

**5TH INTERNATIONAL CONGRESS ON THE ARCHAEOLOGY
V CONGRESO INTERNACIONAL DE ARQUEOLOGÍA**

3-8 April 2006

**OF THE ANCIENT NEAR EAST
DEL ORIENTE PRÓXIMO ANTIGUO**



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ABSTRACTS

RESÚMENES

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ABSTRACTS OF PAPERS

RESÚMENES DE COMUNICACIONES

Marta ABBADO (*University of Tübingen*) and **Edilberto FORMIGLI** (*Antea - Laboratorio di Archeometria e Archeologia Sperimentale*)

The gold of Qatna: Preliminary investigations

Oren ACKERMANN (*Kinnert College in the Jordan Valley*), **Aren M. MAEIR** (*Bar-Ilan University*) and **Hendrik J. BRUINS** (*Ben-Gurion University*)

Tell es Safi/Gath: A Project of Environmental Reconstruction

This environmental research project is part of an ongoing, long-term archeological project that has been conducted at Tell es-Safi/Gath since 1996. Located in central Israel, Tell es-Safi/Gath is considered one of the country's largest pre-Hellenistic archeological sites, and identified as the biblical "Gath of the Philistines." The project is directed by Prof. Aren Maeir from the Institute of Archaeology at Bar-Ilan University.

The aims of this research were to reconstruct the ancient environment and to investigate the impact of human activities on the evolution of the landscape in the area surrounding Tell es-Safi/Gath over the past 3000 years. Three landscape structures that have preserved evidence of the ancient landscape forms were investigated. These structures are: A human-made trench/moat, agricultural terraces in a first-order catchment basin and an alluvial terrace section.

The results show that sedimentation in the given structures occurred during the Iron Age and Byzantine period. Chronostratigraphic interrelation analysis, combining human history and landscape history, shows that high levels of human activity during the Iron Age and Byzantine period led to a high rate of erosion and degradation of the landscape in sensitive units. A reduction in human activity enabled regeneration and stabilization of landscape components.

Giorgio AFFANNI (Dpt. di Studi Linguistici ed Orientali – Un. degli Studi di Bologna)

Astragalus Bone in Ancient Near East: Ritual Depositions in Iron Age I in Tell Afis

Astragali found in Ancient Near East have been interpreted in different ways and the use of these bones was wide-ranging: gaming pieces, amulets, divining instruments or ritual objects linked to cult. Recently they have been considered also as primitive money. Astragalus is a bone which bears a particular symbolic meaning based on its specific conformation and on its location in the animal body. The custom to depose astragali during the construction and repair of a building and of the relative floor, probably with propitiatory aims, is well documented in Iron Age I in Tell Afis. Three lots of taluses, relating to the stone foundations of walls, have been recovered. The paper will deal with this and others particular practices in which astragali were used in Tell Afis. Data drawn from the archaeological analysis of the deposits in their contexts and the paleozoological study of the finds give evidence of a connection between hoarding of astragalus bone, animal offering and selection of animals killed whose bones were used in such occasions.

Alexander AHRENS (Altorientalisches Seminar, University of Tübingen)

Egyptian and Egyptianizing Stone Vessels from the Royal Tomb at Tall Mišrife/Qatna (Syria) – Imports and Local Imitations

Among the many finds within the Royal Tomb of Qatna were more than fifty stone vessels, some of them being genuine Egyptian imports, others obviously locally produced imitations of Egyptian forms and Levantine variations. Dealing with one of the biggest corpus of stone vessels found in Syria so far, this paper aims to give an introduction to their typology and the specific differences of manufacture, but also tries to evaluate the intercultural exchange systems in the Eastern Mediterranean during the second millennium B.C. by using the results obtained through the analysis of these vessels. Furthermore, two of the stone vessels within the Royal Tomb bear hieroglyphic inscriptions. These inscriptions cannot only give new information concerning the "history" of those specific vessels, but might also be used as a key to shed new light on the nature of the relations between the Northern Levant and Egypt.

Bahram AJORLOO (*University of Tehran*)

The Neolithization Process in Azerbaijan

How Azerbaijan was neolithized? The Study on the Neolithic process in Azerbaijan, particularly in the Urmia Lake basin, is still problematic. The majority of the Neolithic sites are reported from the west bank of Urmia Lake rather than other zones in Azerbaijan. In this zone, in contrast to the Mesopotamia, the Neolithic sites are close to each other. In spite of the 1960s-1970s investigations there is not enough evidence to solve the problem of transition of Epi-Palaeolithic to the early Neolithic period in Azerbaijan. R. Solecki, based on the data from his 1960s investigations, emphasizes that transition of Epi-Palaeolithic to PN is still problematic. It seems there took place a cultural sharp change to PN. The project of R. Dyson, Jr. in 1960s concluded that the Neolithization process in Azerbaijan was socio-cultural sharp change because of the migrated people from Iraqi Zagros during the early Neolithic villages. Nonetheless that project has not any attention to the other banks of the lake & Mughan plain. According to this study it is necessary to review in the previous investigations because of

- 1- Those have not paid any attention to the relationships between Azerbaijan and its Eco-tones.
- 2- There was no evidence from Mughan plain-Araxes valley in analyzing process.
- 3- The main data are merely from west bank of the Urmia Lake.
- 4- The previous investigations have ignored the interactions between the Azerbaijan & Iranian central Zagros where the Neolithic period is well known.

Re-analyzing the previous investigations in association with the data from 24 surveyed-excavated sites and also recent investigations in Qazvin plain, Mughan steppe and Nakhchivan are the main approaches in order to re-understanding the Neolithization process in Azerbaijan. It is necessary, however, to analyze whole of Azerbaijani data in comparison with the data from eastern Anatolia and Iraq.

Hassan AKBARI (*University of Tehran*)

Transformation from Neolithic to Chalcolithic in Idier

Fardous AL AJLOUNY (*The Hashemite University*)

The Early Bronze Age Groundstones from Khirbet ez-Zeraqon, Northern Jordan. Typological, Analytical and Ethnoarchaeological Study

This paper is aimed at presenting the results of the project of studying the three hundred and ninety three pieces of groundstones recovered from Khirbet ez-Zeraqon in the seasons of excavations of 1984-1994. Khirbet Ez Zeraqon is an Early Bronze Age site located about 1 kms northeast of Irbid in northern Jordan. The pieces recovered there will be typologically and analytically classified according to the evolution of their forms, and their function. One important aspect of the study is the manufacturing techniques used by ancient people: were the users of these tools the same as manufacturers? Or was manufacturing ground tools a special handicraft that developed through ages and required special skills? In order to answer these questions an ethnoarchaeological study of the ground stones that are still used by many people today in the surrounding areas of Khirbet ez Zeraqon is being conducted. The whole area south of Yarmouk River and around Esh-Shallah Basin such as Bishra, Saal, Mughayir, Ain Rahub...etc is included.

Maysoon AL-NAHAR (*University of Jordan*)

Tell Abu es Sawwan First Season Excavation A Neolithic site, Jordan

Tell Abu es Sawwan site located in Jordan to the east side of the Jarash Amman high way just before the turn to Ajloun. Many archaeologists and non-archaeologists visited the site through the last decades. The University of Jordan started the first season of excavation in summer 2005. The site comprised a unique structure with three clear plaster floors, which indicates that the site has been occupied for a long time. Many diagnostic lithic tools such as arrowheads and scrapers were found. The lithic tools, structures, and the different features found at the site demonstrate that Tell Abu es Sawwan is a Pre Pottery Neolithic B site. This site is one of the mega Pre Pottery Neolithic B sites in Jordan. Few PPNB sites found in the north of Zarqa River during the different surveys conducted in the area. Tell Abu es Sawwan is the only site PPNB site excavated in north of Zarqa River.

Javier ÁLVAREZ-MON (*University of California, Berkeley*)

The Arjan Ring: A Masterpiece of Ancient Near Eastern Art

In 1982 a burial was found in the vicinity of Arjan, about 11 km northeast of the present-day city of Behbahan (southwestern Iran). The Arjan tomb included a number of unique masterpieces of superior artistic value and rare craft. A bath-tub bronze coffin contained the skeletal remains of an adult male lying on his back. His right arm was bent in the direction of the chest, resting on top of a fabulous golden ring bearing emblems of Elamite power. In 2003, I had the privilege to access the unique collection of items found in the Arjan tomb. As a result, I would like to provide an

updated assessment of the Arjan ring, including a new drawing of its repoussé and chased design namely: a palmette tree flanked by two rampant antithetical lion-headed griffin standing on a mountain and a discussion of its art historical significance which includes both, an effort to locate this piece chronologically, and to identify its function and ideological bearing within the later part of the Neo-Elamite period (ca. 650 BC).

Shahmardan AMIROV (*Archaeology Institute, Russian Academy of Sciences*)

Towards understanding religious character of Tell Hazna 1 oval

- 1) Since 1988 Russian archaeological mission conducts excavations in northeast Syria (Hasake province). The main object of the research is a settlement of the IV - first half III mill. B.C. named Tell Hazna. The settlement is located in the lower part of wadi Hanzir stream, approximately 10 km above confluence with Djagh-Djagh river. The size of a settlement is a little bit less than 2 hectares, capacity of cultural deposits about 16 meters.
- 2) The central part of the settlement is composed by a complex of massive, densely contiguous to each other structures, which form in the plan double oval of non-regular shape. On a long axis (west - east) outer oval reaches approximately 80 m., and inner oval about 40 m. The walls of structures of an external ring together with the base were kept on a height up to 8 meters.
- 3) The principles of planning and extraordinary character of constructions of the central part of the settlement have forced to assume its sacral purpose. Plot of the site entered in the oval and separated from domestic life of the settlement represent a sacred district similar to double ovals of Hafjeh and Ninursag temple in Tell el'Ubaid of Southern Mesopotamia.
- 4) Temple complex of Tell Hazna 1 originally constructed in the end of IV mill. B.C. It was under exploitation about 250-300 years and finally has stopped existence at the beginning of the ED I period. In the beginning of the ED I period on Tell Hazna site the last remarkable building activity was noted. Settled life on the site was stopped in the end of ED I period. Development of Tell Hazna 1 architectural complex allows us to observe destructive dynamics of social organization of community of the site.
- 5) There are several features that allow us to speak about religious character of Tell Hazna oval. Among them: Ritual actions noted for process of foundation erection of buildings served for religious aims. Presence of public buildings with niched-butressed decoration on the outer walls. Some buildings of Tell Hazna oval are characterized by extremely small quantity of finds found inside. That is typical for prayer buildings. In case of secondary use of Tell Hazna monumental buildings was noted infilling of interior with pure clay that is important feature of sacral conservation. Inside Tell Hazna oval several constructions interpreted as sacrifice places were investigated. Likewise sacrifice practice of Southern Mesopotamia of Uruk-ED III periods on Tell Hazna 1 two varieties of sacrifice containers were noted. One of them trough-like, another one of round plan (so called "pans"). One among important architectural elements for religious buildings is presence of altars. Number of mud brick podiums of different shapes interpreted as altars were investigated in several premises of Tell Hazna 1.
- 6) In spite of fact that till now tripartite temple building is not opened on Tell Hazna 1, various indirect features tells us that oval plot of the site was partially used for religious purposes.

Ignacio ARCE (*Spanish Archaeological Mission to Jordan*)

Qasr Hallabat: From Roman *Castellum* to Ghassanid *Pretorium*

The aim of this paper is to present, on the basis of ongoing research and excavation work at Hallabat, and the material evidence gained, the new hypothesis on the dating and nature of the physical transformation and change of use of the site, its landscape and the related built structures. The use of stratigraphic analysis to study both these built structures and the archaeological buried context, is providing relevant new information on the building activities, phases and related continuity/change of use of certain structures and the surrounding landscape. This is leading to a new assessment of the site, as increasing evidences would indicate that some of the transformations (dated up to now in the Umayyad period) took place in an earlier (Late Antiquity –Ghassanid-) period: The transformation of a military fort into a Ghassanid compound that includes audience halls, and a monastery (sharing a chapel), and an agricultural estate and a related vicus, is extremely relevant to show the political and military changes that took place in the Limes Arabicus in the 6-7th C. AD. This review of the sequence of use allows to understand better the actual interventions of each period: As a result, a more clear picture is emerging of the continuity and change of use of the site in Late Antique and Umayyad period. This would increase the meagre list (up to now) of Ghassanid aulic architecture (together with the Pretorium of Al-Mundhir at Resafa, in N. Syria, and the recently discovered religious complex at Nitl in Jordan, and probably the complex at Dumeyr, also in Syria), and the knowledge of the territorial management of that period (Furthermore, the continuous changes taken place in this transitional period, could be also linked to the elite's production and the role of gift exchange as reinforcement of social institutions within the clientele policy of the Umayyad period, specially in the Badiyah area). The paper intends to present the instruments, process of analysis and these related hypothesis, that might have an important repercussion in the interpretation of the transition from Late Roman to Umayyad periods: The transformation of military structures from the Limes Arabicus into agricultural estates (in earlier period than expected), and the related relationship between man and nature in order to exploit and

control the territory in the passage from Late Antiquity into Early Medieval period, are thus the basis of the presentation.

Makoto ARIMURA (*Archéorient, Maison de l'Orient et la Méditerranée, Lyon*), **Boris GASPARYAN** and **Christine CHATAIGNER**

“Çayönü tools” in the lesser Caucasus? Kmlo 2, an aceramic Neolithic site in Armenia

Large parts of the prehistory of the lesser Caucasus are not well known yet due to the few systematic fieldwork projects. In particular, concerning the Neolithic, we have very little knowledge of this area: when and how did the Neolithization process of adoption of a new life style based on cultivation of plants and domestication of animals, begin in the lesser Caucasus? Recent Armeno-French archaeological survey and excavation (directors of the mission: Boris GASPARYAN, Christine CHATAIGNER) are providing new information concerning this process. Kmlo 2, a small rockshelter site in the Kasakh valley, was excavated during three seasons (2003-2005). Our results showed that this site was an aceramic Neolithic site, occupied in the 6th millennium BC. The lithic industry of Kmlo 2 is characterized by various shapes of microliths, made using local obsidians. Most remarkable finds are pressure-retouched obsidian tools, similar to so-called “Çayönü tools” found in Neolithic sites in eastern Anatolia and northern Mesopotamia. This enables us to consider the cultural relationship between the lesser Caucasus and neighbouring regions in the Neolithic. Lithic studies of the materiel from Kmlo 2 will provide new insight for the understanding of the Neolithic in the lesser Caucasus.

Ana ARROYO (*Universidad Autónoma de Madrid*)

Akpinar: Escultura inacabada o diosa sedente

El estudio de las técnicas de trabajo de la piedra, las herramientas y los aparejos como andamios o poleas, así como la forma de organización de los propios escultores – en cuadrillas, como artesanos dependientes o no del palacio-constituyen un referente fundamental para el estudio de los relieves pétreos sobre paredes naturales. Con respecto al tipo de herramientas empleadas, no me consta ninguna referencia textual a ninguna de las parcelas relativas a la escultura en piedra, como tampoco me constan ningún hallazgo de ninguna herramienta ni ninguna representación alusiva a este tipo de escultura dentro del ámbito hitita. De lo que sí se dispone es de las huellas de uso, pero a pesar de que su estudio (que incluye también el análisis de los depósitos acumulados en las mismas, los cuales pueden informar sobre una posible datación) sería posible, la realidad es que todavía no ha sido llevado a cabo. Por tanto, el acercamiento a este tipo de relieves, su producción, sus promotores, etc, se realiza, forzosamente, a través de un análisis estilístico de los propios relieves en cuestión. Y en las contadas ocasiones en las que están acompañados por una inscripción, por el estudio de la misma, lo que acarrea también los sempiternos problemas de interpretación, traducción y adscripción cronológica. Si bien es cierto que sobre este tema en el panorama hitita no existe prácticamente ninguna información, aún puede revisarse la última tesis acerca de la interpretación de la figura de Akpinar, en el Monte Sypilos, en base a una relectura de los artículos publicados al respecto y a una observación cuidada del propio relieve en comparación con otras representaciones conocidas. Y en lo tocante a las técnicas escultóricas utilizadas y la forma de organización de los propios escultores, se deberá, por el momento, arrojar un poco de luz mediante comparaciones con otras culturas, cuidando siempre de no aventurar más de lo que la distancia cronológica y geográfica nos permiten. Pretendo en esta comunicación y bajo estas premisas, revisar especialmente la última y más reciente interpretación dada a Akpinar por el matrimonio Salvini, quienes ven en ella una figura masculina inacabada que no puede adscribirse a la esfera hitita en sentido estricto, sino que es producto de una cultura local de la Edad del Bronce.

Gassia ARTIN (*University of Lyon*)

La "nécropole" Chalcolithique de Byblos: Nouvelles approches méthodologiques et nouvelles interprétations

Byblos représente un site-clé pour l'étude de la période Chalcolithique au Levant Nord. Fouillé par Maurice Dunand entre 1925 et 1973, Byblos nous a livré, une importante installation "énéolithique" dont une des grandes richesses est sa "nécropole" comprenant 2097 inhumations dans des jarres. Malgré le caractère remarquable de cet ensemble funéraire et l'abondance des données recueillies pendant la fouille, seule 24% des tombes ont été publiées. Une très grande partie de l'importante documentation relative à la "nécropole", constituée principalement par des documents graphiques, les fiches descriptives des jarres funéraires et le matériel archéologique, est restée totalement inédite. Dans le cadre de cette thèse, ces données inédites ont été exploitées par des méthodes nouvelles étayées par des outils informatiques qui permirent la constitution de deux corpus sous forme d'une base de données (FileMaker™) et d'un corpus géo-spatial de la "nécropole" et de "l'installation" (MapInfo™). L'exploitation de ces deux corpus nous a permis de présenter les différentes caractéristiques inédites des trois composantes de l'ensemble funéraire (les structures funéraires, les restes humains et le mobilier d'accompagnement) et d'en faire une étude archéo-anthropologique. D'autre part, l'analyse spatiale de la distribution des tombes, de leur contenu et des relations des

tombes avec les structures d'habitat nous a permis d'établir une sériation chrono-spatiale de la "nécropole" et de l'"installation". Ainsi, cette recherche, nous a amené à remettre en cause l'existence d'une "nécropole" en tant que telle et à proposer, dans un second temps, une chronologie relative et une nouvelle interprétation de cet ensemble funéraire.

Laurence ASTRUC, Odile DAUNE-LE BRUN, Fouad HOURANI and Alain LE BRUN
(CNRS-UMR 7041, Maison de l'Archéologie et de l'Ethnologie, Nanterre, France)

A stone vessel workshop at Khirokitia

Given the relative scarcity of "Workshop" evidence at Neolithic sites in early agro-pastoral villages both in Cyprus and in the Near East we will present here a unique archaeological context discovered at Khirokitia (Aceramic Neolithic, VIIth millennium BC, Cyprus): a location where stone vessels have been manufactured. The spatial distribution of the artefacts within the architecture, their detailed technological analysis allow us to qualify this location as a "Workshop". Furthermore, it is an opportunity for us to discuss: 1/ the abandonment processes, the use and cleaning strategies of space at Khirokitia; 2/ the organization of the production of stone objects within this community with reference to a multi-scale approach of technical specialization; 3/ stone working handicraft as an important component of the insular cultural identity.

Alessandra AVANZINI (*Università di Pisa*)

The Italian Mission to Oman (2005-2006)

The Italian Mission to Oman (IMTO) has been working at Khor Rori since 1996 and at Salut since 2004. The two excavations have achieved highly significant results. After the American excavations of the 1950s the foundation of the city of Sumhuram in the area of Khor Rori seemed clearly established: the foundation of Qana and the development of maritime trade in Roman times seemed to justify the foundation of the port of Dhoḥār. Incense shipped at Sumhuram reached Qana and thence the Mediterranean. Our excavations point to a very different history of the city and of the state's management of trade. Sumhuram was founded in the third century B.C., much earlier than the arrival of the Romans in Egypt. The abundance of everyday objects found in the city, including many in metal, enable us to lay the basis for a primary typology of the artefacts, and point to contacts with neighbouring areas. Salut, a site up to now unknown, is one of the most interesting settlements of the First Iron Age in Oman. It is located near to Bahla, and can be dated to between the 13th and the 8th centuries B.C. Surrounded by walls, Salut has some interesting parallels with other sites of the same period on the coast.

Esfandiari AZARMIDOKHT (*Archaeological Research Center of the Iranian Cultural Heritage and Tourism Organization*)

Archaeological Excavation, Research, and Discovered Architectural Remains in Gharbalbiz Near Mehriz from the Second Half of the First Millennium BC

The ancient area of Gharbalbiz lies 40 kilometres south of the city of Yazd and west of the town of Mehriz at the foot of the Shir-Kooh mountains. The name Gharbalbiz is composed of two words: "gharbal" (meaning to sift or screen) and "biz" (meaning to pour) and describes a spring that pours out of many holes on the slope of the western mountains. While flowing to the eastern areas, this spring gathers in a large ditch which the natives call the "lake" and produces a delightful sight. The existence of the Gharbalbiz spring which is one of the two main springs in the mostly desert province of Yazd, metal and silica mines, rich soil, plant and animal resources, and the beautiful natural environment of this area which is truly the natural heritage of Yazd province, are the important factors shaping the cultural atmosphere of this area since ancient times. Archaeological excavations in Gharbalbiz began in 2000 and have continued ever since. These excavations have resulted in the discovery of an earthen (unbaked mud-brick) monument south of the area and a large cemetery in the north-east dating back to the second half of the first millennium BC, and an earthen structure west of the area, near the spring, from the Sāfavid period. The discovered monument which is the oldest architectural structure of Yazd province has been built on a trapezoidal-shaped land with an area of about 2200 sq. metres. All around the structure a moat has been dug which is not for defensive purposes but rather to provide an embankment and to protect the building from the floodwaters of the area. The building materials are almost completely earthen (unbaked mud-brick) but in some parts of the exterior stone has been used to strengthen the structure. The building's direction is north - south. The main section is located on the southern side and consists of a central room, a veranda, two long, narrow rooms on the sides, and a closet or back-room in the back. This section was later enclosed with a thick circuit wall with stone on its exterior. The northern section consists of a central courtyard with three verandas and an earthen mastaba around it, and another area which was used as the service section and is connected to the central courtyard via a corridor. At the entrance to the courtyard is a square basin with a platform in the middle, and a rectangular basin with a narrow canal on its side. In the western part of this northern half of the building is a circular courtyard around which a thick wall with a stone exterior has been built. The wall gently slopes down to the western veranda of the central courtyard. This veranda was the connection between the two courtyards. The entire eastern section has been delimited with a thick wall and the northern section with three wide, parallel walls. This building also

has two entrances on the north-eastern and north-western sides. The north-western entrance seems simple and designed for the entry of ordinary people. This entrance is directly in front of the entrance to the circular courtyard. Next to it is a small semi-circular room connected to the entry hallway by a trap-door and was probably used to control the entry of ordinary people to the building. The north-eastern entrance had a more formal aspect considering its structure. Near this entrance a room has been built to watch over the surrounding areas and control traffic into and out of the interior area and the building. This room and the small room next to the north-western entrance were intentionally filled in the final stages of the use of the building. After emptying these rooms, small openings were observed around their walls. It seems these openings to the outside are precursors of wind-catchers (*bad-gir*) in the desert architecture of Yazd province. One of the characteristics of the ancient Gharbalbiz building is the existence of a terrace and bays all around the western and southern parts. Below the bays, which were probably used by pilgrims as resting areas, poles were set up to tie animals they used for transportation. While probing outside the building, the remains of two earthen structures were observed which seem to have been used to perform services such as preparing flour, and baking bread. In the building many pottery pieces related to large vats for storing provisions were seen which are basically comparable to those from the Parthian period. Finer pottery, especially small bowls found in various parts of the building and around the western entrance are kinds of pottery from the late Achaemenian period. Other objects found include a bull's horn made of pottery, a cylinder seal, and the remains of a considerable number of stone mortars. Considering comparisons of the pottery with different periods, the plan of the building, the similarity of the plan with those of religious buildings in Yazd, and information obtained from excavating the cemetery north-east of the area, we conclude the building was probably a religious building constructed in the late Achaemenian period and used all the way to the first half of the Parthian period.

Giulia BACELLI (*Dipartimento di Scienze dell'Antichità "G. Pasquali", Università degli Studi di Firenze*) and **Federico MANUELLI** (*Università degli Studi di Roma "La Sapienza"*)

Middle Bronze Khabur Ware from Tell Barri/Kahat

The spreading of Khabur Ware, in northern Mesopotamia during the first half of the II millennium, represents the first high diffusion of a specific material production after the collapse of the second urbanization, demonstrating the stability restored after the crisis.

The Old Assyrian trade routes and the subsequent growth of the Old Babylonian Empire were the main reasons of the circulation, on a wider territory area, of the Khabur Ware.

The stratigraphic continuous sequence of the II millennium pointed out in the G Area at Tell Barri enables us to focus on the previous discussions through the preliminary results of the analysis of the ceramic assemblage excavated in one of the most important sites of North East Syria. Starting from these considerations we will provide, through the correlations and parallels with the pottery coming from the most important sites of Syrian and Iraqi Jezirah, a proposal of relative chronology for Khabur Ware of Middle Bronze from Tell Barri, focusing on the beginning and the development of this ware, during the main phases of Middle Bronze Age.

Bettina BADER (*Special Research Programme SciEM 2000, Academy of Sciences, Vienna*)

Auaris and Memphis in the Second Intermediate Period

The comparison of ceramic material of the two Egyptian sites of Tell el-Daba/Auaris in the Delta and Kom Rabia/Memphis just south of Cairo leads to the result that the material culture dating to the late Middle Kingdom and the Second Intermediate Period (ca. 1780 to 1550/40 B.C.) started to differ from each other (Tell-Daba Phase E/2-1, Kom Rabia Level VI d). As those sites are not very far apart, it adds some arguments to the hypothesis that Egypt became politically segmented during the Second Intermediate Period with the material culture developing in different ways until it later became more uniform again. This also questions the historical tradition that the Hyksos overran Memphis and ruled from there over the rest of Egypt. On the contrary the research seems to corroborate the opinion that actual Hyksos rule was very limited, conducted by means of political control, but not by physical presence.

Francesca BAFFI (*Università degli Studi di Lecce*)

Who locked the door? Fortification walls and city gates in Middle Bronze Age inner Syria: the examples from Ebla and Tell Tuqan

The archaeological evidence for integrated defensive systems, consisting of fortification walls and city gates, of inner Syria's cities and towns during the first half of the 2nd millennium BC, points to the use of quite similar models and building techniques; however, the increase of archaeological research and extensive analyses of the available data stress, along with similarities, elements of regional, or in some cases local, differentiation. The excavations in two nearby settlements of Tell Mardikh and Tell Tuqan represent one of the clearest examples of this phenomenon. The ensemble of new data favours a discussion on the effectiveness of the defensive potential offered by the city walls and multiple-passage gates, and, in the specific case of Tell Tuqan, the recovery of elements connected with the lock systems of the gates themselves, points to an entirely original method of bolting the entrance.

Heather D. BAKER (*Institut für Orientalistik, Universität Wien*)

Towards a reconstruction of the urban environment in first millennium BC Babylonia

This paper presents some of the results of an ongoing study of the urban landscape in first millennium BC Babylonia. The project aims to reconstitute the city "from the bottom up," focusing especially on the less intensively investigated non-monumental elements of the urban environment. It unites both textual and archaeological data in order to compensate for the problems inherent in describing the form of the Babylonian city when only relatively small areas of coherent city plan have been recovered through excavation. The study investigates urban form at three levels: the individual unit (the house or other kind of structure, or unbuilt plot), the neighbourhood, and finally the overall city layout. Using this approach it is possible to address questions such as variability in the use of space between different residential quarters of the city. It is also possible to investigate long-term changes in the use of city space and to relate these to economic processes and demographic trends.

