable public relations work. The work carried out by the Institute at the historical sites is indispensable. The results of this work are deeply appreciated by the visitors, whose numbers are increasing every year.

I therefore hope that the Institute's activities can continue and will receive funding in the future."

— *Petra Bläss, Vice-President of the German Bundestag, Berlin (Germany)*

It is with great pleasure that I express, on behalf of the American Center of Oriental Research (ACOR) community, our congratulations to the German Protestant Institute of Archaeology on the occasion of its 25th anniversary. Since I became director of ACOR in 1991 and indeed long before, ACOR and GPI

have enjoyed a collaborative and fruitful relationship. Over the years, we have worked together on a common mission to preserve and promote the cultural heritage of Jordan. Our libraries have worked closely so as not to duplicate resources, and our administrators have assisted each other on countless occasions. Our respective students and scholars have continuously collaborated on their research in order to gain a better understanding of the history of Jordan through archaeology. Located only a short distance away, across a small wadi, GPI has been a great friend and asset to ACOR. We wish GPI continued success and look forward to another 25 years of fruitful cooperation.

— *Dr. Pierre Bikai, American Center of Oriental Research (ACOR), Amman (Jordan)*

À l'occasion de la célébration du vingt-cinquième anniversaire du «Deutsches Evangelisches Institut» à Amman je voudrais exprimer combien nous nous sommes tous réjouis de voir que les menaces qui pesaient, il y a peu de temps encore, sur cet Institut étaient écartées et qu'une solution avait été trouvée pour lui permettre de poursuivre sa mission. Le «Deutsches Evangelisches Institut» occupe une place de premier plan dans le réseau des Instituts européens du Proche-Orient, à la fois des centres d'accueil et de recherche, qui sont entrés dans une collaboration de plus en plus étroite au cours des dernières années. Ils ont exprimé leur solidarité car ils savent que ce n'est qu'en associant leurs bibliothèques et leurs documentations qu'ils peuvent mettre à la disposition des archéologues jordaniens et de leurs hôtes des instruments de travail efficaces et constituer les espaces de dialogue et d'échanges qui font progresser la recherche.

— *Prof. Dr. Jean-Marie Dentzer, Université de Paris 1, Paris (France)*

Mit Freude sehe ich auf die 25 Jahre des Bestehens zurück. Das Deutsche Evangelische Institut für Altertumswissenschaft des Heiligen Landes in Amman durfte ich seit 20 Jahren intensiv begleiten. Zunächst als

Stipendiat des Lehrkurses unter der Leitung von Frau Dr. Wagner-Lux, später im Verwaltungsrat. 1981 bot das Institut den DDR-Teilnehmern die einzigartige Möglichkeit, das Gebiet um den Jordan und dann auch Syrien kennenzulernen. Ein Besuch in Israel war uns verwehrt. So standen wir Alt-, Neutestamentler und Kirchengeschichtler denn wie einst Mose auf dem Nebo und blickten sehnsüchtigen Westen. Allerdings erfuhren wir auch, daß die DDR-Währung eine der stabilsten der Welt zu sein schien. Bei einem Einbruch in das Institutsgebäude war sämtliches konvertierbares Geld verschwunden, die nicht konvertierbare DDR-Scheine lagen fein säuberlich auf dem Tisch ausgebreitet. Es waren eben Könner am Werk gewesen.

Unter den Institutsdirektoren Frau Dr. Susanne Kerner und Herrn Dr. Dieter Bienert hatte ich nach den politischen Veränderungen in Deutschland mehrfach Gelegenheit, das Institutslieben kennenzulernen. Hier gingen Studenten, Aspiranten, Professoren und Politiker ein und aus, hier traf man sich zu intensivem Fachgespräch, hier hat inzwischen auch die Deutsche Evangelische Gemeinde ihren Treffpunkt. Das Institut strahlt ein internationales Flair aus, ist fest in dem wissenschaftlichen und gesellschaftlichen Kontext des Landes und anderer Institute integriert.

Möge diese Stätte des lebendigen wissenschaftlichen und geistlichen Austausches noch lange bestehen bleiben – über alle auch finanziellen und politischen Klippen hinweg. Den Mitarbeitern und jeweiligen Leitern gebührt mein aufrichtiger Dank.

— *Dr. Ulrich Schröter, Berlin (Germany)*

Während meiner Stipendienreise habe ich Mitte April 1998 das Deutsche Evangelische Institut in Amman kennengelernt. Ich bin damals nach einer ausgedehnten Fahrt von Aqaba nach Amman recht ausgelaugt am Institut eingetroffen. Mein erster Eindruck: Welche Ruhe und welcher kleine paradiesische Garten! Seitdem habe ich dieses Gefühl jedesmal, wenn ich das Institut betrete. Doch beschränkt

sich die Rolle des Institutes wahrlich nicht darauf, den Archäologen und Reisenden Ruhe und Unterkunft zu bieten. Vielmehr bin ich dankbar, eine nützliche Bibliothek vor Ort zu haben, die weitere Vorbereitungen und Forschungen ermöglicht. Und last but not least waren die wissenschaftlichen und technischen Mitarbeiter des Hauses stets mit Rat und Tat behilflich und auch manchmal für einen Plausch zwischendurch zu haben. Als Archäologe mit Forschungsinteressen in Jordanien kann man sich nur eines wünschen: Daß das Institut auch zukünftig seine Arbeit wahrnehmen kann und seine Einrichtungen den im Land Forschenden zur Verfügung stehen!

— *Dr. Christoph Eger, Deutsches Archäologisches Institut, Madrid (Spain)*

Living for years as a freelance archaeologist and restorer in a country like Jordan is not easy. Not being affiliated to a university team or a well established institute often raises problems in getting all the basic scientific support needed for your daily work. In such a case you have to be able to depend on well functioning personal networks in order to organise your own activities. For me the GPAI is one of the most important stopovers in my professional network. Its library is well equipped and a comfortable working place, its staff is very kind and helpful, and its director is a reliable friend and always a well informed partner for discussions, devoted to the subject of Jordanian archaeology. And last but not least, the garden of the Institute is one of the most appreciated party and reception sites of Amman.

— *Ueli Bellwald, Amman (Jordan)*

Lange bevor ich daran denken konnte, den Orient zu bereisen, wurde meine Vorstellung der Region von Bildern geprägt, von Bildern, die in der ersten Dekade des 20. Jahrhunderts entstanden waren. Während meines Theologiestudiums an der Ernst-Moritz-Arndt-Universität Greifswald arbeitete

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ich als wissenschaftliche Hilfskraft im Fachbereich Altes Testament. Zu meinen ersten Aufgaben gehörte die Sichtung und Katalogisierung der Diapositive und Fotos, die sich im Bestand des Gustaf-Dalman-Institutes für Biblische Landes- und Altertumskunde befanden. Sie waren auf den ersten Lehrkursen des DEIAHL unter der Leitung von Gustaf-Dalman in Palästina entstanden und faszinierten mich ungemein angesichts ihres historischen Wertes und ihrer hohen Qualität. Solange ich mit diesen Bildern beschäftigt war, ob beim Ordnen oder später bei der Präsentation, haben sie nichts von dieser Faszination eingebüßt. Der Wunsch, die Fotomotive mit den originalen Schauplätzen zu vergleichen, tauchte folgerichtig bald auf, war aber erst sehr viel später realisierbar. Meine Teilnahme am Lehrkurs 1989 in Syrien und Jordanien erfüllte nicht nur Wünsche im Hinblick auf meine Forschungen zum Wirken Gustaf Dalmans in Palästina. Unter der fachkundigen Leitung von Susanne Kerner und Thomas Weber erhielten wir fundierte Einblicke in die Archäologie, Geschichte und Kultur des Alten Orients. Die tiefsten Eindrücke

hinterließen jedoch die Begegnungen mit den Menschen in diesen überaus gastfreundlichen Ländern. Die vielfältigen Zeugnisse menschlicher Leistungen aus vergangenen Kulturepochen beeindruckten mich durchaus; daneben bilden die Erfahrungen herzlicher Gastfreundschaft einen ganz wichtigen Bestandteil der Erinnerung an den ersten Lehrkurs und weitere Besuche in Jordanien. Daraus sind z.T. Freundschaften entstanden, die schon über Jahre hin Bestand haben. Stellvertretend für andere sei an dieser Stelle Abu Hassan erwähnt, der schon Generationen von Lehrkursteilnehmern zuverlässig auf den Exkursionen begleitet hat. Im Rückblick auf die Wochen den Spätsommers 1989 trifft die Feststellung in vollem Umfang zu; sie haben prägenden Einfluss auf meine berufliche und persönliche Entwicklung gehabt. Deshalb verbindet sich für mich mit der Dankbarkeit für entscheidendes Erleben auf dem Lehrkurs des DEIAHL mit dem Wunsch, dass diese glückliche Symbiose zwischen alter und moderner Kultur in biblischen Ländern für Interessierte noch lange erlebbar bleibt.

— *Dr. Wernfried Rieckmann, Theologische Hochschule Friedensau, Friedensau (Germany)*

The first thought which strikes my mind when thinking of the German Institute of Archaeology is that of dust, sweat and exhaustion which characterized the beginnings and the history of the 25-year-old institute.

The second thought is that of a success story of achievements, new discoveries, new interpretations and rearrangements of pieces in the mosaic of Jordan's past.

Researchers from inside and outside Jordan will hopefully continue to find in that institute a treasure for their research, education and experience.

Education and propagation of archaeological methodologies, dedication and culture were the values and investments of the Institute, for present and future generations of scientists and students. Safeguarding and protecting them are of utmost importance for our human heritage. Ups and downs, tolerated and contained by love of the work done also characterized the story of archaeology in Jordan and of the German Institute, but progress, success and achievements accumulated nevertheless.

— *Prof. Dr. Elias Salameh, University of Jordan, Amman (Jordan)* ■

The Jordan Valley Village Project: Recent Excavations at Early Bronze IV Tell Abu en-Ni'aj

By: Steven E. Falconer, Department of Anthropology, Arizona State University (USA), Patricia L. Fall, Department of Geography, Arizona State University (USA) and Jennifer E. Jones, Department of Anthropology, Arizona State University (USA)

The goal of the Jordan Valley Village Project is to investigate changes in village economy in the Early and Middle Bronze Ages of the southern Levant (Falconer 1987; Falconer and Magness-Gardiner 1989; Fall, Lines, Falconer 1998; Magness-Gardiner and Falconer

1994). Tremendous social changes characterized these periods, with the development, abandonment and subsequent reoccupation of the region's first cities. Tell Abu en-Ni'aj is a single period agricultural village site dating to Early Bronze IV (EB IV), a period of re-

gion-wide urban abandonment (ca. 2300-2000 B.C). Deep stratified deposits (totaling 3.3 m) and a few Early Bronze III sherds found in the lowest levels indicate that Tell Abu en-Ni'aj is one of the very few Early Bronze IV sites occupied through most or all of the

period. This long occupation provides us a rare opportunity to study diachronic changes in village organization, animal and plant use, and craft production and distribution during this period of social and political upheaval (Jones 1999; Fall, Lines, and Falconer 1998).

Tell Abu en-Ni'aj is located southwest of the modern town of Mashare in the northern Jordan Valley, approximately 250 m below sea level and 500 m east of the Jordan River. The site measures approximately 2.5 hectares, and sits atop a low hill of Pleistocene lacustrine sediments deposited by ancient Lake Lisan. Fertile agricultural land was available nearby, since the site sits on the western edge of the ghor, overlooking the zor (the Jordan River floodplain).