Jacqueline BALENSI (*Maison de l'Orient et de la Méditerranée, CNRS, Lyon*)

A Canaanite archetype for the Phoenician cothon: the artificial 'islandscape' of Tell Abu Hawam (mixed harbour at the origin of Haifa, Israel)

During the 1st millennia BC, men developed artificial harbours in the Mediterranean (e.g., Carthage). In 2005, Nicolas Carayon wondered if there was any oriental antecedent to his model: an inner basin either using a natural pool or dug inland, and linked by a channel to a river or the sea. Rescue excavations conducted by a Hispano-Israeli-French expedition have yielded relevant data some 80 km south of Tyre. Tell Abu Hawam —already famous because of its Late Bronze Age to early Hellenistic imports— is nowadays buried near Mt. Carmel. Islet up to the British Mandate over Palestine, this ancient transit-platform —girded by a monumental stonewall— was barring a marshy delta lacking bed-rock. Moreover, the original settlement had not just been planted on an Aeolian sand dune, but on a series of terraces erected above water level. These are built with sandy loam deeply quarried from a highly brackish milieu (estuary or lagoon), implying the simultaneous planning of harbourage facilities. Bilingual, the Biblical toponym depicts this Egypto-Semitic achievement: 'Bricks of the channel of Horus' (Jos 19.26). Dynamical, the environmental factors grant new understandings about the successive inhabitants' reactions: thus the evolution of their Levantine agglomeration and of its network of communications until the Byzantine period.

Nur BALKAN-ATLI (*Istanbul University*) and **Didier BINDE**

Kaletepe obsidian workshop excavations in central Anatolia

Obsidian is one of the raw materials appreciated by prehistoric men. Its homogenous and mechanical qualities rendering it apt for knapping, its attractive and glassy texture of various colors and its comparative rarity to flint were probably the reasons of this appreciation. New sources and workshops were found due to the recent researches in the frame of obsidian project in Cappadocia (Central Anatolia). One of these workshops Kömürçü/Kaletepe was particularly attracting and it has been subject to excavations (1997-2005). The excavations revealed an unique pre-pottery neolithic workshop displaying a complex and standardized debitage of a high technical control. The products (long, pointed blades and prismatic bladelets) were observed for the first time in Central Anatolia and their samples in the Near East (especially in north Syria and Cyprus) indicate a long distance trade mechanism. Kömürçü-Kaletepe is also particular in regard to its paleolithic finds. The erosion in 2000 caused breaks in the sediment displaying paleolithic layers in situ. Excavations during 2001-2005 exposed 17 layers belonging to Lower and Middle Paleolithic. These layers, attributed to Mousterien, Upper Acheuleen and Acheuleen, are not workshops but living areas in regard to the finds. Especially in the lower layers the presence of andesit and rhyolit besides obsidian as raw material, the use of obsidian for manufacture of hand axes while the other materials are reserved to choppers and cleavers are noteworthy. Kaletepe appears to be not only important for Anatolia but also for Euroasia-Africa relations during the Middle Pleistocene.

Karin BARTL (*German Archaeological Institute, Damascus*)

The Neolithic of the Middle Orontes Region (Syria)

Stephen BATIUK (*University of Toronto*)

Geophysical and Geomorphological Investigations into the Iron Age Lower Mound at Tell Ta'yinat

The site of Tell Tayinat (ancient Kunulua) in the Amuq Valley of southeastern Turkey has been the focus of investigations by the University of Toronto since 1999. Excavations by the University of Chicago in the 1930s uncovered a large and prosperous settlement dated to the Iron Age on the upper mound, while a number of small soundings to the south and east of the main mound provided evidence for a substantial lower mound dated to the same

time period. This paper summarizes the results of the surface collection, remote sensing, and coring conducted between 1999 and 2005, focusing on how the data informs our understanding of the size and nature of and the environment around the site. Tayinat then serves as a case study in the discussion of the morphology of the large urban settlements that develop in northwest Syria during the Iron Age.

Julio BENDEZU-SARMIENTO (*Maison de l'Orient et de la Méditerranée, Lyon*)

Les pratiques funéraires à l'âge du Bronze (III^{ème} millénaire avant J.-C.) sur le site d'Ulug-Depe (Turkménistan). Les recherches récentes et des résultats préliminaires

La recherche sur le site d'Ulug-Depe a commencé en 2001 sous la direction d'Olivier Lecomte (CNRS-UMR7041). Il s'agit de l'un de trois principaux établissements proto-urbains du piémont turkmène méridional, situé à égale distance (45 km) des deux autres, Namazga et Altyn-Depe. Les travaux, au niveau des pratiques funéraires, montrent la richesse de ce site où plusieurs périodes sont représentées à partir de l'âge du Bronze et tout particulièrement la période Namazga IV (Bronze ancien). Ces sépultures étaient surtout individuelles en fosse sans structure particulière. Les résultats préliminaires confirment la présence de sépultures primaires dans un espace dit colmaté. La dislocation de certains éléments osseux de la main, du pied ou du thorax (connexions labiles) confirme la présence d'un contenant léger (végétal) qui enveloppait le corps. Les sujets se trouvaient en décubitus latéral, gauche ou droit, avec les membres fléchis. Les sujets périnataux et nourrissons furent enterrés sous les sols des maisons tandis que certains adultes prenaient place dans les quartiers d'habitat abandonnés. Pour le moment, à défaut d'avoir découvert la nécropole de l'âge du Bronze, il est clair qu'il existait, à Ulug-Depe, des zones importantes de concentration d'une activité sépulcrale qu'il faudra exploiter dans un contexte d'étude d'urbanisation et d'interaction «espace d'habitat et espace mortuaire» tout au long du Bronze.

Julio BENDEZU-SARMIENTO (*Maison de l'Orient et de la Méditerranée, Lyon*)

Les pratiques funéraires de la fin de l'Âge du Bronze ancien aux Emirats Arabes Unis: données récentes

Si les tombes monumentales circulaires et compartimentées constituent les monuments les plus connus de la seconde moitié du 3^e millénaire aux Emirats Arabes Unis et au Sultanat d'Oman (Période Umm an-Nar), un modèle alternatif de sépulture collective a émergé vers 2100-2000 av. J.-C. : la fosse sépulcrale architecturée. Aujourd'hui, seules deux fosses de ce type sont connues aux Emirats Arabes Unis. Celle de Hili (Emirat d'Abou Dhabi) est fouillée depuis 8 campagnes selon les méthodes récentes de l'anthropologie de terrain française. Elle contenait les restes de plus de 650 individus, les dépôts accumulés sur 1m70 d'épaisseur correspondant pour l'essentiel à des inhumations primaires. L'étude biologique a permis de préciser la composition et l'état sanitaire de la population inhumée, la mortalité correspondant à celle d'une population pré-jénérienne, en l'occurrence une population agricole et villageoise d'une oasis de l'intérieur de la Péninsule d'Oman. La confrontation de ces données aux découvertes anciennes faites dans la nécropole attenante permet de préciser la chronologie interne de la Période Umm an-Nar dans la région Est de l'Emirat d'Abou Dhabi. La fosse funéraire de Hili N s'avère la seule tombe où la phase finale de l'Âge du bronze ancien est attestée dans l'Emirat d'Abou Dhabi mais c'est aussi la seule tombe des Emirats Arabes Unis où les phases récentes et finales sont représentées ensemble en stratigraphie. Des données nouvelles ont donc été obtenues sur les pratiques funéraires mais aussi sur la chronologie de la fin de l'Âge du Bronze ancien.

David BEN-SHLOMO (*The Institute of Archaeology, The Hebrew University*)

Iconographic Representations from Early Iron Age Philistia and Their Ethnic Implications

The paper will consider several aspects related to iconographic representations and their reflection on ethnic characteristics in Early Iron Age Philistia. While some Philistine terracottas show distinct Aegean iconographic affinities other small finds indicate a different nature. Two cases are inspected: Glyptics (represented by seals and impressions on sealings) and ivories. Seals and especially sealings (bullae) are important indicators of administration and writing, a topic quite unknown in Early Iron Age Philistia. A relative large number of sealings were recovered from Iron I Ekron, of which many are stamped. The themes appearing in the impressions are mostly from the Canaanite or Egyptian world. Other cylinder or stamp seals known from Philistia also conform to Early Iron Age carving traditions. A similar picture arises from most of the decorated ivories from Philistia, reflected by both the decorative themes and craftsmanship of the objects. Direct links with contemporary Egyptian motifs can be identified. It is suggested, thus, that in the Philistine cities the Aegean iconographic syntax penetrated mostly to the realms of daily life and cult, as manifested by the pottery and terracottas. The dominions of administration and writing as well as other traditional crafts were still under the influence of the local Canaanite and Egyptian traditions.

Ana Isabel BENEYTO LOZANO (*Dpto. Historia del Arte, Universidad Autónoma de Madrid*)

Artistic manifestations on paper from Near East to Al Andalus

The artistic manifestations, painting on paper, papyrus and parchment have a great importance for the understanding of the Islamic art and culture. Most of the researches on miniatures have been centred in the ones illuminated from the 13th century. But we have a lack information about the ones made before that period and there's a lot of material pending of a deep investigation. The importance of the book in the Islam is indisputable, an object that unify a community, the *umma*, and at the same time the three religions called the "book religions". It was a luxury element richly decorated and bound, as we will see in the images shown in the conference. This paper tries to be a "trip", could be called: "The Images Trip", and made a travel from Yemen to Spain, to Al Andalus, showing the richness of the Islamic painting on paper heritage. The influences from greco-roman and sasanid worlds will be discussed and shown in all this illustrations, also the motifs function or the reason of their existence, and how some similar images are present in different places and different times. In 1972 were found some fragments on the Great mosque of Sana'a, Yemen. Qur'anic parchment fragments from the first years of the Islam, in which we can see some of this images, human, geometric or floral flashy because of the richness of their decorations. The next stop will be in Egypt, Fustat or Old Cairo, where it was found in an excavation, tombs with pottery, canvas and parchment or paper fragments. Most of them with richness decorations dated from the 8th century. Then this trip will finish in Spain, Al Andalus where it will be shown a group of miniatures represented in Qur'ans and other kind of books, as a result of all the development of this art discipline that cover all the Islamic art.

Piotr BIELIŃSKI (*Warsaw University Centre of Mediterranean Archaeology*)

Ninevite 5 period city on Tell Arbid (Syrian Jezireh) - Preliminary remarks

Judy BJORKMAN (*Independent scholar*)

Metalworking: Modern Sketches of Ancient Activities

The formation of hypotheses about life in ancient Mesopotamia occasionally is based on inadequate understanding of the archaeological and/or textual remains from the area. Aspects of ancient metalworking sometimes have been sources for this type of modern speculation. Examples from the following areas will be discussed. Ancient metals -- their sources, uses, and values (e.g., did the discovery of metal lead rapidly to its use for weapons and agricultural tools? Was bronze valued for weaponry because it was harder than copper?). Heat treatments and shaping of metals (smelting, melting, casting, annealing, forging); workshops and tools (e.g., what kind of metalworking was done in Mesopotamian cities? What were a jeweler's workshops and tools like?). The social position(s) of metalsmiths in ancient Mesopotamia (e.g., were smiths feared or hated because they possessed special, magical knowledge? Were there itinerant smiths?). Some comparisons with Egyptian depictions of ancient metalworking will be included.

Jeannette BOERTIEN (*Independent scholar, Leiden*)

Perforated clay balls: Was Macalister right or wrong?

Identification of artifacts is never straightforward. Last year the discussion on the use and function of perforated clay balls, so frequently found in Bronze and Iron Age sites in the Levant, was rekindled by an article in Near Eastern Archaeology and a hilarious lecture at the ASOR meeting in Philadelphia. What was the function of these perforated clay balls? The first one to answer this question was R.A.S. Macalister in his report on Gezer in 1912. He identified them as "Weavers' Weights". Over the years many other ideas have been suggested. The objects were supposed to have functioned as jars stoppers, heat retaining devices or fishing nets weights. Homan recently identified them as fermentation stoppers in the beer production process. After 94 years the question is still open: What were these perforated clay balls used for? Was Macalister right or wrong? This paper will evaluate the discussion and present new evidence to lay this question to rest once and for all.

Luca BOMBARDIERI (*Missione Archeologica Italiana a Tell Barri (Siria), Università di Firenze*) and **Carlotta FORASSI**

The pottery from IA II-III levels of Late-Assyrian to Post-Assyrian period in Tell Barri/Kahat. Aspects of continuity in the production throughout the collapse of the empire and the transition to the Neo-Babylonian up to the Achaemenian period in northern Mesopotamia

The Iron Age II and III settlement was extensively excavated in two areas in Tell Barri: the Area G on the south-eastern slope of the tell, where a domestic quarter with three main phases of occupation was detected; and the Area J on the north-western side of the mound, over the Iron Age Acropolis occupied by the Neo-Assyrian palace of Tukulti-Ninurta II, and then rebuilt and partially re-occupied during the Late- and Post-Assyrian periods. The rich collection of

the pottery from these levels allows us to analyse the development of this production, under the typological as well as technological point of view, during this important phase of transition in North Mesopotamia. Starting from the specific study of this production and its parallels – which are spread over a wide region from the Eski-Mosul and inner Assyria (a recent comparative study between Tell Barri and the contemporary pottery of Nimrud from the Italian Excavations of the Centro Scavi e Ricerche per il Vicino Oriente e l'Asia, already raised up relevant affinities) to the Habur, till the Upper Syrian Euphrates - it is possible to outline the aspects of continuity and/or discontinuity compared to the former Neo-Assyrian and the following Achaemenian pottery, giving a wider comprehension of the production itself

Stephen J. BOURKE (*University of Sydney*)

Excavating Pella's Bronze and Iron Age Temple Precinct: The 2005 Field Season

The 2005 field season at Pella in Jordan continued the investigation of the largest Migdol (Fortress) Temple discovered in the southern Levant. The 2005 field season further explored two earlier MBA II mudbrick temples, first detected in 2003 below the seven course mudbrick floor of the massive stone Migdol temple. There are now six distinct architectural/constructional phases of the temple, as well as many sub-phase modifications, some relating to structural issues, others (arguably) to the changing requirements of cult practice and religious thought. As well in 2005, a large civic building immediately to the west of the Iron Age temple was further explored. Another eight rooms of this superb mudbrick and stone structure were exposed, and further elements of its function revealed. The Civic Structure was constructed late in the Tenth Century BC and destroyed at some time in the second half of the Ninth Century BC, when the Iron Age temple and the whole city of Pella was devastated by a widespread horizon of destruction. Major architectural discoveries, select finds and appropriate parallels will all be presented, along with a short discussion of how the new discoveries change the way we view Pella in its regional archaeological context.

Simona BRACCI (*Università degli Studi di Roma "La Sapienza"*)

Growth and development of the ancient near eastern town in the Diyala region, some topographical considerations

Studied since the earliest years of the archaeological research Diyala region turns to be an interesting observation post in relation to topographical subjects. Good portions of the urban texture have been brought to light during the years of the investigations, these evidences allow some observations connected to the use of the inner space of these towns. A closer observation of this urban texture could maybe help in determining the rules which underlie their previous stage of growth and the following developments. A particular attention will be paid to the relation between the inner town space and the people living in it.

Brian BROWN (*University of California – Berkeley*)

The Kilamuwa Stele: a Document for Considering Ethnicity and Politics in Early Iron Age North Syria

The Kilamuwa stele is a document that embodies many of the political and ethnic developments in North Syria/Southeast Anatolia in the mid-9th century BCE. The monument combines elements from the Assyrian, Luwian and Phoenician visual and epigraphic traditions. Yet this object is often described simply as “Aramaean”, based on the usual ascription of Kilamuwa's ethnicity as Aramaean. My analysis indicates that it should be considered as an urban monument that was erected as part of larger efforts to bring together Aramaean and Luwian ethnic groups and at the same time formalize an upper-class, urban “Aramaean” identity. The stele also served as a signal of the political direction the city-state of Sam'al would take under the increasing domination of the nascent Assyrian empire in the region. Finally, the analysis indicates some problems involved with discussing ethnicity and identity in the Early Iron Age and considers how the manipulation of group identity contributed to the development of new socio-political formations at this time.

Frédérique BRUNET (*CNRS-UMR 7041, Maison René Ginouvès, Nanterre*)

The Production of Clay Figurines and Other Miscellaneous from Two Chalcolithic Workshops in South Turkmenistan (Ulug-Depe): An Techno-Typological Analysis

This paper provides data from two workshops found recently at Ulug-depe (South Turkmenistan) and dated to the Late Chalcolithic (Namazga III, 3500-3000 BC). For the first time in Central Asia, it is possible to identify and to analyze the process of manufacturing various clay items, especially zoomorphic and anthropomorphic figurines, spindle-whorls and sling balls which are known at other chalcolithic sites (Altyn-depe, Ilghynly-depe, Kara-depe, Geoksiyur) but in a domestic or a funerary context. The high density and types of finds (raw material, preforms, finished broken products, waste, pigments, and tools) allow specifying the technological choices, the knowledge and the skill of these chalcolithic craftsmen. Based on the stratigraphic data and spatial organization, we argue also the existence of chronological phases and craft specialization in each workshop. Other artefacts were associated with this clay

production: a typical chalcolithic pottery, fine and painted with geometrical and zoomorphic patterns, and a lithic industry (pebbles and flakes from metamorphic stone). The typological analysis of all these productions, particularly the male and female figurines, shows various styles highlighting that Ulug-depe has developed its own features and those which belong to other geographical facies (piedmonts and deltas) to which it was connected.

A. BRUSTOLON and Elena ROVA (*Università Ca'Joscari Venezia- Dipartimento di Scienze dell'Antichità e del Vicino Oriente*)

The Late Chalcolithic Settlement in the Leilan Region of Northeastern Syria: A Preliminary Assessment

The results of the analysis of the 1995-collected fourth millennium ceramic assemblages from the Tell Leilan Regional survey will be presented and discussed. The fine periodization adopted -based on well stratified ceramic sequences and recent comparative studies-, allows to follow settlement dynamics in detail, and thus to provide a model which may be tested and refined on material from elsewhere in the region. The first part of the period (LC 1-2) is characterized by a homogeneous distribution of village-sized settlements on the territory, apparently intensifying in the course of time. There follows, during the LC 3, a phase of incipient nucleation, followed, between the LC 3 and the LC 4, by the development of the first regional site-size hierarchy. The LC 4 phase is also marked by the intrusion of southern Uruk ceramics - whose meaning in this context will be also discussed- within the regional settlement system. Most settlements appear to have been abandoned by the LC 5 period; and occupation remains sparse until the first centuries of the third millennium B.C.

Angela BUSCH, Erika FISCHER and Dirk WICKE (*Johannes Gutenberg - Universität Mainz*)

Levantine bowls and ivories. New evidence for old dates

Die Entdeckung der Goldschale IM 105697 in der Königinnengruft II aus Nimrud schien einer der lange ersehnten Funde zu sein, die neue Erkenntnisse zur Datierung der "phönikischen" Metallschalen ermöglichen würden. Der stark ägyptisierende Dekor und Stil wiesen die perfekt erhaltene Schale als ein levantinisches Erzeugnis aus, welches für die gesamte Gruppe der aus Nimrud und dem Mittelmeerraum bekannten phönikischen Metallschalen einen terminus ante quem bieten sollte. Eine enge Verwandtschaft besteht zu der Berliner Schale VAM 14117, vermutlich aus Golgoi/Athienou (Zypern), nicht nur im Motiv, sondern vor allem auch im Stil. Gerade die große Nähe zu ägyptischen Schalen des ausgehenden Neuen Reiches bzw. der frühen 3. Zwischenzeit hatte eine lange Kontroverse um Herkunft und Datierung der Berliner Schale zur Folge. Im Vortrag wird für eine entsprechende Frühdatierung der Schalen, möglicherweise ins 10. Jh., argumentiert, und diese werden so zu frühen Beispielen des phönikischen Kunsthandwerks erklärt. Im Vergleich mit den v.a. aus Nimrud bekannten Elfenbeinen und Metallschalen der sog. "marsh-pattern-group" zeigen sich allerdings deutliche Unterschiede, welche Anlass für neue Perspektiven im Hinblick auf ihre Datierung, Lokalisierung und Interpretation dieser Fundgattungen geben. The discovery of gold-bowl IM 105697 among the finds of royal tomb II at Nimrud seemed to offer new evidence for dating the large group of "Phoenician" metal bowls. The strong Egyptian style and iconography of the perfectly preserved bowl vindicated at once its Levantine character and therefore seemed to provide a terminus ante quem basis for further discussion of the whole group of "Phoenician" metal bowls. There exists a particularly good parallel to the well-known silver bowl VAM 14117 in Berlin, supposedly from Golgoi/Athienou (Cyprus). Its strong Egyptian character and proximity to Egyptian bowls of the late New Kingdom Period and the early Third Intermediate Period argues for an early, possibly 10th cent. date for both bowls. Hence, they must be regarded as works of early Phoenician art. In comparison to the large group of "Phoenician" ivories and metal-bowls, mainly from Nimrud, there are striking differences and similarities. These give reason to reconsider their date and place of production, too.

Svend Aage BUUS (*Carsten Niebuhr Department*)

Household organization in Northern Mesopotamia during the EBA-Working with Space Syntax Analysis

It is my purpose to categorise different kind of household organisation reflected in the architecture of Northern Mesopotamia houses. The interpretations follow the study of three houses each representing the settlements of Tishritish, Chuera, and Melebiya, situated in different areas of Northern Mesopotamia. The work of Space Syntax Analysis makes possible to study spatial arrangements of these houses. The study follows the observation of three types of spatial arrangements: the circular, the tree-like, and the linear. Using the Space Syntax Method on these houses it is possible to observe the inside-outside relationship of space, and visualise the number of transitional rooms and the number of branches per transitional room. The results conclude in the classification of three kinds of organisation: Private Organisation, Collective Organisation, and Communal Organisation. The different kinds of organisation depend on the domestic functions and family types represented at each of the houses. The categorisation of household organisation is due to explain some of the factors that brought urban development in Northern Mesopotamia during this earlier period.

Ramón BUXÓ CAPDEVILA (*Museu d'Arqueologia de Catalunya-Girona*) and **Raquel PIQUÉ** (*Universitat Autònoma de Barcelona*)

Evidence for plant exploitation from two PPNB-PN sites of the middle Euphrates area: Tell Halula and Akarçay Tepe

Archaeobotanical results from Tell Halula (Siria) and Akarçay Tepe (Turkey), two aceramic and ceramic sites in the valley of the Middle Euphrates, are discussed. The finds are compared to the contemporary vegetation and we discuss the introduction of the new cultivars in the region. Carbonised plant remains indicate that since the first phases of occupation registered (PPNB mid, c. 7600 cal BC), the sites are completely agricultural focused in the cereal crops, leguminous and linen. Both sites see the appearance of the domestic crops such as emmer, naked wheat and barley, but wild-type cereals persist. Charcoal analyses from Akarçay Tepe and Tell Halula have provided data about the early expansion of oak and steppe wood in lowlands. Firewood collection was carried out mainly in the forest gallery, in all layers riparian taxa are the best represented. Exploitation of oak and steppe woods was more sporadic and less intensive; these taxa are better represented between the oldest layers. Changes in the firewood consumption could be the result of changes in vegetal landscape, due to the continuous exploitation of the resources from the surroundings or climatic factors. Further analyses are necessary in order to obtain more data about the vegetal landscape and its exploitation in the area.

Valentina CARACUTA, Girolamo FIORENTINO, Claudia MINNITI and Luca PEYRONEL (*Univesità degli Studi di Roma "La Sapienza"*)

Microstratigraphical and Bioarchaeological Strategies for analysing a Middle Bronze Age "Midden" at Tell Mardikh-Ebla (Syria)

The aim of this paper is to reconstruct the formation dynamics of a Middle Bronze age refuse midden that brought to light at Tell Mardikh-Ebla (Syria) in the 1999 and to analyse its bioarchaeological composition. Microstratigraphical and bioarchaeological strategies proved to be necessary for us to discriminate the micro-layers that have formed this midden and to value its quantitative and qualitative characters. The new stratigraphic observations revealed that the layers of burned hardened clay, ash and charcoal that in sequence form the archaeological deposit derive from firework activities lighted in situ. This sequence is many times repeated and reflect the particular formation dynamic of a physical alteration process of the deposit and the different force of gravity of its components. Together with these firework activities the microstratigraphical strategies allowed to know many internal refuse pits where pottery, animal and bothanic remains are chaotically stored. A preliminary analysis is given of bioarchaeological remains from this refuse midden, particularly about seasonality and variability for reconstructing domestic activities at Tell Mardikh-Ebla.

Corinne CASTEL (*CNRS, Maison de l'Orient et de la Méditerranée, Lyon*)

Al-Rawda and the Conquest of the Syrian Steppe at the end of the Early Bronze Age (last results)

After four seasons of excavations and geoarchaeological studies in the micro-region of Al-Rawda, Central Syria (between 2002 and 2005), we wish to present an overview of the main results of this French-Syrian expedition. Our paper will give the provisional chronological context of the occupation of the site of Al-Rawda, based on our current findings and also on the results of 14C dates. Then we will emphasize the urban nature of the site. In addition to the excavations, geomagnetic surveys conducted in 2003 and 2005, both on the site and in the lower town, indicate that Al-Rawda is not only a town, but a new built town: the geophysical map reveals a very regular urban plan with a very dense infrastructure organised around a radio-concentric road network. This radio concentric road network is the clear result of a planned urbanism. This new town has been founded in a marginal zone, on the very edge of Bronze Age settlement in the steppe lands. Therefore, this confirms the existence of a real conquest of the Syrian steppe at the end of the third millennium. Finally, the religious and defensive functions of the site are two issues that will be examined in more details in order to understand this urban creation, far from the dry farming zone and from the usually urbanized regions. In particular, we will present our very last results regarding the excavation of a religious complex: two temples facing a vast sacred enclosure with several cultic installations.

Alessandra CELLERINO (*Centro Ricerche Archeologiche e Scavi di Torino*)

Vetri ad intaglio dagli italiani di Forte Shalmaneser, Nimrud

Un piccolo numero di vetri venne rinvenuto durante gli scavi del Centro Ricerche e Scavi di Torino per il Medio Oriente e l'Asia che nella seconda metà degli anni '80 interessarono parte degli ambienti dell'ala sud occidentale di Forte Shalmaneser a Nimrud. Si tratta di frammenti di coppe emisferiche o ovoidali più profonde, fuse in stampo, probabilmente con il metodo della cera persa, e in seguito molate e polite per rendere particolarmente sottili le pareti, usufruendo di tecniche tipiche della lavorazione delle pietre, in particolare il cristallo di rocca, da cui i primi vetri trasparenti incisi prendono certamente ispirazione. I frammenti, in vetro trasparente chiaro o blu-turchese, presentano

una decorazione ad intaglio caratterizzata da semplici motivi geometrici, grooves and ridges o diamond band. Fra gli altri si distingue un frammento di particolare interesse, probabilmente appartenente ad una coppa profonda, decorato da un fregio, fra bande incise orizzontali, raffigurante un genio a lato di una palma carica di frutti. Si cercherà dunque di definire le origini del motivo decorativo e lo stile della rappresentazione e di collocare il frammento, sulla base dei paralleli individuati, all'interno di una data area di produzione.

Guillaume CHARLOUX (*Université Paris I Pantheon Sorbonne*)

Tell el-Fâr'ah during the Early Bronze Age Ib: Identification of a Social Entity in the Southern Levant

The EB I in Palestine appears to have been an important transition period during which populations from former chalcolithic chiefdoms evolved into urban society. The population of Tell el-Fâr'ah which is situated in the highlands of Samaria (West Bank) played undoubtedly a significant role in the social development of the region. Typological studies as well as technological examinations of the ceramic assemblage of its necropolis point out to a very innovative material culture during the Early Bronze Age Ib, all while keeping numerous relationships with other sites in the country. This short lecture intends to figure out the character of this social entity, its role, and its transformation into the EB II urban uniformity process.