The East Jordan Valley Survey discovered Tell Abu en-Ni'aj in 1975 and recognized it was a rare example of an Early Bronze IV village (Ibrahim, Sauer, and Yassine 1976). The site lay untouched until October 1985, when Steven Falconer and Bonnie Magness-Gardiner directed two weeks of test excavations during a break in the final field season at Tell el-Hayyat. This work was a collaboration between the University of Arizona, the Department of Antiquities of Jordan (Director-General Dr. Adnan Hadidi), and the American Center of Oriental Research (Director Dr. David McCreery). The U.S. National Endowment for the Humanities and the National Geographic Society provided funding for the 1985 season.

The Jordan Valley Village Project resumed excavation at Tell Abu en-Ni'aj in a five-week season during December 1996 and January 1997, and continued with a ten-week season between January and March 2000. The U.S. National Science Foundation, National Geographic, and the Wenner-Gren Foundation for Anthropological Research funded this work, which is directed by Dr. Falconer, Dr. Patricia Fall, and Dr. Jennifer Jones. Our work represents a collaboration between Arizona State University, the Department of Antiquities of Jordan (past Director-General Dr. Ghazi Bisheh and present Director-General Dr. Fawwaz Khaysheh) and the American Center of Oriental Research (Director Dr. Pierre Bikai). Our success



Fig. 1: Arizona State University student Michele White examines Early Bronze IV architecture at Tell Abu en-Ni'aj.

owes much to the assistance of undergraduate and graduate students from Arizona State University (Tempe, Arizona, USA), and LaTrobe University (Melbourne, Australia), and Jordanian archaeologists Dr. Maysoon al-Nahar, Mr. Nazi Fino, Ms. Lena Arabiyat, Mr. Nasser Hindawi, and Ms. Alia Faza. Our Department of Antiquities representatives were Mr. Ibrahim Zubi, Mr. Muhammad Abu Abileh, Mr. Yoosha al-A'mri and Mr. Nidal Hindawi.

The 1985 excavations showed that Ibrahim, Sauer, and Yassine were correct in emphasizing the importance of Tell Abu en-Ni'aj. Ten 4 x 4-meter units produced abundant material culture, floral and faunal remains, and mudbrick and rammed earth architecture consistent with a sedentary Early Bronze IV farming village. Soundings in two units reached archaeologically sterile sediments and revealed at least three major EB IV strata.

The 1996/97 season demonstrated that Tell Abu en-Ni'aj contained stratified deposits spanning most or all of Early Bronze IV (Falconer, Fall, and Jones 1998). Evidence from the basal level suggests that Tell Abu en-Ni'aj was founded about 2300 B.C., then rebuilt in a series of six successive strata lasting until approximately 2000 B.C. (Phase 7 is the earliest and Phase 1 the

latest). Sixteen contiguous 4 x 4-meter units revealed a series of domestic structures located west of an open area with hearths, pits, and storage bins, the intersection of two sherd-paved streets, and a large mudbrick installation possibly used for pressing olives or grapes.

Non-cultural sediments were reached in thirteen of the fourteen 4 x 4-meter units excavated in 2000, including five started during the 1996/97 season. In the fall of 1999 bulldozing for industrial development on and around Tell Abu en-Ni'aj cleared a 26-meter-long stratigraphic cross-section on the western side of the tell. In a stunning discovery, an earthquake slip fault was revealed in a series of offset ash and burned soil layers near a rock-lined thermal feature. These offset sediments were capped by Early Bronze IV deposits, indicating the earthquake occurred during the occupation of Tell Abu en-Ni'aj.

A group of three articulated sheep burials allude to Early Bronze IV ritual behavior. Each animal was buried in a one-meter-deep pit on its right side with its head pointing east. The top of each pit was marked with several 20-50-centimeter stones that would have been obvious markers. Early Bronze IV ritual contexts at other sites include caprine remains. For example, Early

Bronze IV burials at Jericho and Jebel Qa'aqir include sheep/goat bones interred with the human skeletons (Dever 1995). At Early Bronze IV Bab edh' Dhra, at least a dozen sheep horns were found scattered on a surface associated with two elevated stone platforms (Schaub and Rast 1984). Unlike the evidence from other sites, however, the Tell Abu en-Ni'aj burials feature a shared anatomical orientation and burial markers.

The 2000 field season also revealed diachronic changes in the architectural plan of the village and in the ceramic paste used by village potters (Fig. 1 and 2). Mudbrick architecture grew denser and rooms more crowded through time. The architectural layout shifted in about Phase 4, to a denser architectural plan whose walls ran in different directions than previously. Despite these architectural changes, Tell Abu en-Ni'aj appears to have been occupied continuously from the time it was founded. Accompanying, or predating the architectural changes, potters at Tell Abu en-Ni'aj stopped using large calcite temper, in favor of smaller basalt and limestone inclusions commonly known as "salt and pepper" temper. These changes hint at the vitality and growing population of this village despite the collapse of regional urbanism.

Today, Tell Abu en-Ni'aj lies within a large area being developed by the Jordan Gateway Project, a major international industrial development that will include facilities on both sides of the Jordan River. The active participation of the Department of Antiquities of Jordan has limited the effects of this construction on the site and will protect the remaining portion of the tell from further impact. This intervention will allow future research to recover new evidence and improve our understanding of life in the Jordan Valley during this crucial period in the history of the earliest civilization of Jordan. More importantly, the conservation of Tell Abu en-Ni'aj illustrates how cooperative efforts can preserve Jordan's ancient heritage while simultaneously developing jobs for its modern citizens.

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Fig. 2: Undergraduate archaeology student Ruth Tucker examines Early Bronze IV architecture at Tell Abu en-Ni'aj.

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The Biblical Archaeological Institute of Wuppertal

By: Dieter Vieweger, Biblical Archaeological Institute of Wuppertal (Germany)

The Biblical Archaeological Institute of Wuppertal (BAI) seeks to promote research in areas of biblical archaeology, promotes interaction among scientific institutions at home and abroad, and serves to educate, provide advanced training, and spread scientific knowledge in the field of archaeology. The Director of the Institute is Prof. Dr. Dr. Dieter Vieweger (Chair of Old Testament and Biblical Archaeology).

Research specialties:

1. Excavations in the Near East, with subsequent publications;
2. Application of geophysical methods in Near Eastern archaeology and the development of suitable equipment;
3. Experimental archaeology: research into prehistorical production of ceramics, including firing techniques.



Fig. 1: Excavation of Ba'ja I.



Fig. 2: Kiln during firing.

Excavations and geophysical research (Fig. 1)

We have frequently reported on our Jordanian excavations in *Occident & Orient* and *ADAJ*. In recent years we have investigated esh-Shallaf and Ba'ja I (Fig. 1), III and V (*Archaeology of a Countryside*) – both in cooperation with the German Protestant Institute in Amman and its former director Dr. Hans-Dieter Bienert – and Sal (near Irbid), in conjunction with the Institute for Anthropology and Archaeology of the University of Irbid (Prof. Dr. Zeidan Kafafi). Geophysical investigations, first attempted with excellent results during excavations of Chalcolithic and Early Bronze Age Sal, will be continued and expanded during campaigns at Tell Zera'a in Wadi el-'Arab, planned for autumn 2001.

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Ancient Pottery Production. A History of Technology Project of the Biblical Archaeological Institute (Fig. 2)

The Biblical Archaeological Institute of Wuppertal is researching lifestyles of ancient cultures. Work with historical technologies, especially those related to the production of pottery in the eastern Mediterranean region, has developed into an extraordinary project.

First, we focus on questions arising from the natural sciences: what raw materials were utilized, what was the composition of clay found locally, what additives were mixed in (meager), what firing temperatures were necessary, and what chemical processes occurred in the kiln? Beyond these factual issues lies the question, "Why?" That is, what goal did an ancient potter pursue by applying particular methods and steps in the work process? When experimenting with

techniques, questions range from the way the clay is dug to its processing (e.g., washing, mixing, working the clay) up to studying the hand working techniques and the artistic decorating. The working of surfaces (e.g., polishing), the painting and decorating (including creating the tinting agents), and the constructing of a kiln will be



Fig. 3: Pottery-replicates

pursued during experiments at BAI, according to ancient prototypes as much as possible.

Along with pottery kilns and work stations found at excavations, ethnological studies as well as written discoveries

and drawings from comparable cultures provide models. Potter Hanna Brückelmann contracts with the Biblical Archaeological Institute of Wuppertal to do experimental research on Cypriot pottery-making during the Bronze Age. Besides having decades of experience as a free-lance potter, she also brings to her present work experience

with the production and replication of pottery from the lower Rhein region (under contract with the Rheinland Monuments Department). Results to date were presented at the Summer Academy of the German People's Study Foundation which met in September 2000 in St. Johann, Southern Tyrolia (Fig. 3). Mrs. Brückelmann and Prof. Dr. Dr. Dieter

Vieweger led a study group there which presented and elaborated on Bronze Age pottery production in ancient Cyprus in the larger context of Cypriot history and culture. ■

The Finnish Jabal Haroun Project 2000

By **J. Frösén, University of Helsinki (Finland)** and **Z.T. Flema**

The Finnish Jabal Haroun Project (FJHP) carried out its third fieldwork season between August 4 and September 21, 2000. The project is directed by Prof. Jaakko Frösén, University of Helsinki, and sponsored by the University of Helsinki and the Academy of Finland. The Project's personnel included almost 30 archaeologists, cartographers, conservators and students from Finland, Sweden, Italy, Jordan and the USA. The

excavation site is a large, ruined architectural complex located on a high plateau below the summit of the Mountain of Aaron (Jabal Harûn) near Petra in southern Jordan. According to Jewish, Christian and Islamic traditions, the mountain is believed to be the burial place of Aaron, Moses' brother. The 2000 excavations continued to expose the mono-apsidal, basilica church, the chapel, and other structures, all being



Fig.1: The cruciform baptismal font.



Fig.2: The courtyard west of the church and the area of the cistern. A possible Nabataean/Roman period platform for an unknown structure is on the left.

the components of a Byzantine (5th-7th century A.D.) monastic/pilgrimage center dedicated to St. Aaron. Simultaneously, the project's survey team continued its field investigations in the environs of Jabal Harûn.

The excavations exposed the western-central area of the church – originally a part of the nave in the early phase – which became an open paved court in the subsequent phase. The southern half of the church's apse and

the entire room flanking the apse on its southern side (=south pastophorion) were also excavated. The apse revealed two well-preserved rows of the synthronon installation but the marble floor of the apse's interior was poorly preserved. Inside the pastophorion, a large, stone-built tomb-like installation was found. Its interior has yielded only some fish bones. The storage function of this installation seems plausible, at least during its later use.



Fig.3: The exposition and clearance of the mosaic floor in the narthex of the church.

The excavations in the western area of the chapel exposed the well-preserved interior of the structure, including benches and pilasters for arch springers. Substantial stone tumble inside the structure contained numerous fragments of painted wall plaster with geometric and floral designs, but some Greek letters and words were also noted. The sounding against the western bench revealed well preserved remains of a masonry-constructed baptismal font of a cruciform type (Fig. 1), which probably belongs to the earliest phase of occupation there. The font was abandoned and backfilled, probably following the first destruction of the church and the chapel. The font resembles that discovered in the Petra church in 1996, and is the second baptismal installation known from southern Jordan.

The excavations on the western side of the complex exposed well-preserved remains of a monumental structure forming a large, solid podium or high base for an unknown superstructure (Fig. 2). The masonry type and construction material of this structure are not paralleled by any other at the site. This structure, probably Nabataean/Roman in date, was seemingly a component of either a larger tower or a sacral building, but its function during the Byzantine phase of occupation at the site remains elusive. Farther east, a series of flagstone pavements were exposed as well as the remains of an arch. A large, multi-roomed structure located nearby features a series of modifications and rebuilding, including the installation of an arch in the doorway, construction of storage installations, wall-supporting buttresses and three water channels.