Nicole CHEVALIER (*Musée du Louvre, Département des Antiquités Orientales, Paris*)

Fouiller un palais assyrien au XIX^e siècle: Victor Place à Khorsabad

En 1851, le parlement vote des crédits afin que Victor Place, récemment nommé consul de France à Mossoul, reprenne les travaux inaugurés dix ans plus tôt par Paul-Emile Botta sur le site assyrien de Khorsabad. Plus encore que son illustre prédécesseur, Place semble peu formé pour entreprendre de telles recherches dans une discipline où tout reste à connaître. Toutefois avec une volonté remarquable il s'initie à tout ce que l'on sait alors sur les Assyriens afin de remplir au mieux le programme fixé par l'Académie des inscriptions et belles-lettres. Conscient de ne pas être un «antiquaire», c'est avec un soin scrupuleux qu'il rend compte aux savants français de l'avancement de ses travaux utilisant le plus possible cette nouvelle technique qu'est alors la photographie pour illustrer ses nombreux rapports. Ainsi, malgré les difficultés que représente le dégagement d'un bâtiment construit en briques crues, il entreprend de ressusciter «un palais assyrien». Toutes ses expériences acquises sur le terrain l'inciteront à développer un certain nombre de considérations méthodologiques

Lucia CHIOCCHETTI (*Università di Torino, Dipartimento di Scienze Antropologiche, Archeologiche Storico-Territoriali*)

The pottery of Nimrud from the Neo-Babylonian levels, some suggestions on a key moment of Mesopotamian history

Some considerations on the pottery found during the Italian excavations in Nimrud in the years 1987-1989. The paper is particularly concerned with the pottery from levels 5a, b, c, dated by a cylinder seal with the symbol of Nabu and by the comparison with the pottery found in the Neo Babylonian levels of Tell Barri-Kahat, in Syria. Some observations will also take into account both evolution and continuity from the Neo Assyrian vessel shapes coming from the Italian excavations in the external walls and in one room in the south-west area of Fort Shalmanezar.

Lee CLARE (*Institute für Ur-und Frühgeschichte, Köln Universität*)

The Response of Neolithic Communities in the Near East and Anatolia to Climatic Stress at the end of the 7th Millennium BC

This paper focuses on the consequences of a period of abrupt climatic change and fluctuation upon Neolithic communities in the Near East and Anatolia at c. 6200 calBC. The so called 8,2 ka calBP Event, which is attested in an ever increasing number of global palaeoclimatological records, led to increased aridity and a drop in average temperature. Although it is difficult to reconstruct exact climatic conditions, it is proposed that a number of archaeological sites in both Anatolia and the Near East have delivered evidence for both stress and adaptation within their Neolithic communities at this time. Are such developments attributable to the influence of the 8,2 ka calBP Event? This paper provides a summary of the evidence.

Xavier CLOP GARCÍA (*Universidad Autónoma de Barcelona*)

Estudio petrológico de las cerámicas de tell Halula (valle del Éufrates, Siria): Primeras aproximaciones.

Los estudios de caracterización petroarqueológica constituyen una eficaz vía de investigación para conocer y profundizar múltiples aspectos de las formas de organización de las comunidades humanas del pasado a partir de la determinación de sus estrategias de gestión de las materias primas de origen mineral. En el marco de los trabajos que desarrolla la Misión Arqueológica Española en Tell Halula en torno a las primeras comunidades campesinas del valle medio del río Éufrates, hemos desarrollado el estudio de caracterización petroarqueológica de diferentes materias primas de origen mineral utilizadas por aquellas comunidades. En este trabajo expondremos los resultados conseguidos hasta el momento en el estudio petrográfico de los productos cerámicos documentados en Tell Halula y que permiten abordar diversas cuestiones en torno a su procedencia, proceso de fabricación, etc. y plantear diversas vías de discusión sobre un amplio abanico de aspectos de los productos cerámicos utilizados en este Tell durante las primeras etapas del Neolítico tanto a nivel sincrónico como a nivel diacrónico.

Sarah COLLINS (*British Museum*)

The British Museum Excavations (1998 – 2005) in Sidon, Lebanon

In 1998 the Directorate General of Antiquities of Lebanon authorized the British Museum to begin excavations in the city of Saida. This has been a unique opportunity to systematically excavate ancient Sidon, so well known historically from ancient texts but archaeologically unexplored due to the densely built up modern city. Under the directorship of Dr. Claude Doumet-Serhal excavation has for the first time been revealing the continuous stages in the development of the city from the third millennium to the first millennium BC including Early Bronze Age domestic settlement, Middle Bronze Age burials and monumental construction of the Middle and Late Bronzes ages. Associated with these a remarkable range of material culture has been discovered, including epigraphic evidence as well as a continuous sequence of stratified ceramic material vital for establishing a ceramic typology for Lebanon and understanding its relationship with the surrounding regions. A summary of some of the discoveries from the first seven seasons of excavation will be presented.

Rachel CONROY (*University of Manchester*)

Container Culture and Consumption in the Neolithic: Broadening our perception of the inception of ceramics

Any attempt to investigate the underlying mechanisms behind the adoption of pottery must take into account other vessel types and related traditions of manufacture. I will give a summary of the evidence for the manufacture and use of non-ceramic containers prior to and after the introduction of ceramics, as well as a discussion of other areas of manufacture that appear to be intrinsically linked to their production. Within Near Eastern archaeology, the different elements that together form the material culture assemblage of a site are almost exclusively discussed in isolation. I will therefore bring these elements together by discussing the relationship between ceramics and vessels of alternative materials in a holistic manner. This will centre upon their functional potential and the social contexts within which they may have performed. This will provide a valuable insight into how different vessels may have been perceived by the people who used them and how this may have been affected by the introduction of pottery. It will also elucidate the question of the initial role of early ceramics and why they began to be used if alternatives in stone, plaster, wood and basketry were being utilised. This research summarised in this paper was undertaken as part of my recently completed PhD thesis at the University of Manchester. The geographical focus is southeastern Turkey, northern Syria and northern Iraq.

Lisa COOPER (*University of British Columbia, Vancouver*)

Heterarchy or Hierarchy? A Consideration of Social and Economic Complexity in the Syrian Euphrates Valley during the Early Bronze Age

Considerable emphasis has recently been placed on heterarchical forms of social and economic organization which operated within ancient complex societies around the world, thus forcing one to re-consider the extent to which hierarchically structured societies dominated by elites and regional places actually existed in the past. The heterarchical model can be applied to a number of areas of the ancient Near East, including the northern Euphrates Valley of Syria during the third millennium BC. Here, tribally-based, corporate political and social structures continued to persist even during periods of urban development and the growth of elites who acquired luxury objects and made highly visible displays of wealth and status. In addition to simply describing the manifestations of this heterarchical arrangement, this paper will explore some of the factors that produced this distinctive form of complexity. In particular, it will focus on the unique environment of the Syrian Euphrates, which, while preserving the tribally-based pastoral social structure of the population, nonetheless encouraged the acquisition of wealth through long-distance communications and trading

opportunities. Archaeological evidence, in the form of settlement patterns, public architecture, craft specialization, cemeteries and funerary practices will help to support this proposed model of socio-economic complexity.

Costanza COPPINI (*Dip. di Scienze dell'Antichità "G. Pasquali", Università di Firenze*)

Mitannian pottery from Tell Barri (Syria): The Common Ware assemblage

In the area G excavation at Tell Barri - the ancient Kahat, where there was the Storm God temple, as attested by cuneiform literature, at least since XVIII century b.C. - the stratigraphic sequence including layers from 28 to 16, is assigned to the Mitannian period (Late Bronze Age I); from this comes an impressive quantity of pottery. This communication presents results from the analysis of Common Ware assemblage, concerning the whole period. The study about Mitannian Common Ware assemblage permits to identify evolutions in vessels' morphology and form: therefore, we may distinguish different phases. The first phase is particularly interesting: the ceramic assemblage isn't imputable to LB I yet, but it keeps features from Middle Bronze Age II, although it starts coming off from this one; the area G unbroken sequence permits to identify characteristics concerning production's continuity. Successively, vessels are compared with those from northern Mesopotamian sites: by comparisons, we try to give these a chronological subdivision. To conclude, we deal with the distribution's question of this ware, which may show wide - ranging phenomena.

Eric COQUEUGNIOT (*Maison de l'Orient et de la Méditerranée, Lyon*)

Nouvelles découvertes dans le Néolithique précéramique de Syrie: Dja'de el Mughara (Euphrate, 9^e mill. cal. BC)

Alors que sur l'ensemble du Proche-Orient, les sites du 9^e millénaire (cal BC) sont très rares et présentent une occupation discontinue, la richesse des niveaux mis au jour à Dja'de, tant pour ce qui concerne les techniques (outillages...) que pour les indices relatifs à l'économie alimentaire, aux pratiques funéraires, à la paléontologie de l'occupation, à l'organisation sociale et à l'art (peintures murales), donne une vision renouvelée des modes de vie et des évolutions fines au cours d'un millénaire. Les études en cours à Dja'de permettent d'envisager avec précision la question relative à la nature des passages entre PPNA et PPNB ainsi qu'entre «PPNB ancien» et «PPNB moyen» (ruptures ou évolutions continues?). Avec trois phases principales, Dja'de permet de mettre en évidence une évolution progressive, graduelle, depuis le début du 9^e millénaire (phase DJ I) à la fin du processus de domestication (phase DJ III), c'est-à-dire de la fin du PPNA à la fin du PPNB ancien. Nous avons en effet un continuum évolutif sans rupture ni palier majeur, et non pas un changement de culture comme pourrait le laisser supposer le changement de dénomination entre PPNA et PPNB. While Near Eastern 9th millennium cal. BC sites are extremely rare and present a discontinuous occupation, the wealth of levels discovered at Dja'de, either with regard to the techniques (tools, architectures...) or for data relative to alimentary economy, funerary practices, paleontology of settlement, social organization and art (wall paintings), gives a renewed vision of ways of life and fine evolutions in the course of one millennium. Studies in process at Dja'de allow to discuss the nature of transitions between PPNA and PPNB and between Early PPNB and middle PPNB (breaks or continuous evolutions?). With three main phases, Dja'de allows to enlighten a progressive and gradual evolution, from the early 9th mill. (DJ I) to the end of the domestication process (DJ III), ie from the end of PPNA to the end of early PPNB. We have indeed a continuum, without break or major gap, instead of a change of culture, as implied by the change of denomination between PPNA and PPNB.

Joaquín CÓRDOBA ZOILO (*Universidad Autónoma de Madrid*)

Al Madam 2003-2006. Recent Discoveries

Report of findings of the last seasons in al-Madam (Sharjah, United Arab Emirates): Settlement, Mudbrick Working Area and Falaj of the Iron Age.

Güner COŞKUNSU (*Harvard University*)

The Lithic Assemblages of Mezraa Teleilat, a Neolithic Village Site in the Euphrates Valley, SE Turkey

Understanding the nature of the transition from the Pre-Pottery Neolithic B (PPNB) to the Pottery Neolithic (PN) is an unsolved problem in archaeology of the Near East. My paper will focus on investigating the socio-economic structure of Pre-Pottery Neolithic (PPN) and Pottery Neolithic village communities at the site of Mezraa Teleilat through analysis of the lithic assemblages and their distribution across the site. Mezraa Teleilat is a well-excavated mound where large exposures allow us to evaluate the PPN and PN occupations and to trace changes in material culture through a series of well-preserved architectural levels uncovered using careful recovery and recording techniques. Given these characteristics of the site, the lithic assemblage of Mezraa Teleilat is worthy of study and should enable me to shed some light on this poorly known transitional period of Near Eastern prehistory.

Karina CROUCHER (*University of Liverpool*)

Figuring out Identity: Figurines and The Body in the Ancient Near East

Through figurine manufacture certain aspects of identity can often be revealed to us. Figurine manufacture is arguably one of the oldest art forms, with the appearance of figurines dating back many millennia into the past. From the Early Historic periods anthropomorphic representations in the form of sculptures and reliefs provide valuable insights into many aspects of life, including warfare, ceremonial and religious life, and portrayals of dress and appearance. In earlier periods figurines can provide us with information about gender, personhood, bodily decoration and manipulation. Through examining particular case studies from the PPNB through to the 'Ubaid periods different characteristics of figurines are discussed, revealing information about how people in the past treated their bodies, including cranial modification and bodily decoration, and what insights this may give us about how bodies were perceived of.

Flaminia CRUCIANI

The attributes of Ištar in the Old Syrian glyptic and the Mesopotamian literary tradition

In this paper the iconography of the goddess Ištar will be taken into consideration, as it is represented in the Old Syrian glyptic of the first half of the II Mill. BC. In the first part the attempt will be done to make clear the iconographic differences between the representation of the goddess and the one of her possible *nadītu*. In the second part the elements and attributes of her costume which characterize her iconography will be analyzed: the different mantles, the various hair dresses, the belts, the curved tip shoes and the necklace. A comparison will be proposed between these elements, typical of the iconography of the Old Syrian goddess, and the attributes which Inanna / Ištar must undress while entering the gates of the Netherworld in the famous Mesopotamian text of the *Descent of Inanna* (Ištar). From this comparison it seems possible to infer that the iconographic image worked out in the Old Syrian Period –which is very different from the one of the Old Babylonian tradition– was elaborated also on the grounds of the Mesopotamian myth, which most probably must have been known to the Syrian cultural milieu.

Anacleto D'AGOSTINO (*Dipartimento di Scienze dell'Antichità "G. Pasquali", Università degli Studi di Firenze*)

Mitannians and Middle-Assyrians: Changes and Links in Material Culture at Tell Barri and in Syrian Jazirah during the End of 2nd Millennium BC

The aim of this paper is to investigate some issues related to the ceramic production and cultural development happened in the Syrian Jezirah region during the second half of the 2nd millennium BC. This period is characterised by the collapse of the Mitanni kingdom and the almost contemporaneous arise of the Middle-Assyrian power. As known from previous literature, the pottery typology produced during the Mitanni period is quite different from the later in Middle Assyrian period, in morphology and technology. More specifically, the site of Tell Barri, by the light of a continuous stratigraphy, provides us with some important information in terms of both architectural and pottery data regarding the chronological sequence here considered. Therefore, starting from an analysis of the pottery assemblages, yet unpublished, the paper will first explore the role of Tell Barri as part of the Mitanni kingdom, and, then, will analyze the results of the Middle Assyrian cultural influence. In order to outline the differences between the Mitannian and the Middle-Assyrian production, a detailed analysis of the Late Bronze Age archaeological corpus from Tell Barri, as well as from others sites in the Syrian Jezirah region, will be the focus of this contribution. In conclusion, the social and cultural value of this sudden change in pottery production will be underlined and interpreted.

Anacleto D'AGOSTINO, Stefano VALENTINI (*University of Florence - Italy*) and **Nicola LANERI** (*IsIAO, Rome – Italy*).

Archaeological works at Hirbemerdon Tepe, Turkey: A preliminary report for the first three seasons

Hirbemerdon Tepe is a 10.5 hector site located along the right side of the upper Tigris river valley in southeastern Anatolia (Turkey) about 40 km east of Bismil in the Diyarbakir province. Even though archaeologists have investigated the site only during the last three years, the preliminary results of the working activities demonstrated that the site was an important settlement during the Middle Bronze age, a period that corresponds to the first half of the 2nd Millennium BC. Although the increased number of archaeological activities along the Tigris river in southeastern Anatolia have brought to light numerous structures associated with the material culture from late 3rd to mid-2nd Millennium BC, this chronological period has not been clearly linked to other contemporaneous phases within a broader Ancient Near Eastern historical scenario. Furthermore, the archaeological assemblages consistently feature a characterizing local ceramic production, the so-called Red Brown Wash Ware, usually found in contexts associated with materials similar to those available from contemporaneous periods in northern Mesopotamia and Syria, such as Stone Ware, Khabur Ware, Canaanian blades, etc. Moreover, several elements of this local production recall examples available from 3rd Millennium contexts in central and northeastern Anatolia, such as the presence of decorated andirons as well as

construction techniques. With this geographical and chronological framework in mind, the site of Hirbemerdon Tepe clearly represents an example of a mid-sized ancient settlement that played a fundamental role in connecting the northern Mesopotamian communities to those living in central and northern Anatolia mostly during the end of the 3rd and the first half of the 2nd Millennium BC.

Kate DA COSTA (*University of Sydney*)

The production of ceramic lamps in the Byzantine period in Palaestina and Arabia: Chemical characterization of fabrics

There are far more lamp types than manufacturing centres known for the Byzantine period (4th – early 7th century AD) from the Roman provinces of Palaestina and Arabia. A chemical analysis project, using PIXE/PIGE, was used to characterise 88 lamps from seven sites in Jordan. The data show that different stylistic types are made from chemically distinct fabrics. These results are combined with a re-examination of an earlier PIXE/PIGE study of clays from Pella in the north Jordan Valley and literary references to pottery leases in antiquity to illustrate a complex and highly regionalised manufacturing sector.

M. Michèle DAVIAU (*Wilfrid Laurier University*)

Black Slipped and Burnished Pottery a Special 7th Century Technology in Jordan and Syria

Black-burnished pottery is a unique fabric with a specialized surface treatment that can be assigned almost exclusively to the 7th century. In his classic study of pottery from Transjordan, Dornemann (1983) recognized the appearance of a fast wheel that allowed for the production of fine wares and certain forms that required expert skill. One result of this technology was the decline of red-slipped pottery and the development of light cream ware and black ware. At Tall Jawa (Jordan), black slipped and burnished pottery reached its zenith in Stratum VII (late 8th – 7th c. BC; Daviau 2003). This black slipped pottery has a dark gray fabric with a slightly darker slipped surface. The distribution of black-burnished pottery appears to be limited to the territory of the Ammonites in Transjordan, certain Phoenician sites, and sites in Syria. In certain instances, bowl forms from Tall Jawa suggest strong Assyrian influence and have close parallels with vessels from Nimrud that appear in a highly polished dark gray ware and with the grey wares at Tell Ahmar. This paper will investigate the techniques used to produce this pottery, the forms in which this refined fabric appears, and its distribution in Jordan and Syria.

Lidewijde DE JONG (*Stanford University*)

Early Explorations in Roman Syria

The early 20th century witnessed large-scale excavations or ‘big digs’ aimed at uncovering Roman cities in the Near East. These excavations exposed and restored monumental architecture, such as tower-tombs at Palmyra (1917) the colonnaded road at Apamea (1928) or the well-preserved paintings at Dura Europos (1922). These projects combined the scientific and romanticizing aspects of archaeology, being part of the professionalization of the archaeological discipline and at the same time appealing to a sense of adventure, embodied for instance by the warrior princess Zenobia of Palmyra. This paper focuses on the example of Roman Syria, where early archaeologists were exploring the Roman remains especially after breakdown of the Ottoman Empire. After WWII and the subsequent independence of Syria however, study of the Roman period, in contrast to research on other periods, came almost to a complete standstill. For this paper I will trace the history of these early explorations and the decline of research on Roman Syria. I will argue that the research questions, disciplinary divides and changing ideas about the Near East and its role in western society, have pushed the study of Roman Syria to a marginal spot, outside of both Classical and Near Eastern archaeology.

Fulya DEDEOGLU (*Universitesi Edebiyat Fakültesi Arkeoloji Bölümü*)

Cultural Transformation and Settlement System of Southwestern Anatolia from Neolithic to LBA: A Case Study from Denizli/Çivril Plain

Although western Anatolia is well known from ancient Greek States, many different cultures were formed in this region as well. However, the archaeological investigations have not been satisfactory to define the prehistoric cultures. What's more, insufficient information stems from not only the lack of archaeological investigations, but also the investigations in question have only been focused on process of cultural history in western Anatolia. Recent investigations have necessarily appeared to build upon landscape data and settlement systems in order to understand ancient cultures apart from the study of material culture. This approach, requiring concentration not on the settlement itself, but rather regional evaluations, contributes to make an understanding about the feedback mechanisms of social policy and economical structures of cultures. Since 2003, the systematic survey on Çivril Plain in southwestern Anatolia has been executed for this aim. The purpose of this paper is to describe and analyze the cultural transformation

and settlement system of southwestern Anatolia by using data from Denizli Çivril Plain as a key region. To reach this aim, I use the data from new evidence, provided from Çivril Survey Project and Beycesultan Excavations.

Chiara DEZZI BARDESCI (*Faculty of Architecture, Politecnico, Milan*)

A propos des installations dans la cour du temple ovale de Khafajiah

La présence d'installations parallélépipédiques est un des éléments caractérisant les temples de la Diyala au courant du Dynastique Archaïque. Ces installations peuvent se trouver dans des espaces couverts et dans des cours. Depuis leur découverte, elles sont considérées comme des tables d'offrandes et les fouilleurs indiquent le temple ovale de Khafajiah comme le contexte dans lequel elles furent retrouvées dans le meilleur état de conservation. La publication finale fait état d'un grand nombre d'installations, parmi lesquels la majeure part se localise dans la grande cour. Partant de l'analyse du matériel publié il est possible d'entrevoir une distinction plus nette entre ces installations, ainsi que d'avancer quelques propositions étroitement liées à l'organisation du volume du grand complexe religieux.

Katleen DECKERS (*University of Tübingen, Ältere Urgeschichte und Quartärökologie*)

Fourth to second millennium BC environmental contexts for archaeological sites in the Upper Khabur Area, NE Syria

New anthracological and geomorphological research has indicated that the Upper Khabur Basin has undergone severe environmental changes relatively recently through extensive water use and deforestation which has impacted the fluvial systems and causes the region to appear like an arid steppe during the summer. This paper will focus on the environmental evidence of the fourth to second millennium BC. Recent anthracological research from third to second millennium BC Tell Mozan shows a dominating presence of deciduous oak charcoal in most of the samples. Therefore oak park woodland probably had a more southwards distribution during the Early Bronze Age than today. That oak was probably locally present is supported through the find of charcoal from small branches and acorns. Some changes are observable in the relative proportions of charcoal taxa from the Middle Bronze Age onwards. A denser tree cover may have resulted in steadier, meandering, perennial flow, evidence of which has been found in Jaghjagh sediments from the mid 4th to mid 3rd millennium BC. The Jaghjagh presently runs dry during the summer south of Qamishli. However in the absence of extensive water use and damming, it would be a perennial stream. Some changes have been observed in the relative charcoal proportions from Tell Mozan after 2000 BC and in the sediment record from the Jaghjagh post-dating 2500 BC and will be discussed in the light of the climatic drying towards the end of the 3rd millennium BC.

Katleen DECKERS (*University of Tübingen, Ältere Urgeschichte und Quartärökologie*)

Archaeological Sites in their Environmental Context in the Upper Khabur Basin of NESyria: Anthracological and Fluvial Geomorphological Results

Relatively recently, the Upper Khabur Basin has undergone severe environmental changes through extensive water use and deforestation which has impacted the fluvial systems and causes the region to appear like an arid steppe during the summer. This picture is misleading when we try to place archaeological sites within their environmental context. New anthracological research at Tell Mozan (3rd/2nd millennium BC) and Abu Dhuwil (3rd century AD) and 11th century textual evidence from Nisibis, suggest the presence of an oak park woodland in the Upper Khabur region up to the 11th century AD. A denser tree cover may have resulted in steadier, meandering, perennial flow, evidence of which has been found in Jaghjagh sediments from the mid 4th to mid 3rd millennium BC and possibly from the 5th century BC. The Wadi Khanzir fluvial sediments reflect more the flashy intermittent regime of this stream – like it still is today-, with flashflood evidence dating to the first half of the Holocene and probably dating to approximately 400 AD or later. Possible soil formation in fine grained fluvial sediments from the Wadi Jarrah between 1200 and 600 BC might relate to drier climatic conditions. The sedimentation between 600 and 300 BC was probably not related to human impact on the landscape.

Carmen DEL CERRO LINARES (*Universidad Autónoma de Madrid*)

Vida y sociedad de los habitantes de al Madam (Emiratos Árabes Unidos). Estudios interdisciplinarios de una aldea de la Edad de Hierro y su entorno

Los estudios interdisciplinarios de la región de al Madam (Sharjah, EAU), que de forma continuada ha llevado a cabo la Misión arqueológica de la Universidad Autónoma de Madrid desde 1994, ha permitido la reconstrucción de la forma de vida y sociedad de los habitantes del oasis de al Madam durante la Edad del Hierro. La inclusión de topógrafos, paleobotánicos, zooarqueólogos, geólogos -entre otros- en el equipo arqueológico desde sus inicios, nos ha permitido reconstruir el poblado y la vida de los habitantes de al Madam, así como sus casas, estilos de vida, tipos de trabajos realizados en el área, alimentación, comunicaciones y movimientos, la búsqueda de materiales y especialmente de agua, y sucintamente su mundo funerario. La Edad de Hierro en los oasis del piedemonte de las Montañas de Omán

puede considerarse desde un punto de vista distinto al que conocíamos desde los poblados de los oasis de al Ain, con sus magníficos palmerales y sus recursos acuíferos. Los habitantes de al Madam se enfrentan a un medio más árido y a palmerales más pequeños, pero conocen perfectamente el entorno de su aldea y lo explotan sacando un beneficio que nos ha llegado a sorprender.

Alessandro DI LUDOVICO and Marco RAMAZZOTTI (*Università di Roma "La Sapienza"*)

A Grammar for Ancient Paintings: an Experimental Analysis on the Decorative System of «Building FF2» (EBIVA), Tell Mardikh – Ebla

The geometric decorated plaster fragments recently discovered in the Building FF2 at Tell Mardikh – Ebla can be means to understand some logic rules which were followed by ancient artists in composition processes. In fact, the hypothetical reconstruction of the pattern organization has necessarily to deal with the compositional techniques and with the organization of the available plastered space. The rules and the patterns that can be singled out are the fundamental expressions of a figurative model which depicts a peculiar grammar for the EBIVA geometric decorative system.

Gian Maria DI NOCERA (*Dipartimento di Scienze Storiche Archeologiche Antropologiche dell'Antichità, Università degli Studi di Roma "La Sapienza"*)

Settlements, Population and Landscape on the Upper Euphrates between V and II Mill. B.C. Results of the Archaeological Survey Project 2003-2005 on the Malatya Plain

The archaeological survey of the territory of Malatya (Upper Euphrates, Turkey), is carried out by the Department of Historical, Archaeological and Anthropological Sciences of the University of Rome “La Sapienza”. Aim is that of identifying, from an archaeological point of view, the changes in the life style and in the social and economic relations in the region, in a period going from the V to the II millennium BC, in connection with the complex events and radical changes that are documented by the excavation of the site of Arslantepe, the land mark of the region. The results obtained until today have evidenced different typologies of site occupation in the Malatya territory. Our intention was to identify the relationship between stability and mobility in terms of the settlement models through the different ways of exploiting the local resources.

Silvana DI PAOLO (*Istituto di Studi sulle Civiltà dell'Egeo e del Vicino Oriente – CNR, Roma*)

Between Trip and Exploration: The First Archaeological Surveying in the Southern Syria (Protagonists, Purposes, Methods)

The birth of an archaeological interest for the Southern Syria area in the XIX-XX centuries was not only due to scientific reasons, but also to his particular geographical position between the Lebanese coast and the northern limit of Palestinian region. This fact influenced the research methods and the archaeological activity in this area

Rita DOLCE (*Università di Palermo - Missione Archeologica a Tell Mardikh-Ebla*)

Human Beings and Gods at Ebla (in the Early and Old Syrian Periods). Some Suggestions

The archaeological and textual documentations of Early- and Old Syrian Ebla both show two symmetrical and opposite dyscrasias: during the EBIVA Period the evidences arisen from the excavations pertain almost exclusively secular buildings and valuable works related to the palatine culture of the Royal Palace G. Very poor and scanty are instead the data about holy places and religious monuments, even if the main importance of the pantheon of Ebla as well as of the worship and the ritual practices is clearly revealed by the textual documents of the State Archive. On the contrary, the reconstructing urban landscape of the Old Syrian town testifies many places and monuments relating to the religious domain (which have been attributed to specific divinities by means of well-founded interpretations) while the epigraphic documents are very few and in any case silent regarding to the religious establishment of the “Ebla of Ishtar”. Starting from these remarks some suggestions will be put forward on the identity and role of people at Ebla during its long-lasting life, looking at the development of the inner religious sphere.

Rita DOLCE (*Università di Palermo - Missione Archeologica a Tell Mardikh-Ebla*) **and Lorenzo VERDERAME**

The Royal Inscriptions of the III Mill.: Epigraphic and Archaeological evidences

The aim of this paper is to investigate the relationships between text (format and content), objects, and original destination and position of the III mill. royal inscriptions, trying to outline a logic, a distribution, and an evolution of

these variables. As a case study we focused our attention on the objects found in the level VIIB of the Temple of Inanna in Nippur.

Rudolph H. DORNEMANN (*American Schools of Oriental Research, Boston University*)

Status Report on the Early Bronze Age IV Temple in Area E at Tell Qarqur in the Orontes Valley, Syria

A broad range of interesting materials have been excavated in an Early Bronze Age building in Area E at Tell Qarqur since 1997. Not until the 2004 season could the building safely be identified as a Temple, dating to the last centuries of the third millennium BC. So far we have exposed a portion of the northern wall of the building and portions of rooms associated with that wall in several phases. Continued exposure of the building to the south is proving to be a slow process, since in this area it lies under substantial Iron Age II and later building remains. Further excavation will be needed before we will be able to articulate a coherent architectural plan. It is useful however to review the evidence at hand at this point. This paper will examine the inventories present in several phases of this temple and review comparative materials excavated in Syria and Palestine. Since only a few third millennium BC temples have been excavated so far, our finds provide important insights about temple architecture and furnishings.

Claude DOUMET-SERHAL (*British Museum, University College, London*)

The MBI/IIA at Sidon: Burials, pottery and artefacts

This paper discusses the main features of the MBI/IIA at Sidon. Immediately above the third millennium levels at Sidon there was a layer of sand varying in depth from 90 cm to 140 cm. It was extremely fine and had been brought to the site from the nearby seashore. So far sixty burials have been excavated at Sidon, some of which were in this sandy layer. It is important at this point to underline that this sand does not represent a gap in development but rather a change of function. In the 19th century BC MBI/MBIIA contemporary with Egyptian 12th Dynasty the site becomes a necropolis and again some time in the 18th century BC contemporary with the Egyptian 13th Dynasty onwards four occupation levels have been identified which also contained burials.

Kim DUISERMAAT (*Netherlands Institute for Academic, Damascus / Leiden University*)

Making Pots for the Abarakku. The Organisation of Pottery Production at Middle Assyrian Tell Sabi Abyad, Syria

The excavations at the Middle Assyrian dunnu of Sabi Abyad, Northern Syria, have uncovered the remains of at least two pottery workshops and numerous pottery kilns. In the paper, I will present the archaeological evidence for pottery production, including the layout of the workshops and small finds like unfired pottery and potter's tools. Moreover, I will try to reconstruct the organisation of pottery production and the position of the potter at the dunnu. The potter's craft is hardly ever mentioned in texts, so we have to rely mainly on archaeological evidence. In my PhD thesis on the topic, I take a multi-dimensional approach taking as much and as varied data as possible into consideration. This includes aspects of different theoretical approaches as well, including "ceramic ecology", the "chaîne opératoire" and the "Leiden approach" to the reconstruction of the ceramic craft.

Sally S. DUNHAM (*Leiden University*)

Personal Ornaments and Grave Gifts from Tomb 4 at Umm el Marra

In 2004 the Johns Hopkins University/ University of Amsterdam Expedition to Umm el Marra, Syria excavated a large elite tomb of the Early Bronze Age. This tomb was quite undisturbed and contained most of its original furnishings. This paper will present the personal ornaments and non-ceramic grave goods with a view to elucidating the status and cultural relations not only of the tomb's occupants but also the Umm el Marra community as a whole.

Phillip C. EDWARDS (*La Trobe University*)

Symbolic dimensions of material culture at Wadi Hammeh 27, Jordan

This paper explores the dual nature of dwellings at the Natufian site of Wadi Hammeh 27 in Jordan as residences for the living and as repositories for the dead. In some cases, the site occupants maintained long-term memories of antecedent burials, but in others, mortuary remains seem to have been summarily abandoned on occupied floors. Natufian houses were by no means the first to incorporate human burials in residential space, but they do indicate initial trends in the development of the concept of property tenure. The symbolic dimensions of Neolithic life have recently commanded considerable attention as a consequence of the discoveries of elaborate symbolic paraphernalia at various sites across the Levant. Evidence for Natufian symbolic behaviour is rather different, and indeed, much more subtle. At Wadi Hammeh 27, as at other Natufian sites, there exists intriguing evidence to indicate that utilitarian

objects were imbued with special significance by their makers, and that various features and artefacts were deliberately fashioned, arranged, and even colour-coded according to a series of enigmatic principles.

Alejandro EGEA VIVANCOS (*Universidad de Murcia*)

Artesanos de lo rupestre en el alto Éufrates sirio durante época romana

Los trabajos de prospección arqueológica extensiva que el Instituto del Próximo Oriente Antiguo-Universidad de Murcia ha llevado a cabo en el Alto Éufrates sirio sacó a la luz una ingente cantidad de información acerca del poblamiento romano y bizantino de la región. Especialmente interesante son las miles de obras de carácter rupestre que inundan las laderas de las sierras ribereñas del río: Canteras, hipogeos, acueductos, pozos, silos, monasterios, iglesias, etc. En este trabajo no sólo queremos presentar las características generales de estas labores de cantería, haciendo un repaso también a las distintas canteras localizadas en la región, sino que pretendemos detenernos en la figura de los canteros. Todas estas obras fueron talladas durante siglos en la región. ¿Quiénes fueron los artífices de esta ardua tarea? ¿Pudo darse una cierta especialización artesanal entre los excavadores de hipogeos? Las condiciones de vida de los artesanos de lo rupestre, canteros al fin y al cabo, debían ser extremadamente duras. Estas condiciones debían agravarse en el caso de los talladores de tumbas.

Jesper EIDEM (*CNA, University of Copenhagen*)

Aushariye: A Fortress on the Euphrates

Since 2000 a Danish archaeological expedition has conducted excavations at the site of Tell Aushariye, on the Euphrates in northern Syria. The site has levels ranging from the end of the EBA to the late Iron Age, and can with varying confidence be identified with fortresses in the region attested in written sources from the Bronze Age (Dur-Sumu-Epuh) and Iron Age (Pitru/Ana-Assur-uter-asbat). The paper will provide an introduction to the site and a presentation of the most important recent results of the excavations.

Berthold EINWAG

Fortified Citadels in the Early Bronze Age? New Evidence from Tall Bazi (Syria)

Heavily fortified citadels situated on natural hills in the Euphrates valley have been assumed to have been a Late Bronze Age phenomenon, perhaps initiated by Hittites. The results of the 2004/2005 excavation campaigns in the Citadel of Tall Bazi, however, indicate that such hilltop citadels existed at a much earlier date. Here, a unique building dating to the Early Bronze IV period with walls preserved to a height of more than 4 meter has been excavated. It has a central chamber-gate flanked by triangular niches and is situated on a mountain spur at the fortification's weakest point, where a ditch has been dug separating the Citadel from the neighbouring plateau. The defensive system of the Citadel is formed by circular walls at different heights. The uppermost of these walls encircling the Citadel is connected with this EBA building. Therefore an Early Bronze Age date for the whole concept of the Citadel has to be postulated. In this paper I will discuss, how this affects our knowledge of EBA architecture and of fortified settlements in north-west Syria.

Geoff EMBERLING (*Oriental Institute, Chicago*), **Helen MCDONALD**, **Jill WEBER** (*University of Pennsylvania*) and **Henry WRIGHT**

After the Empire? Domestic Economy and Craft Production in the Late 3rd Millennium BC in Area TC, Tell Brak, Northern Mesopotamia

Excavation in 2002 and 2004 at Tell Brak recovered a roughly built complex of rooms and associated courtyards dating to the late 3rd millennium BC. The structure, excavated over an area of more than 100 square meters and made of pisé, contains evidence of both domestic activities and more specialized craft production, including the manufacture of arrowheads and arrow shafts. The occupants of the structure also participated in an administered economy as attested by seal impressions found on floors of the building. The dating of the building within the later 3rd millennium BC of Northern Mesopotamia poses some problems. The ceramics for the most part suggest a post-Akkadian date as previously defined at Brak, whereas seal impressions are early Akkadian in style. These issues will be discussed.

Astrid EMERY (*University of Paris, Sorbonne; CNRS UMR*)

Metrological techniques in architectural craftsmanship in the late 4th millennium BC

For a long time, early building techniques have only been considered under the scope of building material. Studies published during the past decades have shown that much more was to be understood about the layout principles that underlie the building process. Fourth-millennium architecture is particularly well adapted to this kind of investigations because of the large-scale use of a characteristic type of plan. This is not only true of monumental architecture such as

that discovered at Uruk but also of the private housing at carefully planned settlements like Jebel Aruda on the Euphrates bend. This paper will deal with a few examples meant to illustrate how one could reconstruct the scheme that lies below the plan and how it can yield clues to the layout technique. These design principles are not always identical from one building to another, even when they are quite similar. In fact, they show a real play on the type of scheme and the unit of measurement that were used and that could be linked to the social organisation of the community.

Yilmaz Selim ERDAL (*Hacettepe University*)

Cranial traumas and their probable reasons in İköztepe (Northern Anatolia) Early Bronze Age Population

In this study, cranial traumas of the İköztepe early Bronze Age people (n: 452 skull) were analyzed for the probably reasons of the traumas that were found. The incidence of the cranial traumas is very high (19%); however, the rate of the traumas on the male skeletons exceeds 40%. Whereas many of the traumas were healed, unhealed traumas have been detected only in the male skulls. The forms, frequency and the distribution of the traumas on the skulls have shown that these traumas were caused by interpersonal violence during a war. Given that the dead individuals were buried according to the burial customs of İköztepe and that some of the severe cranial traumas received surgical intervention (trepanations), it has been assumed that the war in question had taken place in the vicinity of İköztepe. The match between the traumas and the weapons found in İköztepe suggests that the war had occurred between groups of people having similar cultures. It has been concluded that in İköztepe, which was the most important production and trade center in the Middle Black Sea region, the war probably related to the people's strife for controlling the access to and the trade of the natural sources.

Fernando ESCRIBANO MARTÍN (*Universidad Autónoma de Madrid / Università degli Studi di Roma "La Sapienza"*)

Babilonia y los españoles durante el siglo XIX

La visión generalmente aceptada señala que España se mantiene separada de los personajes y de los trabajos que hoy entendemos como los pioneros del orientalismo. Sin embargo, y aun admitiendo la modestia de la presencia española en estos inicios, se ha de señalar el viaje de Adolfo Rivadeneyra a Babilonia, poco después de las primeras descripciones de la ciudad, realizando él mismo la suya y aportando sus propias valoraciones. Y se ha de señalar también el trabajo filológico de García Ayuso sobre los ladrillos que Rivadeneyra trajo. Ambas actuaciones suponen quizá la primera aportación española en el tiempo de gestación del orientalismo.

Peter FABIAN (*Israel Antiquities Authority*) and **Isaac GILEAD** (*Ben-Gurion University*)

Horvat Qarqar South. A new Chalcolithic Cemetery in the Qiryat Gat area, Northern Negev, Israel

A dense cluster of Ghassulian burial caves was cut and exposed in Horvat Qarqar South, ca. three km south of Kiryat Gat, in November 2005. Salvage excavations at the site are still carried out while these lines are written, but it is obvious that this is a unique occurrence. The cemetery consists of small rounded caves, perhaps fissures in the local friable chalky bedrock that were enlarged in order to accommodate burials. There are numerous large pottery vessels with bones and skulls in secondary burial. Most human remains were deposited in burial jars, such as large churns, deep basins, and ossuaries. Medium and large stone-cut basins were also deposited in a number of caves, as well as tombstones, a few of them very large. Worth noting is a deep basin decorated with a band of adult male ibexes, a hitherto unknown motive in the Ghassulian iconography. Burial containers are accompanied by hundreds of grave offerings. Most common are small V-shaped and goblet-like bowls, sometimes of miniature proportions, comets and a votive chum. This cemetery was probably used for communal rituals associated with bringing to final rest, in secondary burials, members of the community who died a while ago and buried in habitation sites. On the basis of typo-stylistic considerations, it seems that it is to be dated to the third quarter of the fifth millennium B.C. cal.

Gioacchino FALSONE (*Dipartimento di Beni Culturali - Università di Palermo*) and **Paola SCONZO** (*Altorientalisches Seminar - University of Tübingen*)

Tell Shiyukh Tahtani on the Euphrates. Highlights of recent excavation seasons (2002-2005)

The Italian excavations at Tell Shiyukh Tahtani have continued in recent years bringing to light a large number of new data relating to the Bronze Age and later periods. The site, located on the east bank of the Middle Euphrates river some 12 km south of Carchemish (Tishreen Dam Salvage Project), was intensively inhabited during the first half of the third millennium B.C., when an extensive, long-lived domestic quarter was occupied on the west side (Area B). In a later phase this was encircled by a thick clay embankment, apparently forming a glacis enclosure, which was also used as a

cemetery (EBA III-IV). Earlier evidence was also retrieved in a deep trench on the east side of the tell (Area C-D), where a portion of a mud-brick building contained several occupation layers associated with pottery (Reserved Slip, Plain Simple Ware, etc.) and other artefacts typical of the beginning of the third millennium B.C. (EB I). After a period of decline, the settlement gained a flourishing urban expansion in the late third millennium, as suggested by various buildings flanking two intersecting streets in Area CD. Interesting remains of the Middle Bronze Age were uncovered on the higher slope of the same area, consisting of a sequence of superimposed buildings mostly destroyed by violent fire. This period marks a change in architecture and material culture, apparently suggesting the arrival of new settlers. As regards later levels, while Iron Age remains have been uncovered on the summit of the tell (Area A), Late Roman, Byzantine and early Islamic phases are attested on the western talus of the tell as well as in the Lower Town, showing that our site had a long life-history and played a significant role in the development of the Euphrates culture during several periods.

Mohammad FEIZKHAH (*Iranian Culture Heritage and Tourism Organization*)

Pottery of Grrango Style in Azarbaijan (Iran)

Grrango is name of river in Hashtrod province in East Azarabaijan. This river had sourced from south Sahand Mountains. After 2768 kilometers, it does to travel, it resaves Gizil Ozan River. Grrango is to cause very settlements in the basin its. There settlements are to include different periods. Settlements are very in Hashtrod in Parthian period. Gale Zahak, khorasanlu Tapa and other sites are samples of Parthian period in this province. Garrango River is natural obstacle to protect for Gale Zohak and to cause is for settlement Khorasalu Tapa. Pottery of Grrango Style is special pottery in basin Garrango in Parthian period. This paper introduce particulars of Pottery of Grrango Style and act of spreading province its.

Teresa FERNÁNDEZ PAREJA (*E.T.S. de Ingenieros en Topografía, Geodesia y Cartografía. Universidad Politécnica de Madrid*)

Georreferenciación y topografía en los yacimientos arqueológicos

Taking Cartographic Techniques into account is essential in order to obtain a complete set of data in an Archaeological site. The more detailed the representation of the data, the better that data will be interpreted, thus optimising the planning of subsequent archaeological tasks. The E. T. S. Ingenieros en Topografía, Geodesia y Cartografía cooperates with the team led by Dr. Córdoba from the Universidad Autónoma in Madrid, taking part in archaeological campaigns in Mahuz (Iraq) and Sharjah (U.A.E). Their projects investigate in different fields, from capturing data to obtaining the cartography of the sites at very different scales. The most modern techniques have been applied in the execution of the different tasks, from data taking to cartographic edition. Some examples might be the techniques of global positioning based on the observation to artificial satellites, or the laser scanner techniques that permit the capture of enormous amounts of information in real time.

Silvia FESTUCCIA (*Università degli Studi "Suor Orsola Benincasa", Napoli*) **and M. ROSSI** (*Università degli Studi "La Sapienza" di Roma*)

Recent Excavations on the Ebla Acropolis (Syria)

Latest findings from Area G. The excavation carried out to widen the open trench dug to reconstruct the different phases of occupation of area G completed the 2000 campaign involving the north eastern sector of Royal Palace G.

Recovery of the eastern side of Temple D. The eastern side of temple D dating back to the Middle Bronze Age and dedicated to the goddess Ishtar was uncovered during the latest restoring operations. Some Iron Age structures were also brought to light and traces of a Byzantine necropolis that had been observed during the initial phases of the dig at Ebla were recorded.

Second excavations in Sector E. Work on sector E had stopped in 1974 but, as a direct result of the major project to recover and valorise the archaeological site of Ebla, excavation in this sector was restarted in 2001. Work focused on two different approaches: the first was aimed at defining the Middle Bronze Age and Persian period architectural structures that had been discovered previously, while the second approach concentrated on the current archaeological investigations. Presentation of archaeological stratigraphic data, architectural structures and materials. The new data acquired cover the period between the Middle Bronze and Late Hellenistic periods and are documented by the architectural structures and the items found.

Paolo FIORINA (*Università di Torino, Dipartimento di Scienze Antropologiche, Archeologiche Storico-Territoriali*)

The Neo-Babylonian levels of Fort Shalmanezar

The Neo-Babylonian levels have been reached in one room in the south-west area of Fort Shalmanezar and in all the soundings made along the outer wall of the Fort. In the south-west room have been found U-shaped structures probably used as stands for big storage jars. Along the outer precinct a series of neo-Assyrian rooms and walls had been rebuilt in a later moment, that is dated at the Neo-Babylonian period by cylinder seals, stone vases and pottery.

Farahnaz FIROUZECHIAN (*Golestan Palace, Arg sq., Tehran, Iran*) and **Ali PANDIDAN** (*Technical Office of the Iranian Cultural Heritage Organization, Masoudieh Historical complex, Tehran, Iran*)

Golestan Palace Glazing Tiles

Golestan palace complex is a monument which has left as a memorial from "Tehran's Historical Arg", used to be the residence of Ghajar (1779-1921) Kings and is one of the most beautiful aged constructions in the 200 year old Iranian capital, Tehran. The history of this palace goes back to Safavid period (1484-1727). This historical complex consists of twelve individual building, each of those were so perfectly decorated with incredible ornaments that let the Golestan palace, alone, has one of the greatest collections of ornaments in the whole country. Beautiful moldings, wonderful mirror-encrusted stalactites besides eye-catching tile works are not the only ornaments used to make the king's residence more magnificent. The huge amount of glazing tile works in the palace is a great encounter with different styles and figures. There are two outstanding features in the glazed tile works of this palace. Before Ghajar period, glazing tiles were mostly used in mosques and religious buildings. Artists of Ghajar period gave a new birth to this art by using tile works in Golestan palace building and put an end to this restriction. The Golestan tile works were influenced by the European art, mostly because of the travels of royal family to Europe. These influences in Iranian Architecture and Architectural ornaments lead to an imperfect renovation of these arts. For instance, one of the palace of the Naser-e-din shah (1843-1892) was decorated with the pictures of half naked women to look like European palaces, although is against the Islamic rules. In this article it is tried to analyze each of these glazing tile figures, therefore they are categorized into different groups and are discussed in details. The categories are as follows: *human figures, legendary figures, figures of Sports, horse riding and hunting, figures of Iranian and foreign buildings, figures of birds, figures of entertainment, fighting with wild animals, figures of flowers and vases, figures of flowers with fruits, flowers and fruits in royal dishes or beautiful baskets*. The classification is mostly based on motifs and Anthropology data that will be discussed in the article itself, besides, each of the buildings of this royal complex and its ornaments including not only the glazing tiles, but also other ornaments such as moldings and different types of mirror-encrusted, need to be introduced.

Moshe FISCHER (*Tel Aviv University*)

Archaeological thoughts on continuity and discontinuity along the Eastern Mediterranean in Late Iron age, Persian and Hellenistic periods: Yavneh-Yam as case study

This paper tends to present and interpret archaeological evidence of some of the Eastern Mediterranean settlements along the Israeli southern coast. It is focused on a rather wide chronological frame starting with the (Greek) Orientalizing & Archaic period (Iron Age IIC in the Near East) and continuing through the (Greek) Classical period (Persian period in the Near East) to the Hellenistic period (7th to 1st centuries BCE). The presentation pursues after changes in settlement patterns and material culture in the areas under examination during these periods with a focus on the impact Greek and Oriental elements had on the development. This issue has been strongly determined by the Al Mina excavations (1936/7) and the debates following the long-lasting publication of its archaeological material regarding the Greek colonial or not-colonial character of the site and the data determining the latter. Now, being even in a sort of 'post-Al Mina phase' enriched by a great amount of recently discovered material evidence (e.g.: Niemeyer 2004) the question which still can be asked remains 'Greeks in the East or Greeks and the East' (my emphasis to Waldbaum 1997). In fact this question –valid for the role of ethnoarchaeological data for social and historical interpretation of settlements in general– has been intensively challenged for the area in discussion (inter alia: Tal 2000; Fantalkin 2001). The paper presented here is based on the results of the archaeological excavations carried out currently at Yavneh-Yam, which is located on the central coast of Israel (Fischer 2004). Greek presence in this area which was the arena of 'international' conflicts between the main powers of the periods in discussion, namely Egypt, Babylon, and finally the Persian Empire is worthy of examination. Both architectural and artistic evidence from the Eastern Mediterranean coast from mid-4th century BCE seem to point to a rather accelerated 'Hellenization' before the conquest of the area by Alexander the Great, pointing again to a sort of 'Pre-Hellenistic Hellenism'. It may explain some of the development of the area under Seleucid rule and, moreover, during the cultural conflict between Hellenized and Jews in the Maccabean era.

Bettina FISCHER-GENZ (*German Archaeological Institute, Berlin*)

Settlement pattern and economic potential of the territory of ancient Heliopolis-Baalbek, Lebanon

Although extensive research has been carried out on the monumental Roman architecture of Baalbek for more than 100 years, the factors that led to the foundation and growth of the settlement and the large Roman colony were little understood so far. Thus, a new interdisciplinary project was initiated in 2001 by the German Archaeological Institute in cooperation with the Direction Générale des Antiquités du Liban in Baalbek with the aim to investigate the cities development from the prehistoric tell up to the ottoman period. As part of this project, a survey around Baalbek was started in 2004 in order to elucidate the settlement pattern and land-use in the economic hinterland, as well as the use of trade routes through the Antilebanon mountains. Intensive field survey was combined with the analysis of satellite imagery and aerial photography, which not only reveal substantial information about water technology and burial practices, but also provide documentation of sites prior to their ongoing modern destruction by looters.

Elisa FOLLIS, Enrico FERRARIS (*Università degli Studi di Torino*)

Nimrud ivories: Remarks on artistic influences between Egypt and Near East

From the Italian excavations in Fort Shalmaneser, 1987-1989, 1450 ivories, for the largest part found in fragmentary conditions, were brought to light and all the pieces had been listed and filed in a preliminary work. These pieces came out from two rooms in the SW area of the Fort: A1 (SW 37 in the English reports) and A2. For their great variety they had been classified using a method which combined iconographical and typological criteria, and during this first study many different categories had been identified: human figures, vegetal elements, sphinxes, griffins, bulls, guilloche, wings, crowns, pseudo-hieroglyphs, egyptianizing features, furniture elements, equestrian bridle harness, daggers, frames, fixing elements and varia. The ivories from Nimrud marked by Egyptian traditions, iconography and hieroglyphic inscriptions, such as the ivories from Egyptianizing School, are especially considered here with the aid of a study conducted from an egyptological point of view in order to enrich our knowledge about the trade routes between Egypt and Near East and the cultural influences, rising from such contacts, on the levantine handicrafts.

Jean Daniel FOREST

Les implantations urukiennes exotiques: Quelques réflexions sur Hassek Höyük

Les données architecturales, souvent négligées, fournissent des informations irremplaçables sur les sociétés du passé. Récemment, notre attention a été attirée par les niveaux urukiens de Hassek Höyük, dont le plan permet à lui seul d'aboutir à des conclusions relativement précises, d'ordre stratigraphique ou fonctionnel. La phase d'occupation urukienne la plus importante, liée à la fortification de la colline fouillée, comprend deux éléments majeurs, l'un privé, l'autre, public. Au sud, s'étend un complexe d'habitation, incomplete, mais que l'on peut restituer dans sa quasi totalité. Ce complexe, avec une habitation, une salle de réception et quelques annexes, est absolument caractéristique de l'architecture urukienne, telle qu'on la connaît à Habuba Kebira ou à Djebel Aruda. C'est de l'architecture urukienne proprement dite et non une imitation locale, comme pourraient peut-être inciter à le croire les travaux de B. Helwing. Au nord, apparaissent trois bâtiments supplémentaires, dont le plus important est une salle d'audience ou de conseil. La coexistence de ces deux ensembles, accessibles chacun par un cheminement différent, s'explique probablement par le fait que le principal occupant du complexe d'habitation est le dirigeant de la communauté locale, assumant ses fonctions près de chez lui dans un bâtiment spécifique, le responsable préfère désormais consacrer l'ensemble de la colline aux affaires publiques, en faisant construire une nouvelle salle de conseil, beaucoup plus vaste mais aussi plus conforme au modèle alors en vigueur. Ce bâtiment somptueux, autrefois décoré de mosaïques de cônes, implique évidemment la présence en Contreras d'une communauté relativement importante.

Michel FORTIN (*Université Laval*), **Jacynthe POULIOT** and **Louis-Martin LOSIER**

La géomatique au service des fouilles archéologiques au Proche-Orient: L'exemple de Tell 'Acharneh, Syrie.

Ces dernières années, des missions archéologiques oeuvrant au Proche-Orient ont commencé à introduire sur leurs chantiers de fouilles de nouvelles technologies de l'information et de la géomatique afin d'améliorer l'enregistrement de leurs données sur le terrain et surtout leur analyse après la fouille. Grâce à une subvention de recherches (GEOIDE Canada), une équipe multidisciplinaire canadienne a entrepris de « géomatiser » l'ensemble du processus de fouille du chantier de Tell 'Acharneh, en Syrie. Les premiers résultats de ce projet sont prometteurs, notamment en ce qui concerne la modélisation géométrique 3D d'unités de fouilles (lot/locus) avec le logiciel GOCAD (Geological Object CAD). En effet, une fois les unités de fouille modélisées, il nous est possible de les référencer à l'échelle de la tranchée comme du chantier, de les manipuler facilement (zoom, rotation, translation), de les soumettre à des analyses volumétriques, métriques et spatiales, de pratiquer des coupes stratigraphiques en différents endroits sur le modèle 3D, et finalement de diffuser ce dernier à l'aide du VRML. Si cette modélisation était faite en cours de fouille même, avec

une Station Totale ou mieux encore un GPS, elle pourrait même servir aux archéologues à déterminer leurs stratégies de fouille journalières.

Yosef GARFINKEL (*Hebrew University of Jerusalem*) and **David BEN-SHLOMO** (*The Institute of Archaeology, The Hebrew University*)

Tel Tsaf: A Middle Chalcolithic Site in the Jordan Valley

The new excavations at the site of Tel Tsaf in the Middle Jordan Valley conducted during the recent two years revealed important results filling a gap in the knowledge of the proto-historic periods in the southern Levant. Major finds include a well planned and well built urban quarter. The brick architecture is characterized by an insula-like plan of buildings having rounded silos located in their courtyards. On the edge of the site a water well was excavated together with the floor relating to it. The material culture is rich and diversified including a style of decorated pottery unique for this region, imported items as pottery and obsidian, clay sealings, anthropomorphic and zoomorphic figurines, flint, stone vessels, beads, and very well preserved faunal and botanical remains. Radiocarbon dates show the date of this culture to shortly precede the Ghassulian Chalcolithic culture. Both the architecture and elements in the material culture imply certain contacts with northern Syria. This sophisticated culture may be highly instrumental for illuminating the missing link existing between the first sedentary cultures of the Neolithic period and the full-blown urban cultures of the Early Bronze Age in the Near East.

Alain GAULON (*Université Paris I Sorbonne, CNRS*)

Some technical and cultural remarks on clay anthropomorphic figurines in halafian communities in the North Levant and North Mesopotamia of the 6th and 5th millennium BC

Clay anthropomorphic figurines form part of the material culture of halafian communities in the North Levant and North Mesopotamia in the 6th and 5th millennium BC. Even though the figurine in squatting position with the arms held against the body to support the breasts remains the best known type, other forms are known, of which it is however difficult to distinguish the variety in shapes or the techniques to manufacture them. This paper has not the objective to review the role of these objects, even if the present stylistic and technical analysis imply this problem, but on the contrary, simply to present the various types of figurines, to understand their manufacture, to identify the individuals capable of making them, and eventually the places of production, with the aim to discern whether these objects are only pieces of art or also a craft. Thus, if the manufacturing remains in the domestic sphere and is not restricted to certain individuals or places within the villages, the data allows us to establish that there is a regional diversity in the production of the anthropomorphic figurines, which can be related to other diversities appearing in the material culture of the halafian communities.