An intensive archaeological survey was conducted in the area south-west of Jabal Harûn, and on the northern and north-eastern sides of the mountain, a total of ca 1 square km. Thirty major sites were recorded in the south-western area, including more than 200 bargages and terrace walls (in clusters of several structures per site). These water management installations differ with regard to their location and function (slowing down runoff water or supporting fertile surface soil in small terrace

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fields). Six Middle and Late Palaeolithic sites, including quarries, ridge sites and microlithic sites, were recorded. Also, remains of an ancient road from Wadi 'Araba through Abu Khusheiba to Petra were documented together with several small building sites alongside the road. On the northern and north-eastern side of Jabal Harûn, six sites were recorded, including a dwelling site which dates from the Nabataean through the Islamic periods.

The project's cartographers continued activities to produce a three-dimensional computerised model of the entire Jabal Harûn mountain and its environs, including the gathering of topographical and locational information, digital photography and photogrammetry, and actual computer-generated modelling consolidation and repair of

walls, wall plaster, marble pavements and stone installations at the excavation site.

Further studies and conservation tests were conducted on the mosaic floor discovered during the 1999 campaign and located in the church's narthex (Fig. 3). Originally, the mosaic featured an almost symmetrical arrangement of zoo- and anthropomorphic designs on both sides of the central door to the basilica, a colourful border band of three intertwined bundles or chevrons, and some separate intricate geometric designs. Except for the entire chevron pattern, geometric designs, and the occasional fragments of human or animal bodies, the designs are not preserved since the mosaic was heavily altered by iconoclastic activities. The iconoclasts had removed not only almost all faces but also main parts of human and animal bodies, and replaced them with plain

large-size tesserae. However, while the replacement was generally well done, the removal was often careless, thus the preserved details allow for an overall reconstruction. This kind of deliberate yet careful damage is generally dated to the 8th century (late Umayyad-early Abbasid period), and is known from other churches in Jordan and Palestine.

The FJHP 2000 fieldwork season provided a substantial amount of information concerning the site and its environs. The general phasing scheme, i.e. three major occupational phases of the basilica, as developed after the 1999 campaign, has been largely confirmed by the 2000 season's results. Also, it is increasingly apparent that the time-span of occupation at the monastic/pilgrimage site may be extended into the early 8th century, and probably later. The next fieldwork season of FJHP is scheduled for late summer 2001. ■

Early Neolithic Göbekli Tepe. A Turkish-German Project in Upper Mesopotamia

By: Klaus Schmidt, German Archaeological Institute, Orient Section Berlin (Germany)

The mound of Göbekli Tepe, on top of a high limestone ridge north-east of the town of Sanliurfa in Upper Mesopotamia, was mentioned first by Peter Benedict in his article about "Survey Work in Southeastern Anatolia" (Benedict 1980), which was included in the monograph resulting from the Joint Istanbul-Chicago Universities' Prehistoric Research in Southeastern Anatolia work from 1963–1972 (Çambel and Braidwood 1980). But Benedict did not recognize the true nature of the site; he did not expect a pre-pottery mound of such a size like Göbekli Tepe, and not in such a position in the landscape.

Time was not ready to understand the real importance of this site. Göbekli Tepe

fell into oblivion, and it seems quite clear that no archaeologist reached the site until the author's first visit in 1994 (Fig. 1; compare the quotation in Hours et al. 1994, 144). With the knowledge of Çayönü and Nevali Çori, it was easy to recognize in the large limestone slabs smashed fragments of megalithic PPN architecture.

It is clear that Göbekli Tepe was not an early Neolithic settlement with some ritual buildings, but a place with a mainly ritual function. It was a mountain sanctuary (Schmidt 1995). It overlooks the springs of the Balikh in the east, the Harran plain in the south and the hills around Urfa in the west and in the north. Coming from Mardin, Göbekli Tepe is

a dominating landmark for a distance of more than 20 km.

Until 2000 six campaigns of excavations were conducted by the Museum of Sanliurfa and the German Archaeological Institute in Istanbul (Beile-Bohn et al. 1998; Hauptmann – Schmidt 2000; Schmidt 1997; 1998; 1999; 2000; 2001). The excavations had been located at the south-eastern peak, at the south-eastern and the southern slopes, and at several areas on the limestone plateaus around the mound.

The architectural remains of the younger layers (EPPNB/MPPNB) are restricted to stone walls and rooms, all with terrazzo floors and some strange

installations, e.g., large stone rings or T-shaped pillars, but without fireplaces, ovens, or other usual traces of "domestic life". It is the same with the so called "Löwenpfeilergebäude" (Schmidt 1998, 30ff., Fig.8–10). Two of its four pillars have reliefs of lions. In spite of its denomination "building" it seems most probable that it is not a complete building but a cellar-like structure sunk in the mound. The excavated areas, ten trenches 9 by 9 m, are too small to find some clearly identifiable limitations of the buildings exposed.

But despite the size of the buildings of the younger layers, they seem to be miniatures of the structures exposed in the lower layers (PPNA/EPPNB), found at the southern slope (Fig. 2). As the average height of the 13 pillars found so far in the younger layers is only 1.5 m, the 16 *in situ* exposed pillars of the lower layers seem to be more than 3 m high (most of them are not excavated completely). They belong to three round or oval enclosures with a pair of pillars in the centre