Hermann GENZ (*American University of Beirut*)

Tell Fadous – Kfarabida: A newly discovered Early Bronze Age site on the Lebanese Coast

The newly discovered Early Bronze Age urban site of Tell Fadous – Kfarabida is situated on the Lebanese Coast, ca. 2 km south of Batroun. Bulldozing of the western part of the site in the recent past has led to the creation of two large sections covering the complete stratigraphical sequence of the site, which were examined by a team from AUB in 2004 and 2005. The pottery collected from the sections indicates that the site was only occupied for a short period around the transition from the Early Bronze Age II to the Early Bronze Age III. This dating has been confirmed by several radiocarbon dates. The examination of botanical and zoological material collected from the sections has provided remarkable insights concerning the economy as well as the environmental conditions during the existence of the settlement. This report will present the results of the work undertaken at the site in 2004 and 2005 with a special focus on the economical and environmental conditions during the Early Bronze Age.

Guillaume GERNEZ (*Université Paris I Sorbonne*)

Metal Weapons of Byblos: A Reevaluation

Excavation campaigns of the Twenties and Thirties at Byblos gave us one of the most important collection of metal weapons of the Near East. An importance in quality as well as in quantity. Most of those weapons come from hoards found in several buildings regarded as temples («Champ des offrandes», «Temple aux obélisques», «Temple de la Baal'at»). Others have been found in several tombs, be they royal or common. All those contexts are generally dated from the Middle Bronze Age I (2000-1750 BC). Even though the original publication is precise and several scholars have integrated the corpus of these weapons in their works, some questions remain problematical at various levels, including typological, technological, chronological and contextual. After having had direct access to the whole collection of those bronze, silver and gold weapons preserved in the National Museum of Beirut, it is possible to bring to light new data and to appreciate these weapons in an original way if we look closely at certain technical and

functionnal aspects. The question of the weight of the objects will also be highlighted as well as this of the typonomology. At last, absolute datings have been undertaken and could give us their first results.

Lilly GERSHUNY (*Israel Antiquities Authority*)

A Distinct Bull-Shaped Rhyton from Jerusalem

A Middle Bronze Age II burial cave that was recently excavated in Jerusalem yielded a homogeneous assemblage of pottery vessels, including a few unusual specimens. The outstanding bull-shaped rhyton is intact. It is burnished black and provided with a sieved aperture on its rear back, encircled with a medium-sized neck that has a double-strand handle extending from rim to center back. To date, only one other complete bull-shaped rhyton has been discovered in a Middle Bronze Age context in Canaan, at Tel Nagila in the southern Shephelah. Our unique bull-shaped rhyton will be examined within its own context, as well as the expanded Middle Bronze Age cultural background in the southern Levant. The presence of such a vase raises some questions with regard to its role in the burial context, its affiliation to any of the interred and perhaps, their identity. The issue of bull-shaped vases and rhyta in the Near East will be addressed as well, as it clearly bears upon the subject matter of this presentation.

Deborah GIANNESI (*Università degli Studi di Pisa*)

Hama, the Prehistoric Sequence: Syn- and diachronic Perspectives

The Tell of Hama was excavated by a Danish archaeological expedition between 1931-38, and the Prehistoric levels of Periods M, L, and early K (Neolithic to Late Chalcolithic) were fully published in 1988. Recently new discoveries in the region, foremost the Late Chalcolithic levels at Tell Afis, have offered new comparative material stressing the need for a revised overview of the local material culture. Focusing on the ceramic production of Hama M and L and the new comparative material it is now possible to draw a more comprehensive regional picture of the area during the Late Chalcolithic period. In fact a reevaluation of the Hama prehistoric ceramics suggests some new features in the interpretation of the sequence, in both syn- and diachronic perspectives.

McGuire GIBSON (*University of Chicago, Oriental Institute*)

Hamoukar 1999-2001: An Overview

Excavations at Hamoukar in the first three seasons proved that the site is as important as scholars have predicted over the years. After a brief outline of the research questions we sought to answer, I will give general information on the findings from those seasons, with special attention to the Uruk-related evidence.

Jesús GIL FUENSANTA (*MAET - Proyecto Tilbes*), **Eduardo A. CRIVELLI** and **Petr CHARVAT** (*Oriental Institute, Academy of Sciences of the Czech Republic, Prague*)

The dawn of a city: Surtepe Höyük excavations (Birecik dam area, Eastern Turkey)

Surtepe, on a crossing point of the Euphrates river, is the biggest mound in the Birecik area (Southeastern Turkey). Since the year 2000, and besides a particular interest for the end of the Iron Age, the excavations at Surtepe Höyük are focused in the Late Chalcolithic and the earliest Bronze Age. To date the relationship between the local Ubaid, Late Chalcolithic and the Uruk cultural expansion has been poorly understood. The Terminal Ubaid of the area merged with the foreign Uruk culture. According to the yielded data at Surtepe Höyük, the Uruk peoples substituted gradually the local Late Chalcolithic (with roots into the Ubaid culture). The appearance of the Uruk culture meant too the gradual presence of a foreign ideology and technology. In spite of a possible violent end for the local presence of the Uruk culture, there is not a steep technological change between the end of the Late Chalcolithic and the beginning of the Early Bronze in the Birecik Dam region.

El Amanecer de una ciudad: Excavaciones en Surtepe Höyük (región de la presa de Birecik, Turquía Oriental).

Surtepe, situado en una zona de vado, es el montículo más grande de la zona de Birecik (Eufates turco). Además del interés por el final de la Edad del Hierro, las excavaciones en Surtepe Höyük desde el año 2000 se han centrado en obtener resultados de los Periodos Tardo Calcolítico y comienzos del Bronce Antiguo. Hasta la fecha se conocía muy poco la relación entre el Tardo Obéid local, el Tardo Calcolítico y la expansión cultural Uruk. El Obéid Terminal de la zona se fundió en la foránea cultura Uruk. Según los datos obtenidos en Surtepe Höyük, las gentes Uruk suplieron gradualmente a la cultura local Calcolítica con raíces en el Obéid. La aparición de la cultura Uruk significó además la presencia paulatina de una ideología y tecnología externa. Pese a los indicios de violencia en el fin de la presencia local de Uruk, no hay un cambio tecnológico abrupto entre el fin de la cultura Uruk y los inicios del Bronce Antiguo en la zona de la presa de Birecik.

J. GIRAUD-GERNEZ (*University of Paris*)

Oasis landscape reconstruction in Oman in the third millennium: The contribution of remote sensing and GIS

Four survey campaigns have been done in the province of Ja'alan (Oman Sultanate) within the Joint Hadd Project. The analysis of the distribution of the 2400 tombs uncovered from the Third Millennium BC allowed us to make out they were very large necropolises. They seem to be organised in a dense network of sites within which a regional hierarchy is clearly expressed. New excavations showed that those necropolises were attached to a place of habitation. In an attempt at a definition of these habitats, we will try, through methods of remote sensing and GIS analysis, to see if those zones could have been used for Oasis culture. Also, are the present zones, which are apt to support Oasis culture, situated in zones of necropolises and ancient habitats? If so, we can then advance the hypothesis that necropolises encircled agricultural sites of oasis type. The territorial organisation of agricultural sites in this region could thus be reconstituted.

Amir GOLANI (*Israel Antiquities Authority*)

Large-Scale Rescue Excavations at Ashqelon Barnea –New Perspectives on the Early Bronze Age I of Southern Canaan

Recent excavations at the Early Bronze Age site of Ashqelon Barnea, located north of modern-day Ashqelon, have uncovered significant portions of a large EB I site soon destined for destruction. The importance of these excavations lies in their scope, which provided a rare opportunity to examine the site's internal organization by means of several excavation areas comprising nearly one hectare (10 dunams). These brought to light the character of different regions within the site and defined its growth and decline through three major archaeological strata spanning the EB IA and early EB IB periods. Two of these strata (IV-III) revealed a settlement composed of numerous large compounds built in proximity to one another and separated by narrow alleyways or by open spaces. Some of these compounds included domestic buildings with large mudbrick storage installations while others appear to have been either for storage or for the processing of copper. The extensive metallurgical activities alongside what appears to have been large-scale storage of agricultural produce, suggests a market-oriented economy that employed maritime trade, as is indicated by the site's geographical position adjacent to the seashore. The internal layout of the site indicates pre-meditated planning that differentiated between domestic habitation, storage and industrial/metallurgical activities, each separated from the other by means of a walled compound. These features, appearing before the significant Egyptian involvement in Southern Canaan during the late EB IB and prior to the urbanization of the Southern Levant during the EB I-II transition, shed a new and intriguing light on economic and social organization during this period and challenges our perceptions of what pre-urban "village" society looked like during the EB I of the Southern Levant.

Sébastien GONDET (*Maison de l'Orient et de la Méditerranée – UMR*) and **Tijs DE SCHACHT** (*Ghent University*)

Settlement and landscape organisation in the Achaemenid heartland (Central Fars, Iran): Status quaestionis, multi-scaled approaches and outlook of a renewed survey program into the plains of Pasargadae and Persepolis

The archaeology of the centre of the Achaemenid Empire (560 – 330 BC) is characterised by a well-known monumental palatial architecture. The foundation of these royal centres, their textual records and documented secondary occupation traces (canals, quarries, dams) might suggest a renewed occupation of the region. However, even though several tel-oriented surveys were carried out in the last seventy years, the very nature of the hinterland to sites like Persepolis or Pasargadae is only known in a limited number of settlement mounds. In close connection with the renewed research of the royal zones itself, an intensive survey program aims to provide a more complete and diverse image of the impact of Achaemenid presence on the surrounding landscape. This entails revisiting known sites, evaluating the presence and characterisation of Achaemenid elements and the start of a systematic survey into the zones thus far lacking archaeological traces: fields and piedmonts. A first season (2005) already proved to be very instructive, as it confirmed the archaeological potential of these zones and highlighted different methodological problems linked to the intense agricultural land use. These problems, together with the current state of archaeological research, necessitate a wider scope, ranging from the regional scale (geomorphology, remote sensing), over off-site structures (canals, dams, roads...) to the area of the site itself (geophysics, topography, aerial photography...).

Yuval GOREN (*Department of Archaeology and A.N.E. Culturales, Tel Aviv University*)

Craft and Location of Specialized Copper Production in the Chalcolithic Southern Levant

For half a century, the nature of the Chalcolithic copper industry of the southern Levant has been continuously debated. The discovery of the Nahal Mishmar hoard triggered an ongoing debate about its function, origins and production location. In addition, a significant yet by far smaller amount of copper objects was found during other excavations in

Israel. Typologic and metallurgic aspects have indicated a rather clear dichotomy between simple working tools, made of relatively pure copper by open casting, and elaborate "prestigious items" that were made by the "lost wax technique" of copper alloys with significant levels of arsenic, antimony and nickel. While the simple working tools were considered local production, the elaborate objects were considered as products of another, as yet unknown manufacture center that might have existed either near the remote sources of arsenic copper in the Caucasus and eastern Anatolia, or somewhere in the southern Levant. In the present study, remains of ceramic materials from numerous Chalcolithic copper implements have been analyzed in order to identify the origins of their production sites and solve this long debated question. Based on the results of this study, together with some results of other relevant researches, new interpretations will be suggested.

Raphael GREENBERG (*Tel Aviv University*)

Tel Bet Yerah 2003. Soundings in the Granary

The 2003 excavations at Tel Bet Yerah focused on the well-known Circles Building or Granary, originally excavated in 1946. The entire 1200 sq m structure was cleared of overgrowth and re-surveyed. Soundings were excavated at significant locations in and around the structure, providing insight into the history of construction and use of this enigmatic structure. Finds included portions of the brick superstructure and evidence for several phases of use within the structure. Furthermore, it was established that there yet remain sealed deposits in undamaged portions of the building that promise further discoveries in the near future. The recent finds, coupled with a new analysis of the original excavations, allows a new hypothesis on the original form of the structure, along with a revised interpretation of its history and use.

Niels C. F. GROOT (*Delft University of Technology*) and **Joris DIK**

The faience vessels from Late Bronze Age Deir ‘Alla, Jordan

A collection of faience vessels was discovered in the remains of the Late Bronze Age sanctuary complex of Tell Deir ‘Alla. The research of the vessels, including an archaeometrical study of the vessels has revealed several unknown aspects of the production and exchange of faience vessels during this period. The innovative nature of the Late Bronze Age vitreous industries is attested here by the discovery of a vessel with a remarkable glaze. Also a local production of faience seems to have developed here, due to the find of several vessels with an unknown style. Secondly, the composition of the faience vessel collection gives a further insight in the exchange of these objects in the Near East, especially concerning the ‘international contacts’ of the town and region of Deir ‘Alla during this period. It seems that Tell Deir ‘Alla was strategically located within the network of trade routes of the Near East. Therefore the study of this collection has yielded not only information concerning the production of faience but also provides further information about the position of Deir ‘Alla during the Late Bronze Age.

Sevil GÜLÇUR

Güvercinkayası: A fortified Chalcolithic Settlement in Central Anatolia

The massif of Güvercinkayasý or Porsuklukaya (alt. 1006.084) is situated at the right bank of the Melendiz River (Aksaray/Gülaðaç-Çatalu). The flat settlement mound of Güvercinkayasi once covered the longitudinal plateau, the northern slope and the eastern terrace of this rocky massif. Excavated since 1996, Güvercinkayasý is dated with five main building levels to the first half of the Middle Chalcolithic Period (cal. C14 5200-4750 B.C.). The general concept of the architectural lay out is dictated by the geological formation of the rock. The economy of the settlement is based on rain-fed farming and animal husbandry. The natural setting and the stratigraphic development of the settlement indicates a progress of social and economic change. Already founded on a naturally protected location, during its life time Güvercinkayasý acquires more of a defensive character. The latest discoveries proved a later division of the village into a citadel and a lower settlement. With the external retaining wall along the edge of the east and north terrace steps Güvercinkayasý thus became one of the first Central Anatolian early settlements with a double fortification system.

Eleanor GURALNICK

Khorsabad Sculpture Fragments in the Oriental Institute

When the Oriental Institute conducted its excavations at Khorsabad in 1928-1935 it investigated several areas of the palace that were known to have sculptured slabs abandoned in place by the early French investigators, Paul Emile Botta and Victor Place. The sculptures uncovered provided the primary source for the major collections of Khorsabad sculpture now on display in the Oriental Institute and the Iraq Museum in Baghdad. There are several broken, but otherwise well preserved slabs of sculpture from room 10 of the palace in the Oriental Institute that have never been published nor displayed. In addition there are over 300 fragments of sculpture collected from rooms 7, 10, and 12, and from courtyard VIII that are only now being catalogued and identified. Many of these fragments are of interest as they

retain bright original colors, and fine carving of details of anatomy, horse trappings, landscape elements, and decorative details of clothing. A selection will be presented to enable a better appreciation of the appearance of the sculptured walls when the palace was new, freshly decorated, and the center of the Assyrian Empire.

Frédéric GUYOT

Intercultural emulations, borrowings or rejections of technological innovations in the 4th Millennium Mediterranean Near East

The impact of social organization in the structuring of interregional contacts. During the 4th Millennium, the interregional contacts intensify between Egypt, South Levant and Mesopotamian culture present in the Urukian settlements of North Syria. Raw materials and finished products are thus exchanged, but also technological innovations, iconographical or theoretical concepts. Nevertheless, each culture implied does not play the same role in the management of these increasing exchanges; according to the considered period, some organize them, while others undergo them or are excluded from them, some are looking for new expression or production modes and borrow them from other cultures, others do not formulate such a need. Thus, in order to render the complexity of the dynamics of borrowings and emulations, it's important to consider that any borrowing takes place only when a need to innovate is felt in a given society, that is to say, when the means implemented hitherto are no longer able to fulfil the social demand. Therefore, the Lower Egyptian communities neither adopt the chalcolithic Canaanite use of the wheel for the ceramic production, nor any Urukian architectural feature. In the same way, the EBI South Levantine cultures, deeply dismantled after the collapse of the chalcolithic chiefdoms system, do not have long distance commercial relations because their social organization does not require the importation of exogenous wealth. Consequently, they do not undertake commercial relations with the more northern regions. This also explains why the commercial fluxes linking the Urukian sites of North Syria to the Egyptian centres are essentially organized along the Levantine littoral. Conversely, the situation is different in Upper Egypt in the middle of the 4th Millennium. The Naqadian communities organized themselves in complex chiefdoms and the local elites are then in search of new means of visual expression capable to express their new status as well as administrative solutions better suited to the chiefdom organization. They thus borrow from the Urukians both the sealing administrative practice and some iconographic representations following a two-steps process; in a first time, the reception of the Mesopotamian model does not provoke any emulation because of the insufficient integration of their social organization, then, in a second time, the assimilation of foreign influences generated by practical needs leads to the elaboration of a properly Egyptian figurative discourse.

Goldfus HAIM (*Ben-Gurion University*) and **Arubas BENNY**

From Rural Estate to Monastery. A New Discovery in the Northwestern Negev

The archaeological site at Hatzetim, in the northwestern Negev region, is set up on a flat hill and overlooks a vast area on almost all directions. It was exposed to natural weathering and destruction caused by man. The topography of the area to the north and west of the excavated area clearly indicates that the original site spread beyond the limits of the excavated area. In spite of damage to the site, we were able to attribute the majority of the remains unearthed to a monastic complex datable to the 6-7th centuries CE. The remains of the monastery consisted of a series of rooms surrounding a courtyard; an underground, double-chamber built tomb; a chapel; and a service/industrial wing. A small amount of early Islamic pottery, found in several locations at the site, indicates that the last stage of occupation of the site was in this period. The exact nature of the site prior to that of the monastery is difficult to ascertain. Nevertheless, pottery fragments datable to the 3-4th centuries CE (especially the Ashkelon jar type), and the fact that the chapel of the monastery was attached to an existing complex, show clearly that the site had an extensive late-Antique phase. We suggest that a rural estate or a farmhouse operated here during these centuries. Our reconstruction suggests that the Hatzetim site reflects a little noted archaeological phenomenon in Palestine – a villa/rural estate that was turned, at a certain stage of its existence, into a monastery. While such phenomena are attested in the literary sources, and known from archaeological sites in the western parts of the Roman Empire, they have not been studied in Palestine

Khaled HAMOURI (*Universidad Complutense de Madrid*)

La tríada astral nabatea

Una de las notas definidoras de las religiones árabes preislámicas es su carácter astral, para ellos el cielo fue Sol, Luna y Venus, tríada que puede considerarse una manifestación general conocida entre todos los semitas. Si admitimos que el culto nabateo también fue esencialmente astral, tenemos que planteamos cuáles fueron los epítetos que identificaron a estos astros, y sus posibles relaciones en este contexto. En cuanto al primer aspecto, a pesar de que se existan ciertas ambigüedades, conocemos testimonios epigráficos, iconográficos y literarios que apoyan la consideración del principal dios nabateo Dushara como el representante del Sol, y de las diosas Allāt y al-'Uzzā como representantes de la Luna y Venus, respectivamente. Por lo que respecta a sus relaciones, podríamos preguntarnos si es posible descubrir la mitología de la familia astral, presente en otros pueblos semitas del sur de Arabia, como consecuencia del conocimiento del mito universal antiguo que establece un matrimonio celestial entre el Sol y la Luna, en la que las

estrellas en general se conciben como hijos, pero asignando este papel de una forma más especial y relevante que al resto, a Venus, probablemente debido a su posición entre ambos. La exposición de los diversos testimonios iconográficos de los dioses Dushara, Allāt y al-‘Uzzā, nos permitirán constatar, además de su carácter de epítetos del respectivo astro, como este carácter originariamente astral del culto nabateo, junto con su inicial estilo de vida nómada, determinaron que los dioses se representaran mediante betilos, persistiendo después de su establecimiento sedentario, como un reflejo del rechazo semítico ante las imágenes antropomórficas. No obstante, en la iconografía nabatea también encontramos representaciones figurativas de los dioses, que pueden explicarse como el resultado de la influencia helenística.

Timothy P. HARRISON (*University of Toronto*)

The “land of padasatini”: Recent investigations at Tell Ta‘yinat in the plain of Antioch

The small territorial states that crowded the political landscape of southern Anatolia and western Syria during the early centuries of the first millennium BCE have begun to receive intensified archaeological attention in recent years. Formed during the historical ‘Dark Age’ that followed the collapse of the Hittite Empire at the end of the Late Bronze Age, these ‘Neo-Hittite’ states nevertheless have long been assumed to have been linked culturally and linguistically to their Bronze Age Anatolian forbearers. Yet thus far, only the ‘Great Kings’ of Carchemish have produced a dynastic line that actually bridges this political era, while the archaeological record is equally devoid of well-excavated cultural sequences for the period. The discovery of the Aleppo 3 Inscription has now presented the possibility of tracing the historical development of a second such state associated with the ‘Land of Padasatini’, as recently proposed by J.D. Hawkins. Drawing on the results of recent excavations at Tell Ta‘yinat, the site of ancient Kunulua and capital of the Kingdom of Patina/Unqi, as attested in later Neo-Assyrian records, this paper will review the archaeological evidence for the foundation of an Early Iron Age Neo-Hittite kingdom centered in the Amuq Plain region of southeastern Turkey.

Toby HARTNELL (*University of Chicago*)

The History of Agriculture in Fars, Iran

The Achaemenid Empire represents an early adopter of coined money systems in the Old World and yet researchers have yet to fully understand the historical implications of expanding global trade and economic development in the eastern Achaemenid Empire. Thus, whilst the Persepolis Fortification Tablets and Treasury Tablets give an impression of a centralized, redistributive grain economy, the range of crops, the extent, and intensity of agriculture in the region are still largely undocumented. For this reason, in the summer of 2005 the University of Chicago and the Iranian Cultural Heritage and Tourism Organization conducted a joint survey in the Kur River Basin, central Fars. Our goal was to track the history of settlement in the Abarj region, a prime agricultural district of ancient Fars. This region should be considered an important target for the ancient Sadd-e Dariush Kabir on the Kur River and so its development can be used as one proxy dataset for the scale and nature of agricultural development in the whole region. The results of our first season of survey will be presented as well as some of its implications for future research and models of ancient land use and economy in Fars.

Yousef HASSANZADEH (*National Museum of Iran*) and **Hekmatollah MOLLASALEHI** (*Tehran University*)

Some ruminations on influence of “Local Style” on Mannaean Art. The case of three glazed bricks from Qalaichi Bukan

As result of illegal excavations at Tepe Qalaichi in late 1970s and early 1980s and then systematic excavations in 1985, a series of unique glazed bricks has been revealed, which find their way in to the Museum and Market antiquities the entire world. Up till now, small reports have been published on the discovered assemblage, which unfortunately lacking the contextual information, are not unambiguous. The present article attempt to introduce three glazed bricks of Bukan from two unpublished collections in Iran and Tokyo National Museums. There is little study available on the artistic origins of these glazed bricks some scholars, however, assigned them to Assyrian or Urartian artistic traditions. The article will explain the attributions and artistic roots of these remains and propose them to be belonged to "Zagros artistic style" in late second and early first Millennium B.C.

Frank HOLE (*Yale University*)

Ritual and the Collapse of Susa

By 4000 BC a two-thousand-year long sequence of expanding settlement and population growth had ceased across much of the Near East. Many regions were abandoned and it was half a millennium before a new cultural formation with significant growth occurred. The last chapter in the collapse can be seen in Susa whose inhabitants, under

environmental and social stresses, built and re-built a massive temple platform and engaged in increasingly complex, but ultimately unsuccessful, rituals of supplication. As other worldly forces that could not be predicted or controlled by mortals grew increasingly destructive, humans attempted to placate them through the building of temples presided over by masked shamans. They failed. Susa and a host of contemporary sites were abandoned or much reduced in size, and the land lay fallow for some centuries. Evidence from climate proxies and iconography on ceramics and seal impressions support this reconstruction.

Virpi HOLMQVIST (*Institute of Archaeology, University College London*)

Towards an Absolute Ceramic Chronology? Radiocarbon Datings of the Jabal Harûn Ceramics Discussed

Since 1997, the Finnish Jabal Harûn Project (FJHP, the University of Helsinki) has been excavating a Byzantine monastery complex at Jabal Harûn, the mountain of the Prophet Aaron, located in southern Jordan, ca. 5 km southwest from the ancient city of Petra. Jewish, Christian and Muslim traditions refer to Jabal Harûn as the burial place of Moses' brother High Priest Aaron. The Jabal Harûn monastery and pilgrimage center was in use during the 5th–8th centuries A.D., and there are also remains of Nabataean-Roman period structures at the site. Hence the time span illustrated by the Jabal Harûn ceramic material starts from the Nabataean-Roman period, 1st c. B.C., continuing to the Early Islamic period, 8th century A.D., and possibly later. The abundant assemblage of domestic ceramics also includes a noteworthy collection of ceramic oil lamps. This paper discusses an attempt to approach an absolute ceramic chronology by means of AMS-radiocarbon datings. The dating samples were taken of the soot concentrated on the surfaces of the vessels, thus aiming to provide the utilization age of the vessels. In addition to the methodological application, the radiocarbon datings provide an interesting addition to the existing chronological discussion, in some cases contradicting with the current consensus. The dating results will be discussed in the light of the ceramic typology and the stratigraphic evidence.

Fuad HOURANI (*CNRS, UMR 7041, Maison René-Gnouvès, France; Leiden University, Faculty of Archaeology, The Netherlands*)

Paleogeographical development and settlement phases in the Jordan Valley from the early Neolithic through the Iron Age

This paper presents a series of paleogeographical reconstructions of the Jordan Valley (Jordan) from the early Neolithic through the Iron Age. Based on the comparative study of stratigraphic sequences present within a selection of 12 archaeological sites and their vicinity, these investigations allow us to identify at least eight major phases in the development of the Jordan Valley during the first half of the Holocene and to propose a comprehensive sight as for its development during the second half. Results are here compared to the general trend of the early to mid-Holocene climate and discussed with respect to early agricultural and agro-pastoral settlement phases in the study region.

Carrie HRITZ (*University of Chicago*)

New Readings of Past Landscapes: Reconstructing channel and settlement patterns in Southern Mesopotamia using Remote Sensing

The literate and city-based polities of Sumer and Akkad in southern Iraq are widely regarded as one of the first, if not the first, example of a successful city-based civilization, and over the last century or so great strides have been made in understanding the archaeology, economics, literature and social conditions of early Mesopotamia. The existence of a network of water channels was fundamental to the development of these societies because it provided irrigation water for the successful cultivation of food crops, as well as for the transport of goods from city to city. Despite their obvious remains, the nature and pattern of successive agricultural systems over this broad plain through time remains elusive. As satellite imagery became increasingly available from the 1970s, in conjunction with ground archaeological survey, it was possible to make general maps of channel systems of the Mesopotamian plains. The public release of CORONA satellite imagery has resulted in a flurry of new studies on landscapes in both Mesopotamia and beyond. The digitization of topographic maps for the Mesopotamian plains west of Baghdad has provided valuable supplementary microtopographic data indicating the pattern of river levees and other channel systems (Cole and Gasche 1998). This paper will address channel systems and settlement pattern in southern Mesopotamia incorporating past archaeological survey work of Adams (1981) and others, satellite imagery, and recently release digital elevation data.

Juan José IBÁÑEZ (*Universidad de Cantabria*), **Maya HAÏDAR-BOUSTANI** (*Musée de Préhistoire Libanaise, Faculté des Lettres et des Sciences Humaines*), **Michel MAQDISSI**, **Jesús GONZÁLEZ URQUIJO**, **Angel ARMENDÁRIZ**, **Luis TEIRA**

The megalithic necropolises in the Homs Gap (Syria). A preliminary approach.

One of the outstanding results of the prospecting project that is being carried out in the Homs Gap by the Syrian DGAM, the Saint Joseph University of Beirut and the Spanish University of Cantabria is the discovery of numerous and sometimes very extensive megalithic necropolises. Taking account of the excavations of similar monuments in neighboring regions, these necropolises should date from the Bronze Age. Some necropolises, which are composed by a small number of monuments, are spread throughout the Homs Gap, located on top of some basaltic hills. However, in the western banks of the Orontes River, these necropolises are documented as extensive and continuous megalithic areas, containing hundreds of monuments. The preliminary study of these necropolises indicates that these funerary areas show a complex pattern, with a hierarchical organization of the burials and some ritual structures associated to the tombs.

Juan José IBÁÑEZ (*Universidad de Cantabria*), **Maya HAÏDAR-BOUSTANI** (*Musée de Préhistoire Libanaise, Faculté des Lettres et des Sciences Humaines*), **Michel MAQDISSI**, **Jesús GONZÁLEZ URQUIJO**, **Angel ARMENDÁRIZ**, **Luis TEIRA**

Archaeological Survey in the Homs Gap (Syria). Campaigns of 2004 and 2005

Two field seasons of archaeological survey carried out by a research team conducted by M. Maqdissi (DGAM, Damas), M. Haïdar-Boustani (USJ, Beirut) and J.J. Ibáñez (UC, Santander) have allowed us to discover 132 new archaeological sites in the Homs Gap, between the city of Homs and the Krak des Chevaliers, in the Bouqaia Basin. These sites belong to all kinds of Prehistoric and Historical periods. We have documented some Middle and Upper Palaeolithic flint workshops, near the region of Marmarita. The transition to the Neolithic is documented by the discovery of some Epipaleolithic and some Pottery Neolithic sites. One of the Epipaleolithic sites shows the characteristics of the Natufian Culture, while one of the Neolithic sites shows clear affinities with the Byblos Neolithic. Some Bronze Age sites, distributed in an axe east-west could indicate the route of a commercial way from the coast to inland Syria in this period. In the classic periods the region was densely populated.

Antonio INVERNIZZI (*Centro Ricerche Archeologiche e Scavi di Torino*)

Grelot's drawings of Iranian antiquities

Ambrogio Bembo, a Venetian noble, travelled to Syria, Mesopotamia, India and Persia in the 70's of the XVII century. While in Isfahan, he met Joseph Guillaume Grelot, the excellent painter who traced the drawings of Persepolis for Jean Chardin. The artist came back to Europe together with Bembo and made for him the drawings of the Bisutun and Taq-i Bustan reliefs. These are unique masterpieces of the greatest importance for our understanding of the early approach of Europe to the antiquities of Iran.

Krzysztof JAKUBIAK (*Warsaw University*)

Pelusium, still Egyptian or maybe Oriental town in the Western Sinai. Results of the last excavations on the Roman city

Since 2003 Polish expedition has conducted research in a Greek-Roman town Pelusium in Western Sinai. Those excavations resulted with unearthing a Roman theater, and fragments of Late Antiquity dwelling architecture located north from the theater. Analyze of the discovered material seems to prove that Pelusium had many relation and contacts with the Levantine coast, what underlines that the town was attended as the first Egyptian or last Middle Eastern city on the via maris older the Horus Rad running along the seashore from Egypt to Levantine.

Michaël JASMIN

Arabian Trade, Copper Road and Camels domestication in the Southern Levant at the end of the Second Millennium

This paper will offer a summary of the research on the Incense Trade Road which linked South Arabia to the Mediterranean Sea and present some suggestions concerning the context of its early emergence. Still many uncertainties surround the historical phenomenon of the incense trade route; however, it seems that its roots could be put back in the historical context in the Late Bronze II at the end of the second millennium. It is usually admitted that the emergence of this trade route was closely related to the domestication of the dromedary whose introduction has revolutionized the trade routes across the Near East. This common view has to be redefined. In particular the relation between the copper road and the incense road offers new insight into the process of the development of that new trade.

The paper will focus on the Egyptian economic exploitation of the southern Negev in the LBII, on archaeological testimonies with the Qurrayya Painted Ware distribution, on zoo-archaeological data and isotopic analysis of camels bones which are especially significant because of its many implications for the understanding of the camels uses in the Southern Levant. To conclude I will propose a sequence of the incense trade road development.

Sabah A. JASIM (*Directorate of Antiquities, Sharjah, UAE*) and **Eisa ABBAS**

The Excavation of a Post-Hellenistic Tomb at Dibba, UAE

This paper deals with the outcome of archaeological excavations which were conducted in the UAE city of Dibba, located on the eastern coast of the Oman Gulf, over a two month period (May-April 2004) by a local team from the Directorate of Antiquities of the Emirate of Sharjah. The excavations resulted in the discovery of an important and particularly interesting large subterranean collective tomb. Contained within this tomb were several human skeletons with associated lavish funerary offerings including a number of complete glazed jars and extremely fine wares, together with variety of metal objects and weaponry. Also found within the tomb was a beautiful collection of Roman glass vessels as well as a significant amount of ostentatious jewellery, including gold and precious stones. Of special interest are three gems engraved with Roman portraits and deities. Most fascinating are the ivory pieces beautifully decorated with a variety of interesting scenes. The discoveries have been attentively dated to the 1st century A.D. A full account of excavations and the implication of these discoveries are presented and discussed.

Kai KANIUTH (*Institut für Vorderasiatische Archäologie, Ludwig-Maximilians-Universität*)

The Bronze Age relations of Southern Central Asia

The contribution reviews the external relations of Southern Central Asia in the Middle- and Late Bronze Age (late third and early second millennium BC). During this time period, several larger cultural entities, the Eurasian steppes, the eastern Iranian and Indus spheres, interacted with Bactria, Margiana and the Kopet Dagh foothill zone, exerting varying degrees of influence on the local communities. Similarly, objects of Central Asian derivation have been found all the way down to the Persian Gulf, suggesting that it was a very active participant in a larger exchange system rather than a migratory zone. It shall be attempted to go beyond using imports merely as a convenient means for cross-cultural synchronization by showing patterns of association that will help to improve our understanding of the nature of the Silk Road's prehistory.

Eva KAPTIJN (*Leiden University*)

Settling the Steppe. Investigating the presence of Iron Age irrigation in the middle Jordan Valley

The research presented here is part of the regional project Settling the Steppe; the archaeology of changing societies in Syro-Palestinian drylands in the Bronze and Iron Ages. This project seeks to answer the question why people came to settle the steppe zone of the Near East and the Syrian Jezirah and Jordan Valley in specific. Habitation of the steppe zone requires significant effort of the inhabitants to overcome the constraints of the marginal environment they live in. This paper will focus on the question whether the Iron Age people of the Deir 'Alla region (middle Jordan Valley) practiced irrigation and if so what form this system took. In order to answer this question results from the first two pedestrian survey campaigns, conducted as part of my PhD research, will be discussed. Furthermore the irrigation system of this region known from ethnohistory and the likely situation in the Mamluk period will be evaluated. This ethnohistorical model will together with the physical restraints posed by the landscape and the archaeological evidence itself be used to construct a hypothesis about the irrigation system used in the Iron Age

Kaoru KASHIMA (*Kyushu University*)

The climatic events during the Neolithic in central Turkey and north Syria

The geo-archaeological research project in Turkey and Syria has started in 1991 in conjunction with the excavation of Kaman-Kalehöyük by the Japanese Institute of Anatolian Archaeology, and the excavation of Tell Seker al-Aheimar by University of Tokyo. It is a multidisciplinary research program to investigate environmental history during Neolithic and to discuss relationships between environmental changes and archaeological epochs. We took drilling surveys at inland lakes and marshes surrounding archaeological sites at Konya basin, Lake Tuz, Lake Seyfe, Kayseri and Kaman Kalehöyük in central Turkey, and Lake Khatouniyeh in north east Syria. We also took a drilling core at Lake Karum in Egypt to compare the environmental changes to those areas. In central Turkey, humid environment happened at the Younger Dryas about 11000 BC. After then, very dry environment continued during the Neolithic. The humid environment recovered at about 4500 BC at Kayseri, Lake Seyfe, Kaman Kalehöyük and the east part of Konya basin. In contrast to it, the humid environment started about 8500 BC at Lake Khatouniyeh in north east Syria. Especially, a drastic humid event happened about 6500 BC, and turned to very dry environment since 4500 BC. Those climatic changes occurred at the turning points of the distributions of habitations and cultures in Neolithic.

Melissa KENNEDY (*The University of Sydney*)

Life and Death at Tell Umm Hammad and Tiwal esh-Sharqi (Jordan) – A Village Landscape of the Southern Levantine EB IV

Tell Umm Hammad and Tiwal esh-Sharqi are located in the central Jordan Valley near the wadi Zarqa, south-west of Deir 'Alla. Tell Umm Hammad is divided into two mounds, al-Sharqi and al-Gharbi. The first excavations at the site were undertaken by Mellaart, and revealed a series of settlements dating from the Late Chalcolithic to the EB IB. Subsequent excavations conducted by Helms and Betts revealed EB II occupation, as well as an extensive EB IV settlement, one of the largest in the southern Levant. The cemetery of Tiwal esh-Sharqi is located some 300 metres south-west of al-Gharbi and was first excavated by S. Helms and A. Betts and later by J. N. Tubb of the British Museum. This presentation will consist of a comparison of the settlement and funerary assemblages of these important sites in the EB IV period. This paper presents new information regarding the daily life and funerary practices of Tell Umm Hammad and the EB IV. This synthesis will also suggest that the material culture is more closely aligned to that of northern and highland Jordan than the Jordan Valley. In addition possible Syrian (nomadic) influences on the site are highlighted. This suggests that the Zarqa drainage system was, like the Hulah Valley, an important conduit for such contact. In summary, this presentation will highlight the similarities, differences and key elements of these two assemblages, which are fundamental to an understanding of this enigmatic period.

Christine KEPINSKI (*CNRS National Centre for Scientific Research*)

New data from Grai Resh and Tell Khoshi (south-Sinjar, Iraq) collected in 2001 and 2002

Researches in southern Sinjar aim at documenting the development, but also the beginnings of urban settlement in that area from the fourth till the second millennium B.C. through investigations at two complementary sites, Grai Resh and Tell Khoshi. Tell Khoshi illustrates one of the great cities of a 100 hectares that developed in Upper Mesopotamia, during the Early and Middle Bronze Ages while Grai Resh yields data from the fourth millennium. Grai Resh has revealed a very dense occupation, diversified buildings and installations. An enclosure wall, several tripartite houses, a beads workshop, one seal, exotic goods, different items used for exchange testify to the existence of far distance contacts, social hierarchy, specialised craft, distribution, units of measure and calculation, production of means of exchange, control and conflicts as soon as the very beginning of the fourth millennium B.C. Areas A and B yield attestations of four coherent ceramic assemblages and three radio-carbon dates from 3600 to 4000 B.C. The French archaeological expedition at Sinjar in 2002 remains the last foreign excavations in Iraq before the 2003's conflict.

Fiona KIDD (*University of Sydney*)

Of blue camels and the black horses. Wall paintings from Kazakl'i-yatkan, Chorasmia

The opening days of the 2005 excavations at Kazakl'i-yatkan revealed a "blue camel" in the corridor of the mysterious cultic building in the upper enclosure of Kazakl'i-yatkan. The final days exposed the black legs of two horses. A monumental procession? A hunt? Who were the riders, where were they going and why? Lying at the crossroads of east and west, Central Asian art embodies a myriad of influences including Iranian, Hellenistic, Chinese, Buddhist and steppe nomad. Razed by Chengis Khan and long buried beneath the harsh sands of the Kyzil kum, the flourishing heartland of ancient Chorasmia lay on the rich Oxus delta, which flowed into the Aral Sea. Kazakl'i-yatkan is one of the biggest sites in Chorasmia and its wall paintings, dated to c. 3rd century BCE – 1st century CE are among the earliest. The Karakalpak-Australian Expedition to Kazakl'i-yatkan has yielded significant finds of monumental Chorasmian wall paintings, contributing critical new evidence and providing a fascinating snapshot of art and culture in this complex and challenging region. This paper will examine the iconography of the paintings in the broader context of Central Asia, showcasing for the first time the remarkable results of the last two seasons.

Masoumeh KIMIAIE (*Iranian Cultural Heritage and Tourism Organization*)

The Report of Archaeobotanical Research in Historical Wall of Gorgan, Northeastern of Iran

The first part of archaeobotanical researches in Historical Wall of Gorgan, was done in 2003, in the third season of excavation. The main goal of this research which took place in Qizlar Qale (Northeastern Iran), was based on studying and identifying of agriculture situation of this site's inhabitants by the help of archaeobotanical materials recovered from the soil samples. Plant remains which recovered from soil samples by flotation, were very well preserved in the layers by carbonization process. The well-known domesticated remains, were *Hordeum vulgare* (Barley) specially six-row barley which were identified so much in the samples. Also there were some *Triticum compactum* (Compact wheat) seeds and different parts of wheat spikelet. Some grape seeds (*Vitis vinifera*) and their skin were identified in the samples. Some wild and weedy plant remains were found in the samples, such as: *Linum* sp., *Valerianella dentata*, *Trifolium* sp., *Melilotus* sp., *Phalaris* sp., *Aizoon* sp., *Bromus* sp. and some seeds from Malvaceae family. There were also some wood charcoals in the carbonized samples which belong to *Tamarix*. These documents belong to one season

of excavation, can be useful both for getting some results about living economy and agricultural situation in historical period and for continuing the archaeobotanical research to achieve more goals in this site.

Aviva KLEIN-FRANKE (*University of Cologne*)

The Pioneering Ethnography and Archaeology Work of Carl Rathjens in Yemen

Carl Rathjens was a Geographer from Hamburg. His first trip to Yemen in 1927, was unplanned. C. Rathjens and H. von Wissmann were travelling from Cairo to Jiddah to investigate central Arabia. Their plan did not come to fruition because they were denied visas. Their arrival at the port of Hudaidah thereafter was accidental. There they received permission from Imam Yahya to visit him in Sanaa. They both enjoyed a very warm welcome. The permit to travel in Yemen afforded the scholars the opportunity to research a broad field of subjects for many years to come, both together and separately; Rathjens in Yemen and von Wissmann in Hadhramawt. Imam Yahya surprised Rathjens, who had started to measure the city of Sanaa and to collect meteorological data, with the request to excavate a site in Huqqah. Although he was not an archaeologist, and was not trained in methodological digging, he knew that he could not refuse the Imam's request to unearth an ancient Himyarite tomb. This archaeological attempt proved to be successful, but Rathjens decided to look for an experienced archaeologist, someone acquainted with the ancient language as well as with the history of the area, to assist him in future. In his next journeys between the years 1927-1938, he collected data about objects and listed historical sites, which he published in his two-volume work, "Sabeaica". Rathjens' second groundbreaking project in Yemen was to establish a meteorological station in Sanaa. He also trained young students to handle the equipment in the station and showed them how to calculate and record the daily weather data in Sanaa. Rathjens was a consultant to Imam Yahya in many ways, as well as advising German businessmen who wanted to work with merchants from Yemen and with the Imam. Carl Rathjens also enriched our knowledge of Yemen's ethnography. Many of the objects Rathjens studied in Yemen were brought to the Hamburg Museum of Ethnography. Rathjens also studied the Jewish community of Yemen and documented the carafs and the economy. He also described a typical Jewish house of the Jew Subeiri from the Jewish Quarter of Sanaa. The ethnographical material that Rathjens documented, have contributed greatly to the study of the material culture of Yemen during the time of Imam Yahya.

Aviva KLEIN-FRANKE (*University of Cologne*)

Rock Graffiti Discovered at a Unknown Archaeological Site Near Sanaa

During my last ethnographic research in Hiziaz, I was informed about an archaeological site in the area. Hiziaz is a small village South-East of Sanaa, which has an old mosque and some Himyarite inscriptions on the walls of a few houses. In addition, there are eight engraved wooden pillars, originally belonging to the ancient mosque in the village, but due to the renovations they were removed and now held in private homes. The historical site was unknown to scholars and to the Antiquities Authority in Sanaa until I informed them of it. I climbed the mountains near the village in the early morning hours and took photos and videotapes of the site. I documented over 20 inscriptions and over 30 rock-drawings, and graffiti, all dealing with hunting. It seems that the place was a temple where animal sacrifice was performed. I would like to present to the Seminar's audience these findings about the village and about the site on the mountain, which is still waiting to be thoroughly explored.

Gulriz KOZBE (*Ege University*)

A New Archaeological Survey Project in the Southeastern Anatolia: Report of Cizre and Silopi Region

The Turkish Government has been implemented a development program for the southeastern Anatolia which is known as the "Güneydogu Anadolu Projesi, GAP" since 1986 that involves the construction of a number of dams on the Euphrates and Tigris rivers as well as on their tributaries. The Cizre Dam which will be erected only a few kilometers north of the modern town of Cizre is one of those dams. Besides the Cizre Dam, water diverted from this dam and the Nerdus, a perennial stream of the Tigris, will be used to irrigate 32,000 hectares of agricultural land in Cizre-Silopi plain. Even though this irrigation project is now in the planning stage, it's well known that this type of damage affects the archaeological and historical sites of the region more severely than a dam reservoir area. Due to those troubles, the first archaeological reconnaissance project was started in the region by G. Algaze between 1988 and 1990. Fourteen years later, our survey project began in 2004 in the province of Siirt in the southeastern Anatolia comprising a more extensive area according to the works done previously. Because of the security considerations, during the first two years of the project, we mainly focussed in Cizre and Silopi region bordered by the modern Cizre-Zakho road in the north, the eastern Khabur river in the east, the Tigris river in the south and extending approximately up to the province of Mardin in the east. A total 44 archaeological sites were documented in Cizre and Silopi region dating from the Ceramic Neolithic to the Islamic periods. In spite of two seasons of the survey, it's very clear that the most intensive traces of occupations in the region are recognizable by the Halaf, Khabur and New Assyrian periods. However, the main goal of our project is to determine all possible data defining this insufficiently known but very strategic region

between east and west as well as between Upper Mesopotamia and highland Anatolia along with its whole settlement sequence.

Florian Janoscha KREPPNER (*Freie Universität Berlin*)

An Extraordinary Cremation Custom in Iron-Age Dur-Katlimmu

Excavations in the operation “Neo-Assyrian Residences” in the “Lower Town II” of Tall Sheikh Hamad / North-Eastern Syria have brought to light graves of a special type. Large oval pits (ca. 2m) contained a thick ash-layer with charcoal underneath an upper fill. In the ash-layer burnt human and animal bones were found. Eleven graves of this type have been excavated containing one human individual each. Some of those were equipped with precious gifts like bronze and ivory objects. The finds were uncovered in a bad condition because they had suffered by the fire which had blazed in the pit. Graves of this type can be dated by their stratigraphic position into the time of the Neo-Assyrian Empire and the time after its fall. The aim of the paper is to throw light on a cremation custom not known from Iron Age Northern-Mesopotamia so far.

Hartmut KÜHNE (*Institut für Vordesiatische Archäologie*)

Urbanism in Neo-Assyrian Provincial Centres of Mainland Assyria

It has been suggested elsewhere (Kühne 1994) that the Assyrian provinces were urbanized by stepping up the settlement system by new foundations of villages, provincial centres, and capitals. However, how were these new centres structured, geographically as well as functionally? In analogy to the capitals, the geographical structure consists of a citadel and a lower town. It is generally assumed that the citadels were spacing the palaces, temples, and administrative buildings while the living quarters of the inhabitants were situated in the lower towns. New evidence seems to indicate that the urban structure was different mirroring a different function as well. This almost certainly also reflects a social pattern.

Ian KUIJT (*University of Notre Dame*) and **Bill FINLAYSON**

New insights into the Forager-Farmer Transition: Excavation results from Dhra‘, Jordan

Archaeological excavations at the Pre-Pottery Neolithic A period settlement of Dhra‘, located just to the East of the Dead Sea, have provided important new insights into the forager-farmer transition in the southern Levant. Excavations have revealed that the settlement of Dhra‘, with the majority of the occupation dating to between 11,500 and 11,200 BP, was characterized by round-circular residential structures made of stone and mud walls. Many of these structures were partially semi-subterranean, and were rebuilt multiple times in the same location. There is evidence of an extensive ground and chipped stone industry, elaborate bead production, and importing of shells from the Red Sea and Mediterranean Ocean. Burial practices at Dhra‘ were focused on the interment of individuals in single, unmarked graves, between buildings. In select cases ground stone was buried with individuals, and in contrast to the broadly held practice of cranial removal seen at other PPNA sites, all of the burials at Dhra‘ were complete. Excavations also uncovered the remains of two large storage silos. Despite the economic reliance on wild plants and animals it appears that the past occupants of the settlement were able to harvest and store significant amounts of food for some of the community to live year round at Dhra‘.

Marc LEBEAU (*European Centre for Upper Mesopotamian Studies*)

Main results of the latest seasons of excavations and architectural restoration at Tell Beydar (Syria)

The Syro-European archaeological joint mission at Tell Beydar is organized by the Directorate-General of Antiquities and Museums of Syria, represented by Abd-el-Messih Baghdo and Antoine Suleiman, and the European Centre for Upper Mesopotamian Studies, composed of partners from several universities including our hosting institution, Universidad Autónoma de Madrid, and –currently– the universities of Brussels, Munich, Venice and the European Centre for Upper Mesopotamian Studies. All together six teams of archaeologists are assigned to six areas of excavations, within a common joint Mission. The Spanish team concentrates on the discovery of a large mudbrick building in Area A, built around 150 BC and comprising several phases of occupation until around 50 BC. The other teams are devoted to the exploration of the Third Millennium city. Most of the recent discoveries concern the Early Jezirah IIIb level (2500-2350 BC). Previous excavations explored the acropolis, composed of a Palace, several temples and other administrative buildings. The acropolis is surrounded by buildings of economical function and workshops. The private houses are installed further to the periphery. The latest excavations reach the core of the city itself. Cuneiform tablets and bullae are still discovered, reaching an amount of 237 written documents. Retrieved in 2005, sixteen tablets from Area I –provisory dated around 2450 BC– are probably the earliest documents ever found in Syria. Since 2003 a large programme of architectural restoration has been initiated. Four seasons of restoration and rebuilding were devoted to the restoration and reconstruction of the Early Jezirah IIIb acropolis, which will be completed soon.

Olivier LECOMTE (*CNRS, UMR 7041*)

A «Median» urban settlement in southern Central Asia: The case of Ulug Depe

Located in the piedmont plain of southern Turkmenistan, Ulug Depe, which displays the longest stratigraphy of Central Asian sites, from early Chalcolithic to the late Iron Age, is currently excavated by a French Turkmen joint expedition. The present paper will concentrate on its latest period of occupation: Yaz II-III. A magnetic survey carried out on top of the site in 2003 yielded the complete plan of a large (10 ha) urban settlement dated from the 9th-8th centuries BC and probably still occupied during the Achaemenid period. Excavations first concentrated on a massive, fortified building: the «citadel», almost completely excavated by the end of the 5th campaign. Its plan displays striking similarities with that of the so-called Zagros forts in Western Iran but, at the difference of the Zagros forts, it is part of a monumental complex which forms the upper town of a large settlement, unknown for that period, both in Central Asia and Iran, with the exception of Ecbatana whose Median levels remain to excavate. Excavations at Ulug Depe shed a new light on the Median power whose very existence was recently questioned by specialists.

Gunnar LEHMANN (*Ben-Gurion University*)

Zincirli Revisited: Renewed Studies of the Stratigraphy and Pottery of Zincirli (Sendschirli)

More than a hundred years after the German excavations at Zincirli (Sendschirli) the pottery from the site still remains mostly unpublished. The paper will show that there is significant information available on the stratigraphy and the pottery, more than is generally assumed. This data allows renewed research on the site. A new chronological and stratigraphical framework will be presented as well as many so far unpublished examples of pottery from Zincirli. A large percentage of the pottery now drawn and photographed for the first time belongs to the Early Bronze Age, but there are also significant assemblages of Middle and Late Bronze Age pottery. In addition, a number of previously unpublished Iron Age and Greek imports are presented. Most of the Greek pottery is Archaic, including Corinthian and East Greek ceramics. Among the later pottery there are examples from the Achaemenid, Hellenistic and Roman period as well as vessels from the Medieval period.

Françoise LE MORT (*CNRS - UMR 5133 "Archéorient", Maison de l'Orient et de la Méditerranée*), **Stéphanie HARTE-LAILHEUGUE**, **Françoise BOUCHET** and **Montserrat SANSILBANO-COLLILIEUX**

Environment, way of life and health status at Khirokitia, Cyprus (VIIth millennium cal. B.C.)

The site of Khirokitia was first excavated by Dikaios between 1936 and 1946. Excavations directed by A. Le Brun were renewed on the site in 1977 and are still continuing. The site has yielded the largest series of human remains for the Aceramic Neolithic of Cyprus and one of the largest in Near Eastern Pre-Pottery Neolithic. The burials are primaries; most of them are single. The accessible human bone sample consists of 240 individuals. The subadults/adults ratio appears to be consistent with an ancient population. The study of this population revealed cultural, demographic and morphological particularities. The observed pathological conditions include pathologies directly connected to the way of life and the environment, such as auditory exostoses and parasitoses (ascariasis and trichuriasis). They also include dental and periodontal lesions that current epidemiological surveys tend to explain as the result of a complex of interactions between several different factors one of them is environment. Finally, a high prevalence of cribra orbitalia has been noticed in the subadult sample; this could be related to anemic conditions, possibly linked to environmentally induced circumstances. A change in the health status of the population, possibly related to environmental modifications, seems to have occurred during the occupation of the site.

Carlo LIPPOLIS (*Centro Ricerche Archeologiche e Scavi di Torino*)

Old Nisa-Mithradatkert: Italian excavations in the Red Building

The excavations started in the 30's of the 20th and resumed after the second world war by JuTAKE expedition in Old Nisa (Turkmenistan) achieved exceptional results and started revealing the complexity of the Arsacid cultural tradition. From 1990 new research have been carried out by an the Italian expedition of Centro Scavi di Torino: the works, still in progress, represent a fundamental contribution to our knowledge of the architecture, art and culture of the early developmental stages of the Parthian Empire's history. Last campaigns (2000-2005) brought to the light a monumental building in the central part of the tepe, whose features once more confirm the heterogeneous character of the local architecture. The excavations carried out in this sector revealed evidence on a square Parthian building (side about 40 m) with walls still well preserved. The Red Building (so called for its typical red-plaster decoration) is integral part of the central monumental complex: a large compound of structures different one from the other in plan, but all with the main celebrative purpose of glorifying the royal Arsacids. Even though many question about the punctual destination and chronology of the structures didn't receive yet exhaustive answer, the new studies undertaken achieved important results for our knowledge of the whole central sector of ancient Mithradatkert.

Anna Rita LISSELLA (*Università degli Studi di Roma "La Sapienza"*)

Clay Figurines from Tell Ta'anek

A reappraisal of the clay figurines from P. W. Lapp's excavations at Tell Ta'anek –based on the original materials courtesy of Bir Zeit University and the American Schools of Oriental Research– has led to some new insights about choroplastic developments in northern Palestine during the Bronze and Iron Ages. A stratigraphical analysis of the finds, their typology and chronology and the relations of the clay productions with those from neighbouring areas will be presented.

Minna LÖNNQVIST (*Institute for Cultural Research, Department of Archaeology, University of Helsinki*)

Kathleen M. Kenyon 1906-1978. A Hundred Years after Her Birth. The Formative Years of a Woman Archaeologist and the Stratigraphic Method

Kathleen M. Kenyon has sometimes been called the world's greatest field archaeologist. She followed the way trodden by such female archaeologists as Dorothy Garrod and Gertrude Caton Thompson in the Near East. Kenyon's father Sir Frederick Kenyon, a biblical scholar and director of the British Museum and British Academy, apparently had some influence on his daughter's choice of a career that finally led her to the Holy Land. It was in Samaria in Palestine where she deepened her knowledge in archaeological field techniques and methodology. Through the co-operation with the teacher and colleague Sir Mortimer Wheeler she gradually developed the stratigraphic method also known as Wheeler-Kenyon method that was executed meticulously in Kenyon's Jericho excavations in the 1950s. This paper examines Kenyon's formative years in the emergence of the stratigraphic Wheeler – Kenyon method and the significance of the method not only to the Near Eastern archaeology but also to the discipline of archaeology in general.

Minna LÖNNQVIST, Kenneth LÖNNQVIST, Jari OKKONEN, Michael HERLES and Marcus KÖNIGSDÖRFER (*Institute for Cultural Research, Department of Archaeology, University of Helsinki*)

“River Deep, Mountain High” Different Degrees of Sedentism in the Valley of the Euphrates River and the Mountain of Jebel Bishri in Syria

A Finnish project SYGIS has been surveying and mapping the mountainous region of Jebel Bishri in Central Syria since the year 2000. The project has used remote sensing methods in approaching the area covering c. 1 million hectares of desert-steppe area limited with the green irrigated valley of the Euphrates river. The environment has largely dictated the livelihoods in the region throughout the past. The satellite images used in the study reveal the environmental contrast between the nomadic and sedentary regions. The desert-steppe areas have only provided semi-nomadic and semi-sedentary sites so far, but at the river side signs of buried settlements and tells have been traced and mapped. In the year 2004 field season the focus was in surveying, mapping and modelling a tell at Tibne, which offers early layers of sedentary life with Uruk pottery. The Sumerian texts from the Early Bronze Age tell (Gudea statue B) that large stones were transported to Mesopotamia from Jebel Bishri. The rise of small towns along the river on the foot of the mountain was based on development of irrigated agriculture and the Mesopotamian trade along the river.