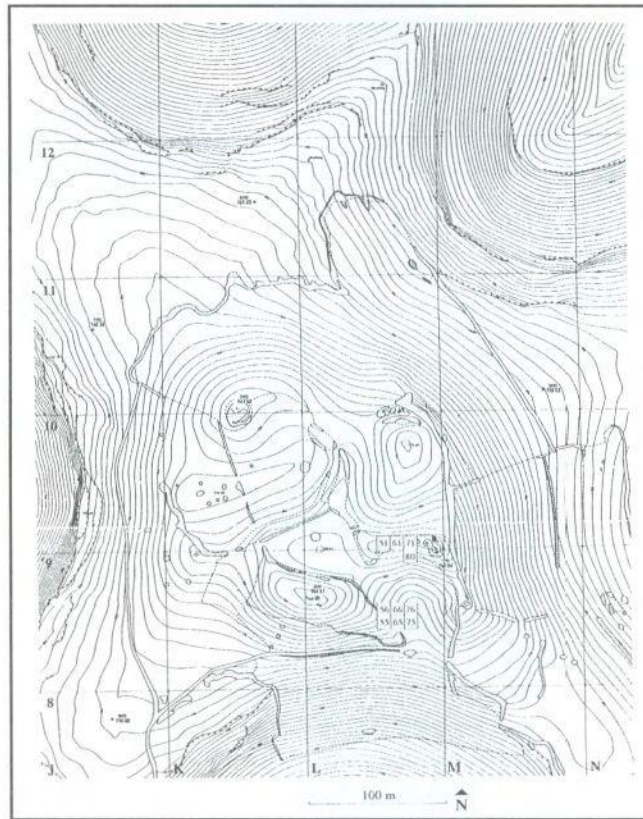


Fig. 1. Göbekli Tepe from the north.

(enclosure A, B and C). Some of the pillars are decorated with reliefs, e.g., snakes, foxes, reptiles, a bull, a boar and a crane (Fig. 3). The floor was reached in a small section between the pillars.



Fig. 2: Göbekli Tepe, the excavations on the southern slope, with enclosures B and C with megalithic limestone pillars.

In front of pillar 9 a stone slab with an oval cavity, connected with a shallow channel, was found *in situ* inserted into the terrazzo floor (Fig. 4). A megalithic limestone slab with a rectangular opening in the center, surrounded by a broad collar, was found in the filling of enclosure B.

The lithics are based on naviform core technology and tools made from blades. Byblos, Helwan and Nemrik points are common. The analysis of the animal bones reported a rich fauna of wild species, such as wild cattle, wild ass, gazelle and wild pig (von den Driesch–Peters 1999; Peters et al. 2000). But no domesticated species have been found, as with the botanical remains from the lower layers (Neef *in prep.*; there are no botanical samples from the younger layers until now). Only wild species, such as almond and pistachio, have been found so far – and wild grain.

The construction of the megalithic buildings of the lower layers was accomplished by a hunter-gatherer society. It seems obvious that only organized meetings of several groups of hunter-gatherers from territories around Göbekli Tepe would be able to provide the capabilities for such a purpose, meetings that were rooted in a ritual background. So the hypothesis emerges that these meetings are the starting point of incipient cultivation, as hunter-gatherers living at Göbekli Tepe for an extended time would have caused a serious over-exploitation of the local natural resources. The grassy slopes, which had been reported by Benedict, are still large areas where wild cereals occur. Karacadag, a volcanic mountain favoured as the homeland of cultivated grains by genetical analysis (Heun et al. 1998), can be seen on the horizon looking to the north-east from Göbekli Tepe. Göbekli Tepe quite pro-

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bably will be a key-site in understanding the process of the development of hunter-gatherers into farmers.

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Fig. 3. Göbekli Tepe, enclosure B, pillar 9, limestone, relief of a fox.

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Fig. 4. Göbekli Tepe, enclosure B, stone slab with oval cavity, connected with a shallow channel, *in situ*

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Al-Bassah Cave near Iraq al-Amir

By: Mohammed Waheeb, Director of the Baptism Site Project, Amman (Jordan)

Iraq al-Amir is situated on the western side of Wadi al-Sir, about 17 km west of Amman. This area includes a Hellenistic monumental building (Qasr al-Abd). Field surveys of the area during the last ten years revealed the presence of natural and man-made caves located on steep cliffs.

Among these caves is al-Bassah Cave, which is located near al-Bassah village near the modern paved road

which links al-Bassah with Iraq al-Amir. The cave was dug in the natural limestone rock, and the surrounding area was used as a cemetery during the Roman-Byzantine periods. Several rock-cut tombs were noticed on the western side of the cave, mostly robbed in antiquity; the area is now used as a cemetery by local people.

The cave was investigated during 1974 by a team from the Department

of Antiquities. The excavations inside the cave revealed remains of a church with colored mosaic floors dated to the Sixth Century A.D. The second phase of occupation inside the cave dated back to the Umayyad and Mamluke periods (Islamic era). In 1994 the author conducted a salvage excavation in front of the cave, which revealed the

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presence of an Early Bronze Age cemetery. The limits of the cemetery are still unknown and only four tombs were excavated, all of them partly disturbed by bulldozing and ancient silting of the rock-cut chambers. A limited survey was conducted in the area of the cemetery. It revealed rock-cut classical tombs, cisterns and wells, wine presses, rock-cut features such as quarries and channels, and Early Bronze, Roman and Byzantine pottery fragments.

In 1996 more excavations were conducted in front of the cave, revealing

the presence of a church with well-cut limestone ashlar and a white mosaic floor pavement in the central aisles. The discovered material and the inscription in the area of the apse dated the church to the late Byzantine period (Sixth Century A.D.).

The discoveries of two churches, one inside the cave and the second outside it, indicate that the cave was very important during the Byzantine period. Previous archaeological investigations and surveys were primarily concerned with sites in the immediate vi-

cinity of Iraq al-Amir, ignoring the region of al-Bassah and the Byzantine settlement in this area. Most of the Byzantine sites were apparently reused during the Islamic periods.

The al-Bassah cave deserves restoration and preservation and some degree of aesthetically and archaeologically appropriate development, so that it becomes again, like Qasr al-Abd, a focal point for the whole area of Iraq al-Amir. ■

Conference: Fifth Millennium of the Invention of Writing in Mesopotamia

Hotel Al-Mansur, Baghdad, 20 - 26.3.2001

By Joachim Marzahn, Vorderasiatisches Museum Berlin (Germany)

Soon after the turn of the millennium of modern times, which occurred in 2001, the Ministry of Culture of the Republic of Iraq invited scholars from around the world to an international conference on the invention of writing in Mesopotamia. Numerous scholars from many countries came to Baghdad to spend three days together with Iraqi colleagues viewing and assessing the newest results in the field of research on writing. The cuneiform writing system was of primary interest but also different and much younger writing systems were included in the lectures. The participants in the meeting had the opportunity to get an overview of almost all writing systems in the history of the geographic region of the Near East. A summary volume of collected papers will be published on the "classic" cuneiform and also the younger letter systems up to the use of Arabic script.