Kirsi O. LORENTZ (*School of Historical Studies, University of Newcastle-upon-Tyne*)

Crafting the Head: The Human Body as Art?

The human form is a recurring subject of artistic expression in the ancient Near East. It is not only the depictions of the human body, but also the actual human body itself that have been the focus of aesthetic expression and manipulations. Headshaping is such a form of body modification, with high visibility, and very culturally specific aesthetics. To bring this modification about, a complex process of restricting the growth vectors of the human cranium in infancy is needed –requiring an in-depth, sophisticated knowledge of the material: the human body. The various types of head shape modifications occurring from prehistoric to historical times in the Near East may have been further accentuated using hairstyles, and sometimes even depicted in the medium of anthropomorphic figurines. Is the practice of headshaping more akin to an art (here understood to contain aspects of individual, and/or one-off expression), or a craft (here understood as somewhat more standardised material production, with high level of expertise)? To begin to investigate this question, we must ask what socio-cultural function did headshaping fulfil, and who were the practitioners of this art or craft? The paper brings archaeological, physical anthropological, ethnographic and historical evidence to bear on these questions.

Christine LORRE (*Musée d'Archéologie Nationale*)

Jacques de Morgan et la question de l'origine de la métallurgie dans le Caucase

Depuis plusieurs années, la redécouverte de la collection archéologique rapportée du sud du Caucase par Jacques de Morgan entre les années 1890 et 1910 et conservée au MAN (Saint-Germain-en-Laye, France) est l'occasion de s'interroger sur les motivations de l'archéologue dans sa recherche des origines de la métallurgie – sujet qui l'a préoccupé tout au long de sa vie. La communication s'efforcera de montrer l'élaboration de la méthode de recherche de Jacques de Morgan sur le terrain, ses relations avec le monde savant de l'époque ainsi que l'intérêt scientifique d'une collection ancienne pouvant être réévaluée à l'aune de découvertes plus récentes.

Jaimie LOVELL (*University of Sydney, Council for British Research in the Levant*)

Olive as a luxury product in late prehistoric Jordan: New excavations in the Wadi Rayyan.

The fact that Chalcolithic inhabitants of the southern Levant ate, and indeed cultivated, olives has been long proposed (Zohary and Spiegel-Roy 1975). Even before systematic archaeobotanical sampling, large quantities of olive wood and olive pits were reported from the site of Teleilat Ghassul and other Jordan Valley sites (Neef 1990). Systematic measurement of olive stones or pits from the large volumes of archaeobotanical data from recent excavations at Teleilat Ghassul (Bourke et al. 1995, 2000, *ibid.*) has, for the first time, revealed a reduction in variance over time (Meadows 2001, 2005). This constitutes the first concrete evidence that olives were, in fact, domesticated during the Chalcolithic period in the southern Levant. This paper explores the development of horticultural technology in the Chalcolithic and its association with developing complex settlement systems. Olive oil has also been implicated in debates on the emergence of civilisation, although detailed discussion of the actual requirements for such agricultural technologies and their associated risks is rare (Hamilakis 1999: 41). Olive oil produces one of the greatest amounts of calories and fat per unit volume, however there are considerable risks to producing it. For this reason olive oil production, within the limits of the Mediterranean economy, was better suited to farmers who were able to offset risks. Hamilakis notes that despite the strong resonance of the Mediterranean with olive oil, “in social contexts where extensive oil production is documented, an extensive market network which demanded oil is usually present” (Hamilakis 1999: 44; see also Mattingly 1988). We can therefore expect that the production of olives and olive oil in late prehistoric Jordan involved something of this shift in framework from cereals and pulses to high-risk elite crops. It has been recently suggested that the settlement patterns of Chalcolithic settlements might be related to the suitability of their soil for olive growing (Banning et al. 1998: 154; Lovell 2002) and it is generally presumed that olive oil was a feature of Early Bronze Age trade with Egypt (Ben-Tor 1986: 10, 14, 16, 1991: 8; Stager 1985, Joffe 1993; cf Ward 1991: 20, n 4). Whilst we can document a significant antiquity to interaction between the two regions (e.g. Perrot 1959; Tutundzic 2001; Bar-Yosef Mayer 2002), precise evidence for olive oil trade is lacking. However, it may be that olive – a new horticultural resource – made it possible for Chalcolithic inhabitants to more fully exploit new highland territory (see Gophna and Portugali 1988). The recent excavations in the Wadi Rayyan, Jordan are designed to examine this question in further detail and to examine the role of new luxury products on developing social systems in the late Prehistoric period.

Marta LUCIANI (*Institut für Orientalistik, University of Vienna*)

Craft activities in Qatna's Palaces?

The paper will analyse some of the most important classes of materials found in the palaces of the ancient capital Qatna (modern Tell Mishrifeh) in view of exploring the question of the production of luxury and prestige goods in Middle and Late Bronze age Syria. Both texts and archaeological evidence, old research as well as the most recent discoveries on the site, will be discussed. Furthermore, comparison with the findings in other palatial and non-palatial structures of the ancient Near East will help draw conclusions on the presence of ateliers, the organisation of production, the circulation of high status goods and the mobility of artisans in the second millennium BC.

Steven LUNDSSTRÖM (*Institut für Altorientalistik, FU-Berlin*)

From six to seven royal tombs. The documentation of the Deutsche Orient-Gesellschaft excavation at Assur (1903-1914) – possibilities and limits of its reexamination

The excavation of the Deutsche Orient-Gesellschaft (DOG) in Assur from 1903 to 1914 has brought to light several architectural structures as well as numerous objects. Results have already been published during the excavation as preliminary reports in *Mitteilungen der DOG*, afterwards mostly as monographies in the series *Wissenschaftliche Veröffentlichungen der DOG*. Since 1995 the Assur-Projekt of the DOG and the Vorderasiatisches Museum zu Berlin is resuming the work on those excavation results which are still unpublished or to be reexamined. One subject of discussion is the documentation of the excavation consisting of several written sources, plans and photographs. This paper aims to present an overview over these different sources and the possibilities as well as the difficulties in utilizing them. Especially this is due to the written parts of the documentation: There are records focussed on objects or architectural structures, private notes and reports to the DOG and German authorities. Each record is to be examined on its own as well as a part of the documentation in order to assess the informations given there. This discussion is illustrated with examples taken from the authors' PhD thesis on the royal tombs of the Old Palace in Assur.

Aren M. MAEIR (*Bar-Ilan University*)

Goliath' and other Philistines: Recent Excavations and Finds at Tell es-Safi/Gath, Israel

The excavations at Tell es-Safi/Gath, Israel, directed by the author, have revealed a rich and wide range of material remains spanning the late Prehistoric thru Modern periods. Particular emphasis has been on finds from the Early Bronze, Late Bronze and Iron Ages I-II. A central facet of research has been the study of the development and transformation of the Philistine culture. The Philistines, who arrived in Canaan in the early 12th cent., came with a largely foreign ("Aegean") culture. Throughout the Iron Age this culture went through a process of transformation – while retaining much of the original "Aegean" cultural traits, it incorporated more and more local "Levantine" aspects. This transformation has been identified as a process of "Acculturation," or as I prefer, a process of "Creolization." The finds from the excavations will be reviewed, in particular finds from the various stages of the Philistine culture from which this process can be studied. This includes the pottery assemblage, ritual finds, domestic behaviours, and linguistic evidence. Noteworthy is the recently found Philistine inscription, the earliest known to-date, in which non-Semitic names (reminiscent of the name Goliath) are written in Proto-Semitic letters. Finally, the stratigraphic sequence at the site, along with well-based typological and radiometric dating, place this transformation within a distinct chronological sequence, in relation to sites in the Southern Levant.

Lisa A. MAHER (*Leverhulme Centre for Human Evolutionary Studies, University of Cambridge*)

New evidence of burials, mortuary practices and treatment of the dead in the southern levant

In 2005 the Wadi Ziqlab Project conducted excavations at a Geometric Kebaran encampment in northern Jordan. The recovery of at least nine individuals highlights the uniqueness of the site for its contribution to understanding pre-Natufian mortuary practices. Based on the site's large size and diversity and depth of occupational debris, it appears to have been inhabited repeatedly over several generations as a favoured locale. The subsequent use of the site for multiple interments also attests to its ideological and ceremonial importance. Some burials represent primary interments, while others are secondary burials or show reuse of an earlier grave. Flint implements, groundstone, red ochre and partial animal skeletons were found associated with several of the skeletons. Analyses of the skeletons and associated objects provide critical data on biological and cultural affinities, prehistoric technology, adaptation, health, and treatment of the dead. There are only a few other examples of burials from this time period. This site is one of the first to document several interments in one location prior to the Natufian and has allowed us to better situate prehistoric Jordan within the larger context of Late Pleistocene society during this increasingly crucial period preceding the emergence of social complexity and agriculture.

Martin MAKINSON (*Département des Sciences de l'Antiquité Université Dufour*)

Tell Ahmar, from Middle Assyrian Outpost to Neo-assyrian Provincial Capital: Shreds of Evidence from the Upper City

From the inception of the second millennium BC, the Syrian Upper Euphrates was a frontier region, a border at the crossroads between contending Empires. In the Late Bronze Age, vassal city-states coexisted with Hittite and Middle Assyrian military and trading outposts. Pottery typologies from excavated settlements along the river do provide insight on how the various empires of the Late Bronze and Iron Ages saw and administered the region. Moreover, Iron Age chronology in this part of Syria can distinguish between phases of local development (the Iron IB and II), when shapes are overwhelmingly similar to those of inland Syria west of the Euphrates, and periods of direct imperial domination, when processes of acculturation are gradually at work (the Iron Age IA and III). Such an approach can help us establish meaningful subdivisions. Enough wares and profiles are available from sites between the Taurus and the Balikh confluence so as to now isolate various stages reflecting local cultural and historical trends. Beforehand, the Iron Age material culture of the Syrian Upper Euphrates had been interpreted solely by using chronologies from northern Mesopotamia, the Habour, sites southwest of Aleppo or even Palestine.

Desde el inicio del segundo milenio a.C., la parte siria del alto Eúfrates ha sido simultaneamente un lugar fronterizo entre imperios rivales y un cruce de rutas. En el Bronce tardío, ciudades vasales y tributarias se desarrollaron junto a asentamientos militares y comerciales hititas y medio-asirios. Las tipologías cerámicas de yacimientos excavados a lo largo del río demuestran a menudo como los varios imperios de las edades del Bronce y del Hierro consideraban y administraban a la zona. Mas aún, es posible señalar, en un estudio de la evolución de la alfarería de la época del Hierro, periodos de desarrollo exclusivamente local (el Hierro IB y II), tiempos de tipologías en su gran mayoría similares a las de Siria interior al oeste del Eúfrates, así como fases de dominio imperial, marcados por procesos de aculturación evidentes (Hierro IA y III). Esta clase de problemática nos ayuda a establecer subdivisiones significativas. Una cantidad suficiente de cerámicas y de perfiles de sitios arqueológicos entre el Tauro y la confluencia con el Balikh están actualmente a nuestra disposición como para poder distinguir varias etapas que reflejan a tendencias culturales e históricas. La interpretación de cultura material del alto Eúfrates de Siria se basaba hasta ahora en cronologías establecidas para el norte de Mesopotámia, el Habour, yacimientos al suroeste de Aleppo y hasta Palestina.

Gianni MARCHESI (*Università di Bologna - Harvard University*)

Towards a Corpus of Early Dynastic Royal Statues: New Data and Interpretations

A very recent survey of published and unpublished Early Dynastic inscriptions on statues has resulted in the identification of hitherto undetected statues of early Dynastic rulers. At the same time, a number of statues considered to be royal in previous scholarship literature have turned out, upon closer examination of their inscriptions, to belong to lesser officials. These new data and interpretations represent a point of departure for further investigation about royal statues in the Early Dynastic period and open new perspectives in the study of royal ideology in these early phases of Mesopotamian history, when the figure of the king as political leader of the human community first emerges and becomes visible both in figurative arts and in written documentation.

Nicolò MARCHETTI (*Dip. di Archeologia, Alma Mater Studiorum - Università di Bologna*)

The 2004 and 2005 Turkish-Italian excavations at Tilmen Höyük. New finds on MBA temple and palace architecture in south-eastern Turkey

The excavations of Bologna University, with funds also by the Italian Ministries for Foreign Affairs and for Education, University and Research, are undertaken at Tilmen Höyük in cooperation with Gaziantep Museum. The excavations of 2004 and 2005 have been carried out the acropolis and the lower town. New stratigraphical and chronological data have been collected for the monumental palace area on the south part of the Acropolis, including newly identified Building G and Fortress H, which gave abundant pottery materials from MB II and LB I respectively. In Acropolis north a significant sequence within the MBA has been obtained in Area L. The great stairway K5 to the east has been restudied and in the extension of the excavations an impressive palatial building, destroyed late in MB II, has been identified. In the lower town a temple in antis has been excavated in area M, surrounded by a temenos in which some metallurgical activities were seemingly carried out. In the cella, a late Old Syrian stela has been found. A MB II postern (K3) in the western line of the fortification casemate walls has been excavated.

Nicolò MARCHETTI (*Dip.o di Archeologia, Alma Mater Studiorum - Università di Bologna*)

The emergence of royal rhetoric in Mesopotamia and the chronology of Early Dynastic visual documents

A basic need for establishing the sequence of Early Dynastic figurative documents is to check their relative dating through the stratification of provenanced pieces. This operation results into a new framework in which setting the first appearance of royal figures within the visual communication system developed by early urban elite communities. From a stage in which the administration as a whole is celebrated, there is a gradual shift towards the figure of the king, both visually and epigraphically, who in the course of time becomes the main and then almost the unique subject. This is obtained partly also through the reinterpretation of traditional themes, and in part through the introduction of new ones. At the very end of the Early Dynastic period, at a time of continual political upheavals, some iconographical details are also developed in order to further characterize the royal figure.

Catherine MARRO (*CNRS*)

Where did the Late Chalcolithic Chaff-Faced-Ware originate? New discoveries from Anatolia and Transcaucasia

Recent research in Anatolia and Transcaucasia has revealed the existence of several Late Chalcolithic, often single-period sites, teeming with Chaff-Faced ware of Amuq F or pre-Amuq F type (dated ca. 4000-3500 BC). Chaff-Faced ware was first described by the Braidwoods after their excavations in the region of Antakya in the Orontes basin; its geographic extension is usually associated with Northern Syria and Upper Mesopotamia. Hence its presence, at times exclusive, on a number of settlements throughout the Eastern Anatolian Highlands or in the Kura basin calls this assumption into question: where is the focus of the Chaff-Faced ware province? How and where did it originate from? Should the Highlands be considered as the outskirts of a cultural entity focused on Upper-Mesopotamia as usually assumed, or quite to the contrary, might they be its cradle?

Harriet MARTIN

The Tell Brak Survey: Collected Sealings

About 25% of the 600 registered objects from the Tell Brak Survey are sealings. These have been particularly abundant on sites with large Ninevite 5 deposits, sealings from these sites frequently showing “Piedmont” or “Glazed Steatite Style” impressions. Sealings from other periods are represented, but much less frequently. One site with mid-third millennium pottery yielded a cluster of Early Dynastic II-III sealings while a Neo-Assyrian stamp seal impression was found on a site with 1st millennium pottery. Instead of seal impressions, some sealings were impressed with finger nails. Others appear to have a simple tallying system marked on them. The backs as well as the fronts of these sealings

inform us on ancient economic and trade practices. Excavations in the 1980s on sites on the middle Khabur near Tell Brak indicated many were abandoned after Ninevite 5 levels which included large scale storage facilities. The recovery of so many Piedmont style sealings from the Tell Brak Survey may indicate that there was a similar pattern of Ninevite 5 settlement further north in Tell Brak's sphere of influence.

Rodrigo MARTÍN GALÁN (*European Centre for Upper Mesopotamian Studies*)

El palacio de época helenística de Tel Beidar, un ejemplo de pervivencia de la tradición indígena en la Alta Mesopotamia

Los manuales de historia del Próximo Oriente suelen situar el final de las antiguas civilizaciones mesopotámicas en el momento de la llegada de Alejandro y los Macedonios. La época helenística ha sido dejada de lado por parte de muchos investigadores que han trabajado en el Creciente fértil, esta actitud ha hecho difícil poder llegar a tener una visión clara de la evolución de las culturas autóctonas más allá del siglo III a.n.e. Sin embargo, las investigaciones arqueológicas llevadas a cabo en algunos enclaves como Assur, Seleucia del Tigris o Tel Beidar muestran cómo efectivamente existe una continuidad que no se rompe con la llegada de los griegos. En Tel Beidar el equipo español que se integra dentro de la misión arqueológica euro-siria está llevando a cabo la excavación de un palacio de planta cuadrada cuya división interna y técnicas de construcción se integran dentro de la vieja tradición palatina mesopotámica. Los habitantes de la Alta Mesopotamia del siglo II a.n.e. continúan construyendo los edificios que constituyen las sedes de los poderes locales según las mismas concepciones técnicas y espaciales que habían imperado en la región durante siglos.

Near-East general history books usually place the end of the ancient Mesopotamian civilizations at the arrival of Alexander and the Macedonians. Many researchers working in the Near East during the XXth century have neglected the Hellenistic period. Consequences of this attitude are the difficulties we face today to reach a clear vision of local cultures evolution after the IIIth century b. C. Nevertheless researches carried on at some sites like Assur, Seleucia on the Tigris or Tell Beydar show a clear continuity of these cultures uninterrupted by the arrival of the Greeks. The Spanish team working in Tell Beydar in the framework of the Euro-syrian mission that excavates this site is digging a squared plan palace. This building, according to its internal layout and its construction techniques, can be considered as representative of the old Mesopotamian traditions. The inhabitants of Upper Mesopotamia during the IInd century b. C. went on constructing their official buildings following the same criteria that had been present in the region during the previous centuries.

Ana Cristina MARTINS (*Faculty of Arts of the University of Lisbon*)

International conflicts and oriental antiquities: A Portuguese episode during the First World War

During the First World War, the Association of Portuguese Archaeologists made all efforts to obtain the nationalisation of the content of a German ship, detained at the Lisbon harbour in the ambit of the bilateral accords previously established with the United Kingdom. In its interior laid almost a hundred containers accommodating an authentic treasure: archaeological artefacts excavated in the territory of Ancient Mesopotamia, scarcely represented in the few Portuguese museological establishments of those times. Subsequently it is our purpose to explain the main phases of this unusual (for Portuguese standards) episode of our History, analysing it at the light of its time, and understand the institutional problems motivated by it.

Maria Grazia MASETTI-ROUAULT (*Ecole Pratique des Hautes Etudes, Sektion V, Sorbonne*)

Recent Excavations in Tell Masaikh, Middle Euphrates, Syria: The Old Babylonian and Halafian Levels

Excavations in Tell Masaikh, in the Syrian part of the Middle Euphrates, on the eastern bank of the river; have revealed the presence of an administrative center of the Neo-Assyrian Empire, to be identified probably with the town of Kar-Assurnasirpal. The Iron II settlement was founded on an ancient tell, explored by recent works mainly in the western part of the site. Many tombs of Middle Bronze Age give evidence of an Old Babylonian settlement in the area, which survived for a long time, a satellite of the city of Terqa. The Middle Bronze II burials are often intrusive in Halafian levels. While no domestic unit has yet been discovered, the characteristics and the function of this Chalcolithic settlement in the Middle Euphrates landscape are now better understood, helping to highlight the history and the continuity of the occupation of the valley before the proto-urban and urban organization of the region

Kimiyoshi MATSUMURA (*Japanese Institute of Anatolian Archaeology*)

Hellenistic Human and Animal Sacrifices in Central Anatolia: With a focus on the examples at Kaman-Kalehöyük

During the excavations at Kaman-Kalehöyük since 1986, ca. 150 km south-east of Ankara, so many pits were excavated from the early Bronze Age to Islamic period that were primarily used for storage of grains. Human and animal (mostly dog) skeletons were found from the pits that are dated to Hellenistic period. Both of them were sometimes found in the same pit. These skeletons do not seem to be buried as a mortuary practice because of their situation. Human skeletons were not buried with a regular style and were found with many one's head size stones, probably thrown together with the skeletons into the pits. The practices of human and animal sacrifices by the Galatian during the Hellenistic period in Central Anatolia are often mentioned in literature. Additionally, similar samples were recently found through the archaeological studies at the Galatian occupation of Gordion. By the comparison with the examples from Kaman-Kalehöyük is able to reinforce and induce the progress of the Hellenistic studies in Central Anatolia, especially on Galatian.

Roger MATTHEWS (*Institute of Archaeology, University College, London*)

Imperial impacts on settlement in north-central Turkey: A long-term perspective

All empires have impacts on their surroundings, but what are the factors that structure the specific trajectories of those impacts across time and space? A good way to approach this problem is to study a border area where the varying impacts of historical empires can be traced and interpreted. In this talk results from field-work in north-central Turkey will be reviewed in the light of imperial interaction with a fringe zone over very long time periods. Case-studies include the Hittites, Phrygians, Romans, Byzantine and early Turkish, with an emphasis on shifting settlement patterns through these imperial or quasi-imperial episodes. A major conclusion is that, while the physical environment of the region provides a range of arenas for imperial-local interaction, in each case varying socio-political circumstances have an overriding influence on the specifics of imperial-local interaction, as principally attested in dramatic variations in settlement distribution and hierarchy. The evidence thus suggests that interpretation of imperial-local interaction has to be rooted in an understanding that is above all historically contingent. Within this appreciation, however, there is also scope for discernment of some general and consistent features that appear to transcend the particular, such as the importance of rivers as frontier markers.

Paolo MATTHIAE (*Università degli Studi di Roma "La Sapienza"*)

The Temple of the Rock of Early Bronze IVA-B at Ebla: Structure, Chronology, Continuity

The Temple of the Rock of Early Bronze IVA was located in a sounding made in 2004, and was brought to light in the main planimetric aspects during the 2005 excavation campaign at Tell Mardikh. It is located in the south-east periphery of the great urban centre of the age of the Archives, is characterised by the two antae in the façade and its walls are preserved for more than 300 m in height. It included only two rooms in axis: in fact, a large cella of the broad room type, where the rock of the original floor had been levelled only in part, was preceded by a vestibule of the same size, completely open in the façade. The Temple of the Rock was probably re-employed during Early Bronze IVB, and was destroyed during a final phase of the same Early Bronze IVB. During Middle Bronze I, over the imposing ruins of the older temple a new cult building was erected, quite badly preserved, with a tripartite axial structure, which was certainly destroyed during the final destruction of the Id Syrian town by the end of Middle Bronze II.

A. MEDEROS (*Universidad Autónoma de Madrid*)

When Solomon and Hiram meet Europe. Phoenician and Atlantic Late Bronze Age interaction (1000-900 BC)

J. MEHRKIAN (*Iranian Cultural Heritage and Tourism Organization*)

New Evidence of Parthian Rock Carving and inscription of Kal_e gangal, Birjand, Iran

50 years after recovery and introduction of Parthian Inscription of Kal-e Gangal, by Jamal Rezaei and Sadeq Kia, then by papers of R. N. Frye and etc. In the Frame of a Rescue Committee for Rock Arts and Historical Inscriptions of Iran, on October of 2001, we revisited that area. The area was known for its three Rock Carvings: Two of them Inscriptions with figure and the third one is just inscription. In this scientific trip, according to one of local peoples, we found the fourth and new Rock Carving on about 150 meters far from in the North of those Rock Arts complex. Because of highly damages and smooth traces, this one has not been recovered yet. The dimension of fourth one is about: 70 by 100 cm. It shows a profile portrait of a man with a helmet?, long hairs?, and long beard. There is an Inscription in Two Parthian Pahlavid liens below the portrait. The Carving has been done on a smooth and dark colour Rock surface on the bank of a mountainous passage. Details of art and its inscription shows as a new Parthian Monument. These Rock arts are the

closest to the Parthava, homeland of Parthians, in the North-East of Great Khorasan. This paper would like to introduce the above mentioned new evidences and the archaeological and historical background of Parthian Period, especially because of its inscription that shows the appearance of Parthian Pahlavid after Greek inscriptions.

Diederik MEIJER (*University of Leiden*)

Settlements in Northern Syria: An archaeological view of marginal areas and hoarding cities

This paper will deal with the fact that by now we are able to detect regionally varying degrees of settlement in Northern and Western Syria during the later 3rd and the early 2nd mill. BC. Whereas the river valleys seem to attract people, the areas in between sometimes seem to be depopulated. Are there historical reasons to be found for this phenomenon, or is our archaeological view marred by methodological deficiencies? A case will be made for a combination of these two factors, but the conclusion will deal with facts rather than with theory. Results from excavations at several places in the so-called marginal area of ca. 200mm. rainfall, as well as from surface surveys will be taken into account.

Roberta MENEGAZZI (*Centro Scavi e Ricerche Archeologiche di Torino*)

The terracotta figurines from the Italian excavations at Seleucia on the Tigris: Some chronological and typological notes

The city of Seleucia-on-Tigris (around 30 km south of Baghdad) played a key role in the diffusion of Hellenistic culture in the Orient. The excavations carried out by the Centro Scavi di Torino, brought a great quantity of material to light in which the terracotta figurines were most prominently represented. They consisted of a corpus of around 11,000 pieces with extraordinary historical interest. Their technical, iconographic and stylistic forms are testimony to the various phases of cultural development between the Greek and Mesopotamian traditions from initial encounter to ultimate diffusion. The paper will be focused on the figurines coming from the three main terracotta deposits unearthed on the South and West sides of the Archives Square and in the South Area of the city. The stylistical and iconographical differences between the three groups are relevant of the coexistence in the local production of quite different approaches to the new Hellenistic language.

Vito MESSINA (*Centro Ricerche Archeologiche e Scavi di Torino*)

The faintly smiling Lady. A late-Akkadian – Ur III sculpture rediscovered

Before December 2004, a number of looted antiquities was providentially recovered in Jordan and kept under the control of local Authorities. Among these objects, there is an outstanding late-Akkadian – Ur III limestone head of a statue unpublished and damaged during unauthorized excavations. It is a woman's head broken off at the neck, with long hair on the shoulders, a thick band and inlaid eyes now missing. The aim of this paper is to submit the relevant sculpture to the scholars in order to bring it to their knowledge.

Maria Gabriella MICALE (*Università degli Studi di Roma "La Sapienza"*)

The Course of the Images. Remarks on the Architectural Reconstructions between 19th and 20th cent.: The Case of the Ziqqurat

From the beginnings of the archaeological research in the Near East, the architectural reconstructions of the unearthed ancient buildings have always found a place within both scientific publications and museum-exhibitions. The ordinary people could have interpreted these kind of images as mere illustrations of a likely world of the past such as some of their authors (the archaeologists) wanted it to be. However, the architectural reconstructions in fact have played a fundamental role among the "unspoken" methods for establishing and handing down at the same time an archaeological interpretation and the reconstructing hypothesis based on such interpretation. Independently of the probable evaluations on the presumed "exactness" of this kind of images (read: independently of the relationship between the reconstructed architectural image and the archaeological data one has used) the analysis of each reconstruction proves with no doubt that each image has an history which is partially shared, but it mainly keeps a strong link to the history of each building and its continuous rebirth the archaeology and its instruments of representation give them. Thus, taking in account the at the time most commonly diffused reconstructions of the ziqqurat, this paper would like to focus not only on the practice of the architectural reconstruction as expression of the relationship between archaeological/architectural data and their interpretation, but mainly on the exploitation of the reconstructions during the years between 19th and 20th cent.