The investigations about the genesis and development of writing as a revo-

lution in communication dominated the lectures. Also considered were the dating of the time of genesis (recently proved by C 14 dating about or before 3200 B.C.) as well as the social, ideological and natural environments and single cultural characteristics (i.e., directions of reading and writing). Other broad themes included writing as a visualization of thinking in certain forms, the wide-spread cuneiform variants of the script, their mutual influences, palaeographic lines of tradition, and the effects of different cultural regions in the Near East. Special research on certain monuments, on forms and formulas and genres of literature, and considerations of document keeping and questions of education and school systems completed the main subjects of the conference. Other contributions dealt with scriptural peculiarities, for instance so-called astroglyphs on Assyrian monuments, or animals in writing, and the most recent developments in computerization in Assyriology.

The focus on writing was balanced by reports of archaeological investigations, excavations, geographical patterns of settlement, single monuments, and questions of cultural history.

The hosts of the conference offered a rich cultural program (for instance, receptions by the minister and a marvelous evening in the theater seeing the epic of Gilgamesh) and two extraordinary excursions to the main places of archaeological interest in Iraq, like Uruk, Assur, Nimrud, Ninive and Hatra, as well as the offer to go to Babylon, Kerbela and Najaf.

This very successful meeting on the banks of the Tigris contributed once more to better understanding among scholars, and to a good relationship with Iraqis today, showing that their rich cultural heritage is well protected and that the ongoing embargo is anachronistic and should come to an end. ■

Tell Khanasiri Cave Sounding

By: Bernd Müller-Neuhof, German Protestant Institute of Archaeology in Amman (Jordan)

In May 2000, as part of the "Prehistorical Palaeoenvironment and Archaeology of the Khanasiri Region" project, a sounding was made in the entrance of a small cave (cave No. 5), discovered during the 1999 survey (see K. Bartl et al. in *Occident & Orient* 4, 1&2, 1999, 23ff.) The cave, situated on the southern slope below Tell Khanasiri, is distinguished by a relatively large entrance. The interior floor of the cave is covered with thick layers of ash, probably of recent date, so that the present height of the cave's interior reaches about 1,20 m. During the 1999 survey many Middle and Upper Palaeolithic artifacts were discovered in the vicinity of the cave. The aims of this sounding were to establish whether the cave contained *in situ* stratified deposits dating to these periods, and to examine any traces of Middle or Upper Palaeolithic activity in the cave.

The terrace-like area in front of the cave was chosen for this sounding and a trench was dug directly in front of the cave entrance. In contrast to the surface of the area in front of the cave, where just a few very rolled pottery fragments, eroded from the tell itself, were found, the uppermost layer of dark ashy soil contained a relatively large amount of pottery with non-rolled edges, in addition to some lithic artifacts.

The same observation could also be made in the following layers of debris. One of them is characterised by large amounts of limestone pebbles, the other by a greater amount of soil. Between 1,70 m and 1,80 m below the surface two walls were discovered. One runs in an east-west direction and probably blocked the cave entrance. The other wall, further to the south, is a curved wall, and was probably part of a round structure. The masonry of these walls was very rough, and no mortar was used. The walls were founded on a thin layer of rich red-brown soil lying on the bedrock, which was exposed at a depth

of ca. 3,10 m below the surface.

The whole stratigraphy of the sounding is characterised by debris; no clear, undisturbed layers could be detected. This is mirrored in the pottery found in the different layers of debris. Pottery, probably from the Late Iron Age, Roman, Byzantine, Umayyad and Mamluke periods, was found in almost all layers. The "fresh" condition of the breaks of the pottery hints at their utilisation and discard close to this area. It can be assumed that the cave was used in these periods. Cleaning activities inside the cave may explain the mixture of pottery stemming from different periods in the debris layers in front of the cave. For the construction of the above mentioned walls we have a provisional *terminus ante quem* of Late Iron Age. Pottery from this period was found in the area of the lowest layer of the wall, on the bedrock. The lithic assemblage discovered in the excavation is characterised by unspecific large flakes, cortical flakes and other primary products mostly retouched by use. Besides one intrusive exception of a probable Chalcolithic artifact, these tools can be dated to all periods from the Bronze Age onwards. No clear tool types were discovered which could offer clear dates. Dating is only possible due to the primary production, characterised by thick and partly cortical platforms.

Although no evidence for utilisation of the cave in Middle and/or Upper Palaeolithic periods could be found, it may still be assumed that the cave was occupied in these periods. If the bedrock inside the cave is at the same level as that discovered in the sounding, the cave would have been approximately 3.6 m high with a floor area of approximately 20m²: the cave could have served as a comfortable shelter. However, later occupations of this cave probably destroyed all remains of prehistoric occupation. During the same periods as the tell itself was occupied, the cave was intensively used, as is demonstra-

ted by the pottery and the dating of the wall construction. Architectural features were also found in other caves in the vicinity, especially in caves in the modern village of Khanasiri itself, proving the intensive utilisation of these natural shelters for living and storage purposes through time.

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Reference:

Bartl, K., Eichmann, R., Khraysheh, F., "Archaeological Survey of the Khanasiri Region/Northern Jordan, Preliminary Results." In: *Occident & Orient* 4, No. 1&2, December 1999, 23-26. ■

From Gadara to Tall Knedij (Mesopotamia)

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A new coin find from Tall Knedij in the north Khabur valley (Syria) sheds light on the relationship between Gadara in the Decapolis (Jordan) and settlements in the Roman eastern military border zone.

Tall Knedij lies about 20 km south of Hassake on the western bank of the Khabur. Since 1993 a German mission of the Vorderasiatisches Museum Berlin under the direction of Evelyn Klengel-Brand and Lutz Martin has been

excavating the site, which was settled - with interruptions - from the 3rd Millennium BC to the 13th Century. AD. In the 1st Century. BC Tall Knedij formed a small village within the classical region of Mesopotamia. Its ancient name is unknown. The Parthian-Roman burial no. 77 was comparatively rich, and produced a lot of artifacts. On one of the left ribs of the corpse a corroded copper coin was discovered (fig. 1a, b). In spite of its very poor

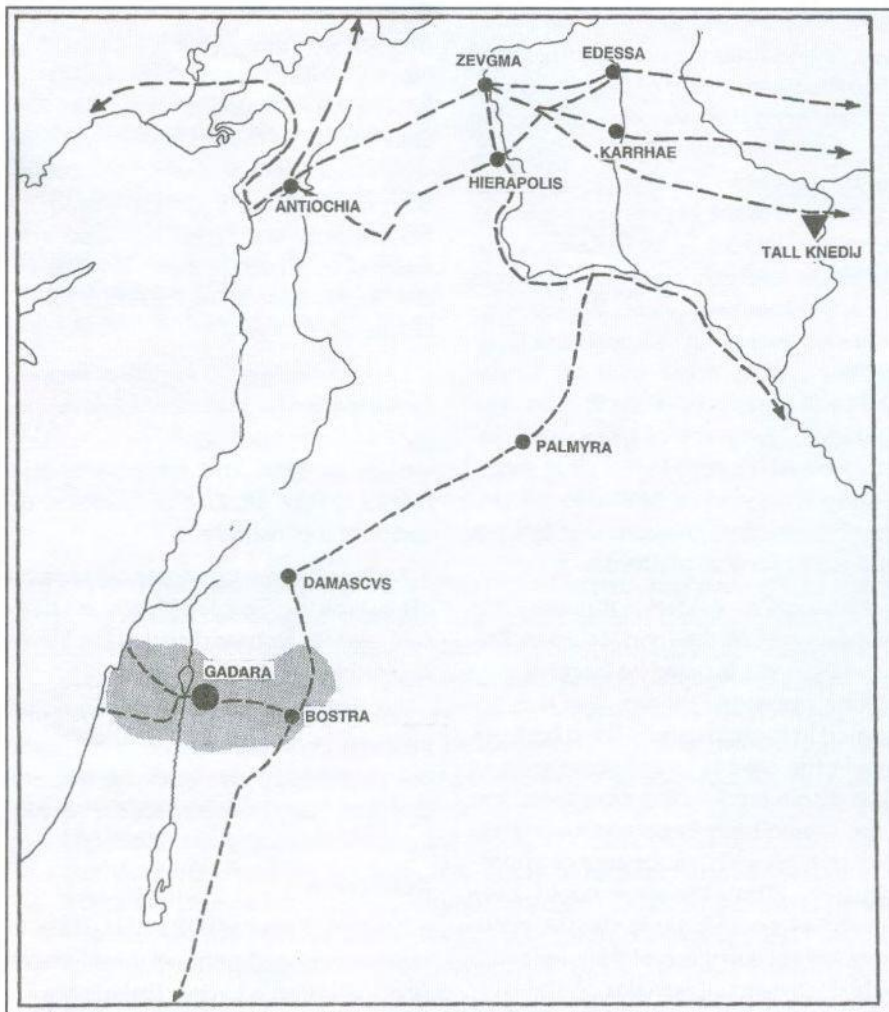


Fig. 2: The circulation area of the city coinage of Gadara and the military roads of northern Syria/Mesopotamia.

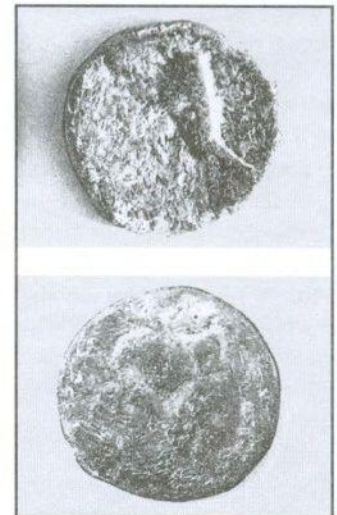


Fig. 1a: City coin of Gadara found on Tall Knedij.



Fig. 1b: Another specimen of the same type in better state of preservation.

preservation the identification of the coin was successful. It was minted at Gadara in the Decapolis between 47 and 39 BC. On the obverse the bust of Tyche facing to the right is visible and on the reverse a *cornucopiae* and inscription (SNG-ANS 6, no. 1287-1290).

Copper coins were civic coinages destined only for local circulation. The recent find belongs to a restricted circulation area in northern Palestine and Arabia, but Tall Knedij is about 700 km from Gadara, its place of origin (fig. 2).

A possible interpretation of a "local" coin travelling so far can be achieved by a comparison with finds of "foreign" coins in the region of Galilee, Samaria and the Decapolis.

There are very few, and they always come from the same places, such as

Alexandria in Egypt and the urban centres situated on the important military roads in northern Syria and northern Mesopotamia, like Antiochia, Hierapolis, Zeugma, Carrhae (Harran), and Edessa (ar-Ruha, Urfa). Therefore the connection between the cities of the Decapolis and those in northern Mesopotamia primarily had not an economic but a military character.

From the Decapolis the road led via Damascus and Palmyra to the north and east, and connected the garrisons of

Bostra and the Syrian desert border with the military camps in northern Mesopotamia.

So the coin from Gadara in Tall Knedij is a counterpart of the occasional imported coin of northern Syrian and Mesopotamian origin into the region of the Decapolis. It reflects the movements of soldiers or military units between the Phoenician and Arabian cities in the south and the cities and villages in the north-east on the Roman-Parthian border. ■

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