Ianir MILEVSKI (*Israel Antiquities Authority*) and **Yaakov BAUMGARTEN**
Between Lachish and Tel Erani: Horvat Ptora, a New Late Prehistoric Site in the Southern Levant

Salvage excavations conducted by the IAA prior to the construction of the Trans-Israel highway exposed in the last years an unknown site, named Horvat Ptora. It dates to Pottery Neolithic, Chalcolithic, Early Bronze I, Roman and the Byzantine periods. The site is located on the northern bank of Nahal Lachish (Wadi edh-Dhuweir) and extended at least over 10 ha. The subject of this presentation will focus on the settlements from the Chalcolithic (ca. 4,000-3,800 BC) and EB I (ca. 3,300-3,000 BC). Their relation with two main archaeological tells –Lachish and Tel Erani- located nearby, within the borders of the southern Shephelah and the coastal plain, will be analyzed as well. The excavations at Horvat Ptora exposed at least three strata of the Chalcolithic period and three strata dated to the EB I. In addition, a burial cave yielded numerous finds of the EB I. The finds from these two periods allow us to complete the regional picture during the late Prehistory of the southern Levant.

Excavaciones de rescate conducidas por la Autoridad de Antigüedades de Israel, previas a la construcción de la autopista Trans-Israel, revelaron la existencia de un nuevo sitio arqueológico llamado Horvat Ptora. El yacimiento contiene restos de los siguientes periodos: Neolítico cerámico, Calcolítico, Bronce Antiguo I, Romano y Bizantino. El sitio está ubicado en la rivera norte del Nahal Lachish (Wadi edh-Dhuweir) y ocupa una superficie que se estima en las 10 ha. El tema principal de esta presentación se concentra en los asentamientos del Calcolítico (aprox. 4.000-3.000 a.C.) y el Bronce Antiguo I (aprox. 3.300-3.000 a.C.). La relación de los mismos con los vecinos tells de Lachish y Tel Erani serán analizados también, en el marco regional de la zona identificada como el borde entre la Shephelah (pie de monte) y la llanura costera mediterránea. Las excavaciones de Horvat Ptora revelaron tres estratos del Calcolítico y tres estratos del Bronce Antiguo I. Además una cueva conteniendo restos de enterramientos datados del Bronce Antiguo I revelaron un número importante de hallazgos. Los hallazgos del Calcolítico y el Bronce Antiguo I nos permite completar nuestros conocimientos sobre dicha región durante la prehistoria tardía sudlevantina.

L. MILANO and E. ROVA (*Università Ca'Foscari Venezia- Dipartimento di Scienze dell'Antichità e del Vicino Oriente*)

New discoveries of the Ca' Foscari University -Venice team at Tell Beydar (Syria)

The paper will present the results of the 2002-2005 excavations of the Ca' Foscari University of Venice at the III millennium B.C. urban centre of Tell Beydar (Northeastern Syria) in the framework of the the Syro-Europæan archaeological expedition jointly directed by M. Lebau (ECUMS) and Antoine Suleiman (DGAM). After completing the investigation of the NE Inner City Gate area, excavation concentrated on the upper part of the mound's slope. Here, part of a large official complex dating to the EJ IIIa period (2500 a.C. ca) was uncovered. The building, which was repeatedly renewed, rested on a terrace overlooking the street. It consisted of a sector devoted to large-scale food preparation and processing, which has been completely exposed, and of a sector, only partially excavated until now, for which a ceremonial function can be suggested on the basis of its elaborate architecture. Evidence of administrative activities is provided by the discovery of groups of impressed clay sealings. The most significant find is a group of 16 cuneiform tablets of economic content dating back to a phase (final EJ IIIa / transition to the EJ IIIb period) earlier than that documented by the over 200 texts discovered so far at the site.

Sima MIRI (*National Museum of Iran*)

Iconography of some of the figurines of National Museum of Iran

Among archeological objects in National Museum of Iran, we can point to human figurines which reveal the religious experiences and ceremonial manners of Historic and Pre-historic periods. Apart from figurines found and fully recognized through scientific excavations in different parts of the country, there are also a number of human figurines which have been discovered in illegal excavations and are kept in store- rooms in National Museum of Iran. Due to the extension project of the museum and, as a result, the possibility of exhibiting many more of the stored objects, identifying these objects felt to be necessary. In this regard, the study and distinguishing of 30 human figurines, kept in different store- rooms of the museum has begun. These figurines are handmade or moulded and are all made of terracotta. At first, they were divided into two groups of naked and dressed. Among naked ones, some are standing, in some case with hands holding their breast; some with head-dress, sometimes wearing diadem. Dressed figurines have also different variety and are dated back to Pre- Islamic period (Sasanian period /10th -11th century A.D). Comparative research of these objects and discovered figurines belong to the different parts of Iran has revealed that these objects are from north and north-eastern (especially Gorgan), Susa (Khuzestan) and central Plato of Iran and dated from 6-5 Millennium B.C. until 10th -11th century A.D.

Yutaka MIYAKE (*Tokyo Kaseigakuin University*)

Excavations at Salat Cami Yanı: A Pottery Neolithic Site in the Turkish Tigris Valley

The Tigris valley in southeast Anatolia has virtually not been investigated for a long period of time. In recent years, however, with projected dams on the Tigris, a rescue project for the future reservoir area has been launched, and a number of archaeological investigations have been actively progressing. Salat Cami Yanı, one of these sites in the Ilisu Dam reservoir, provides us with a good opportunity to examine the Pottery Neolithic sequence in this poorly known region. Three Pottery Neolithic phases, covering from the very beginning to “Proto-Hassuna” related period, have been attested, situated directly above virgin soil. The pottery of the earliest phase (Phase 1) contains a large amount of mineral inclusions and is well burnished, which is well comparable to the earliest pottery recently attested in the Middle Euphrates and the Khabur Basin. In the following phase (Phase 2) the aspects of the pottery had been changed dramatically. Vegetal tempered coarse ware became predominant. The latest phase (Phase 3) is probably contemporary with “Proto-Hassuna”. Husking tray and painted pottery came into existence together with the developed vessel shapes.

Miquel MOLIST, Josep ANFRUNS, Ferrán BORRELL, Xavier CLOP, Walter CRUELLS, A. GÓMEZ, Emma GUERRERO, María SAÑA, Carlos TORNERO and Oriol VICENTE
(*Universidad Autónoma de Barcelona*)

Tell Halula (Vallée de l’Euphrate, Syrie): Nouvelles données sur les occupations néolithiques. Notice préliminaire sur les travaux 2002-2005

Cette communication expose les résultats des dernières campagnes de travaux de fouilles et études archéologiques sur le site de Tell Halula (Vallée de l’Euphrate, Syrie) qui avaient un double objectif scientifique général. D’une part pour les niveaux de la période PPNB l’obtention de nouvelles données sur l’architecture domestique et l’agencement des différentes unités d’habitation, en vue de la définition de la structure de village au VIII millénaire cal BC. La fouille en extension de ces niveaux là on permis de documenter des nouveaux apports sur les techniques utilisées dans les constructions, des nouveaux dispositifs domestiques (systèmes de canalisations d’eau domestiques, ...). D’autre part et pour les périodes du VII millénaire (Prehalaf et Halaf), une nouvelle aire de fouille a permis la définition d’une nouvelle séquence stratigraphique, dont les datations relatives et absolues, monstrent a nouveaux une occupation continue du site au long de cet horizon. Le dégagement de nouveaux documents (restes architecturaux, sépultures, amplifie considérablement les informations historiques qu’on dispose sur le site et permet de mieux saisir l’importance de cet horizon dans la Vallée de l’Euphrate et dans l’ensemble du Levant Nord.

Juan Luis MONTERO FENOLLÓS (*Universidad de La Coruña*), **Chakir CHEBIBE, Ignacio MÁRQUEZ, Francisco CAMELO and Jordi VIDAL**

Le projet archéologique Moyen Euphrate Syrien: Premiers travaux de la mission syro-espagnole à Deir ez-Zor

L’Université de La Corogne (Espagne) en collaboration avec la DGAM de la Syrie a créé une mission conjointe pour étudier un secteur de l’Euphrate qui n’a pas encore fait l’objet d’une recherche approfondie et systématique. Il s’agit d’un secteur de 70 km de la vallée placé entre Halabiyé, au Nord, et Tall as-Sin, au Sud, qui apparaît souvent, mais à tort, seulement comme un fil de raccordement entre d’autres sections du fleuve. Des prospections étaient nécessaires pour connaître l’importance historique de ce tronçon du Moyen Euphrate syrien situé entre le Khabour et le Balikh. La première campagne de prospection a eu lieu en juin 2005 dans le verrou de Halabiyé, où on a attesté plusieurs sites de l’Âge du Bronze.

Daniele MORANDI BONACOSI (*University of Udine*)

The Royal Palace of Qatna

The monumental building of Qatna’s Royal Palace was intensively and jointly investigated by Syrian, Italian and German teams between 1999 and 2005. By now, its plan has been nearly fully explored and its functional organisation has been (as far as possible) understood. However, what is hitherto uncertain is the chronology of the building, which is still a matter of scientific discussion especially as far as its foundation is concerned. Several datings of the construction of the Royal Palace have been proposed so far, none of them, however, relied upon firm stratigraphic data and archaeological materials found in situ. The evidence excavated in seven years of archaeological exploration by the Italian expedition will be discussed with the goal of achieving a more precise chronological determination of the foundation of Qatna’s Royal Palace. Furthermore, the conservation programme of the building and the projects of development of an archaeological park at Mishrifeh and Virtual 3D Reconstruction of the archaeological site and its surroundings will be shortly presented.

Mehdi MORTAZAVI (*University of Sistan and Baluchistan*)

The Bampur Valley: A new chronological development

The study of history gives one access—even less directly but often no less vividly—to hundreds of years of recorded time. But it is only archaeology, in particular prehistoric archaeology, opens up the almost unimaginable vistas of thousands and even a few millions of years of past human existence (Renfrew & Bahn 2001: 117). The stratigraphical sequence at Tepe Bampur, which has been divided into six periods, was firstly studied by De Cardi in 1966 (Lamberg-Karlovsky & Schmandt-Besserat 1977: 114). Her chronology is mostly based upon a pottery classification compared with other sites in Iran (Tosi 1970a: 12), demonstrating similarity over the whole sequence. According to the de Cardi's chronology, the Tepe Bampur sequence started in the mid-third millennium BC and ended in the first centuries of the second millennium BC (Tosi 1974a: 31). The present paper aims to re-examine the comparative chronology of Tepe Bampur and present a new comparative chronology for the third millennium BC settlements in the Bampur Valley for the first time. This study is mostly based upon the first systematic survey at Tepe Bampur and a non-probabilistic survey in the Bampur Valley during July 2002 (Mortazavi 2004: 147). These surveys are the first systematic and non-probabilistic surveys of the Valley since the time of Stein and has provided important information concerning the settlement patterns and the chronology of the third millennium BC sites. This paper represents the first systematic study of the Bampur Valley in the Iranian Baluchistan during the third and second millennia BC. This study also pilots the first application and review of concepts of settlement patterns and comparative chronology of the Valley based upon the ceramic typology using a combination of published data and new data recovered during fieldwork in 2002.

Sultan MUHES EN (*Damascus University*), **J.-M. LE TENSORER** and **A. ABDUL RAHMAN**

Recent Palaeolithic Discoveries from el-Kowm (Hummal) Syria

Hummal is an open air site situated in el-Kowm region north of Palmyra in Syria. The site is under systematic excavation since 1999; by syro-swiss mission. Long sequence of human occupation was exposed, in a section of about 20m thick. The oldest level gave pebbles cultures, oldowan, followed by middle Acheulean, Tayacian, upper Acheulean, Yabrudian, Hummalian, Levallois-Mousterian, Aurignacian and the youngest level gave Kebaran industry. The site is one of the unique places where we can follow the global evolution of the major Paleolithic cultures covering a period of more than one million years. The Yabrudian and the Hummalian are very well represented, this make Hummal a key site for studying these two especially characteristic cultures in the Paleolithic of the Near East. In addition important Palaeoanthological and anthropological remains, were collected which will enable better understanding of the kind of environment and man of the Paleolithic age.

Béatrice MULLER (*CNRS*)

La figure dédoublée

Du célèbre sceau d'Uruk au "roi-prêtre nourrissant le troupeau sacré de la déesse Inanna", représenté par deux ovins se faisant face de part et d'autre du personnage, au fameux autel de Tukulti-Ninurta Ier où le roi est figuré dans deux postures différentes, en passant par de multiples reliefs estampés paléo-babyloniens, le dédoublement de certains personnages ou de certaines figures a été souvent constaté, dans une composition symétrique qualifiée d'héraldique. La signification du procédé n'a pas manqué d'être discutée. Ce qui est proposé ici, c'est un recensement rapide des types de figures ainsi dédoublées, de façon à voir dans quelle mesure les séries révèlent des récurrences chronologiques et thématiques venant confirmer ou non les interprétations habituellement proposées.

Michael MÜLLER-KARPE (*Römisch-Germanisches Zentralmuseum*)

Casting for Ea. New Research on the Manufacturing Technique of the Bassetki Statue

Towards the end of the 23rd century BC Akkadian founders created a magnificent life-size Lakhmu-figure in pure copper for the divine King Naramsin, commemorating a victorious war against a coalition of hostile kings. Some 4200 years later, at the eve of another war, this time against an un-hostile coalition, the statue became the focus of a joint research project of the Iraq Museum and the Römisch-Germanisches Zentralmuseum. First results provide an intriguing insight into a casting technique, which modern founders jealously admit, can still not be rivalled.

Stefan MÜNGER (*University of Bern, Switzerland*), **Juha PAKKALA**, **Jürgen ZANGENBERG**
Kinneret Regional Project – The 2004-2005 Seasons

The paper presents the major results of the 2004-2005 excavation seasons at Tel Kinrot/Tell el-Oreimeh (ancient Kinneret) with regards to the ongoing German-Finnish-Swiss "Kinneret Regional Project" under the auspices of the Universities of Berne, Helsinki and Mainz. Kinneret – located at the northwestern shore of the Sea of Galilee (Israel) – is emerging as one of the major sites for the study of urban life in the Iron Age IB in the Southern Levant. In view of a final publication, work at the site concentrated during the 2004-2005 seasons mostly on well-preserved Iron I habitation quarters in the lower city where complete house-complexes could be fully exposed and prepared for restoration. New architectonic and stratigraphic insights enhanced the knowledge of the city's complex urban

development and lead to a revision of the hitherto pro-posed stratigraphic concept. Additionally, the rich find assemblages from settlement layers dated to the Iron Age IB as well as other indicators, that witness a lively and multilayered urban culture, show the variety of cultural influences on the ancient population of the city in the dawn of the first millennium BCE. Additionally, excavation work and paleobotanical analyses undertaken in the course of our restoration program of the Iron Age II fortress town on the acropolis suggest a new interpretation of the much-discussed tripartite pillared-buildings.

Olivia MUNOZ and Serge CLEUZIQU (Université de Paris 1 - CNRS - UMR 7041)

La tombe 1 de Ra's al-Jinz RJ-1: Une approche de la complexité des pratiques funéraires dans la péninsule d'Oman à l'Âge du Bronze ancien.

In the Oman peninsula, the Umm an-Nar collective graves (ca 2700-2000 BC), have been known since the fifties and have been excavated since. They are monumental circular graves scattered over the entire peninsula, near settlements, containing the remains of tens and even hundreds of individuals. For a few years now, it seems that, they are witnesses of complex funerary practices made in several stages which sometime includes post mortem treatment of the bodies, such as desarticulation and/or cremation. The excavation and the anthropological study done on human remains from the Tomb 1 and the three associated bone pits from Ra's al Jinz RJ-1 (Oman) proved more than one operation aspects as well as the evolution of this graves, and provides a lot of information about the funerary practices as well as the deceased population. The count indicates that at least 74 individuals have been buried in this grave, 47 of whom are adults. Both sexes and all age groups are represented, including also fetus remains. The pathologies we have observed do not indicate symptomatic violences, but more of activities and, for some cases, nutritive deficiency.

Davide NADALI, Maria Gabriella MICALE (Università degli Studi di Roma "La Sapienza")

Archaeology and Memory. Discoveries at Tell Mardikh/Ebla Through the Stories of Its Modern Inhabitants

In reconsidering the history of our discipline, from its first manifestation to the latter uses of new methods and ways to gain information from the archaeological records, we would like to focus on a smaller detail of the archaeological investigation starting from the case of Ebla. Begun in 1964, the exploration of Tell Mardikh, soon identified with the ancient Ebla (1968), accomplished in 2005 the 42nd campaign: together with the excavation strategies that use the new geophysical and geomagnetic instruments to detect traces of ancient buildings before the excavation, the memory of the modern inhabitants of Mardikh has guided at the beginning and, we can say, confirms today the archaeological exploration of the site. Actually, even though, as archaeologists, we are used to assume that the knowledge of an archaeological site follows different stages (study – sources – survey – excavation) and uses all devices of the archaeological research, the work as archaeologists teaches us that such knowledge comes also from the words and memories of the people living there. As the earth, they are the actual custodians and at the same time the only ones who can change the landscape of the site itself. Between modernity and tradition, the archaeological works at Ebla exploit the technological supplies on one hand and, on the other, take advantage of the memory of the men who lived and experienced the tell before the excavations started.

Davide NADALI (Università degli Studi di Roma "La Sapienza") and Lorenzo VERDERAME (Università degli Studi di Palermo)

Works and sculptors in words: The evidence of artistic production in the texts of the third millennium B.C.

The archaeological evidence in Mesopotamia of crafts and workshops is really scanty. The excavations have only provided few attestations of the existence of workshops, sometimes supposed since the presence of artefacts already finished or part of them. On the contrary, texts, particularly from the Neo-Sumerian Period, show a very rich activity in producing a large variety of objects. This paper aims to focus on the evidence for statues and tries to sketch the work of artisans and sculptors. As already stated, because of the lack of archaeological evidences, the relationship between texts and objects is often only hypothetical: however, texts inform us about the process that leads to the final result, such as a statue, a relief or a building. Moreover, they enlighten the large use of different materials, otherwise unknown from any other document.

Lily NIAKAN (ICAR)

An Introduce on settlement pattern and prehistoric to Islamic culture, in the cultural Basin of Karaj and Qazvin Plain

The survey of Karj and Qazvin in direction of writer and in 2 seasons and during 40 days with the aim of recognizing of settlements of different periods, from earliest settlements to Islamic age and from south of Karj and Eshtehard road to

Boaein Zahra, and Takestan carried out. Surveying of Karaj and Qazvin plain, which works about that is very less, is so important in central plateau. Within this project we could introduce and record many sites.

Survey strategy

- 1- Better understanding of different settlements and their development during thousands years.
- 2- Recording of connection between settlement patterns and environmental sources.
- 3- Reconstruction of population situation from one period to other period.

Survey methodology

- using of satellite images of Qazvin and Karaj plain, and studying of geomorphology
- finding of ancient settlement and determining of location of sites by GPS and removing them to the map of 1/5000
- pottery and other objects assemblages
- taking photo from settlements and distributing of pottery sherds.
- surveying of geology and recording of them by GPS, this materials which have assemblaged are dividing to 3 groups of prehistoric, historic and Islamic prehistoric period sites are in Zagheh, Cheshmeh Ali, Qabrestan Sialk III and Middle Susa in Qadimabad Tepe and Gomrokan. Proto-literate and Uruk, Sialk IV sites are in Agh Tepeh, and Gomrokan

Historic period which is divided to Iron age includes: Tepe Gorgan, Tepe Haji Qadar, Tepe Shizard and Partian and Sasanian periods like Tepe Gorgan, Tepe Rashteh; Islamic period includes Tepe Gorgan, Rahmanieh, Rashteh. According to geographical importance and sites and finding more information about settlement pattern of sites in central plateau, this mentioned sites will help us to get information about cultural chronology and social-economical conditions that ended to cuty dwelling in central plateau.

Olivier NIEUWENHUYSE (*National Museum of Antiquities, Leiden*)

Not so coarse, not always plain. Early ceramics from Tell Sabi Abyad (Syria)

The earliest stages of the Pottery Neolithic in the Near East remain poorly understood. There appears to be a consensus that pottery production began with an “experimental” stage characterized by simple, poorly made, undecorated pottery, followed only after some time by more elaborately made wares. Recent excavations at sites in southeastern Anatolia and northern Syria now provide new evidence that challenges this view. In my paper I shall present new material from Tell Sabi Abyad (northern Syria) and discuss some of its implications. The excavations 2004-2005 at Tell Sabi Abyad yield well-preserved occupation levels from the very early stages of the Pottery Neolithic. The rich ceramic inventory provides an opportunity to follow the development of pottery production from its initial stages into the later Pre-Halaf period. Of particular interest are the earliest Pottery Neolithic levels recovered so far, characterised by low ceramic-herd densities. Surprisingly, the early pottery is technologically complex, and it is sometimes decorated (painted). These levels precede stages with the coarsely-made, undecorated wares always thought to be typical for the early Pottery Neolithic.

Lorenzo NIGRO (*Università degli Studi di Roma "La Sapienza"*)

Khirbet al-Batrawy, an Early Bronze Age fortified town at the edge of the Black Desert of Jordan: Alternative tracks of early urbanization in the Southern Levant

The Expedition to Jordan of Rome University “La Sapienza” resumed its activity on the field in 2005 starting a new project on Early Bronze Age urbanization in “marginal” regions, focusing on the previously unexplored site of Khirbet al-Batrawy, a central settlement in the Upper Wadi ez-Zarqa in Northern Transjordan. Khirbet al-Batrawy was a fortified town controlling the access to the Wadi ez-Zarqa, one of the major eastern tributaries of the Jordan, exercising a primary role in the road network of antiquity. The discovery and investigation of Khirbet al-Batrawy has important effects on the study of urbanisation in fringe areas.

Lorenzo Nigro (*Università degli Studi di Roma "La Sapienza"*)

Tell es-Sultan/Jericho from village to town: New evidence from the Early Bronze I settlement and necropolis

An overall reassessment of Jericho Early Bronze Age stratigraphy has been generated by Italian-Palestinian excavations in Area F (on the northern plateau), where previous expeditions already investigated interesting remains of the early urban settlement at Tell es-Sultan. Especially John Garstang’s 1936 excavations, though remained largely unpublished, exposed a huge portion of the Early Bronze Age rural village, which gradually developed into a small town during Early Bronze IB. Finds, stratigraphy and architecture of such a village exemplarily illustrate the mechanisms and reactions which lead to the birth of an early urban society in the Lower Jordan Valley during the last quarter of the 4th Millennium BC.

Bonnie NILHAMN (*The National Museum of Antiquities, Leiden*)

Let's brush the white dust off... – White ware in focus

White Ware, Vaisselle Blanche or Vaixella Blanca has for a long time been a neglected find category in the Near Eastern Archaeology. In this paper however I would like to highlight white ware as a rather frequent common find found especially in occupation layers dated to between 6800 and 6200 BC. Tell Sabi Abyad, Syria has the recent excavation seasons shown to treasure a large quantity of White ware items. This unique assembly provides us with an excellent picture of the development of this particular handcraft, usage and how white ware may be seen related to but also how it differs interestingly from the contemporary 7th Millennium BC pottery.

Yoshihiro NISHIAKI (*The University Museum, The University of Tokyo*), **Sultan MUHESSEN**, and **Takeru AKAZAWA**

The Natufian Occupations in the Dederiyeh Cave, Afrin, Northwest Syria

The Dederiyeh cave, located in the northern Levant, is well known for its Neanderthal fossils that were excavated from Middle Palaeolithic contexts during the 1990s. Since 2002, the excavation trenches have been enlarged to cover a much larger area; it led to the discovery of Palaeolithic levels other than the Middle Palaeolithic. This paper outlines the discovery of the late Epi-Palaeolithic or Natufian remains, with an emphasis on the architecture and lithic implements of that period. The Natufian occupations found in the Dederiyeh cave represent an interesting combination of the elements of both the Natufian “homeland” to the south and the inland Natufian on the upper Euphrates to the east. The architecture, which comprises structures that are composed of large limestone cobbles, is comparable to that of the southern Levant, while the material remains such as flaked stone artifacts, bone tools, and a variety of ornaments bear a greater resemblance to those of the upper Euphrates group. The series of radiocarbon dates indicates that the latest level of the Dederiyeh Natufian dates from ca. 11000 uncal. BP, the earliest stage of the Late Natufian period. Future studies on the details of the evidence from the Dederiyeh cave should contribute to the testing of the hypothesis of the Late Natufian expansion from the southern homeland toward the north.

Margaret O'HEA (*Classics, Schoole of Humanities, The University of Adelaide*)

From Late Byzantine to Abbasid Glassware – context & functionality in the Jordan Valley

Using the glass assemblages from a major urban settlement - the Decapolis city of Pella in the north Jordan valley - the use of glassware for different storage, tableware and architectural uses can be determined. For example, similar-sized households, in the same insulae in the same location reveal increasing relative proportions of small flasks, toiletry or medicinal vessels, and a relative decrease (in terms of assemblage percentages) of the use of glass for platters or bowls, from the Byzantine to the Umayyad periods. This is despite the continued use of ceramic shallow bowls/platters in the same households. More significantly, glass increasingly is used architecturally and for lighting. Pella provides sound and statistically-viable data from its house assemblages, which are separated by destruction and rebuilding of the mudbrick superstructures of these houses - one in the fifth or early sixth century, one in the 630s or 660s, and another in 749. This provides a more finely-tuned dating of these changing patterns of useage than is currently available for the region, and allows for a picture to emerge that is not weighed by the heavy use of glass in public buildings such as synagogues, churches or bath-houses. I do hope that you will consider my late submission of abstract, and I do apologise for my confusion in waiting for the internet form - which, as I said above, I simply cannot locate in any of your links on your website or pdf of the second circular. I realise now that I simply should have emailed you the details rather than wait.

Oriol OLESTI VILA (*Universidad Autónoma de Barcelona*) and **Maamoun ABDULKARIM** (*Universidad de Damasco*)

Organización territorial y centuriaciones en la Siria Romana. Progresos y límites

Desde los años 90, son diversos los equipos que han retomado el estudio de las centuriaciones en el área de la provincia de Siria. Ejemplos como los catastros de Damasco, Latakia o Antioquia permiten intuir la presencia de este tipo de estructuras rurales en esta provincia, aunque se trata de trabajos limitados por la falta de datos concluyentes. En esta comunicación se presentarán estos estudios, y se contrastarán con los resultados del trabajo en la ciudad de Homs, donde ha sido posible identificar y estudiar un magnífico ejemplo de territorio centuriado. Del análisis conjunto de todos estos casos, puede intuirse una conclusión general acerca de la organización territorial romana en la provincia de Siria.

Sachihiro OMURA (*The Middle Easter Culture Center in Japan*)

Excavations at Kaman-Kalehöyük in Central Anatolia, 2003-2005

Kaman-Kalehöyük is situated approximately 100 km from the capital of Republic of Turkey, Ankara. Excavations at Kaman-Kalehöyük are organized by the Japanese Institute of Anatolian Archaeological Institute, of the Middle Eastern Culture Center in Japan, which started in 1986. The first goal of the excavations, just as in the first season, was to establish the stratigraphy of the North Sector. The second goal was to identify the architectural remains of the Ottoman Period, the Iron Age, the Middle and Late Bronze Ages, as has been identified in the North Sector. In the excavations at Kaman-Kalehöyük, 1986-2005, the following strata have been identified in the North Sector: Stratum I, Ottoman Period, Stratum II, Iron Age, Stratum III, Middle-Late Bronze Ages and Stratum IV, Early Bronze Age. Excavations at Kaman-Kalehöyük 2003-2005 in the North Sector focused on Stratum III, Middle-Late Bronze Ages, especially the architectural remains of the Old Hittite Period and the Assyrian Colonial Period. In this paper I would like to discuss the functions of these architectural remains, which were unearthed in the middle of the site

Francesca ONNIS (*University of Lyon 2*)

The Nimrud bowls: new data from the analysis of the objects

The metal vessels known as “Nimrud bowls” were discovered in the NW palace at Nimrud. Despite their clear archaeological context, the style and iconographic themes composing the decoration reveal that they are not the production of Assyrian craftsmen. Instead, they belong to the category of artefacts called “Phoenician bowls,” for which a general Levantine origin has been proposed, even if it has not been possible, so far, to identify their exact provenance. A review focusing on the form and technique used in the decoration has provided some new data casting light on the function of the bowls as well as the metallurgic procedure of their creation. Especially from this point of view, some characteristics shared by all these vessels can lead to highlight the unity and homogeneity of the cluster, helping to identify their producers.

Bart OOGHE (*Ghent University, Dept. of Languages & Cultures of the A.N.E.*)

The Rediscovery of Babylonia (12th - early 19th century)

In great contrast to the more “accessible” parts of the Near East, such as the Holy Land or Egypt, Mesopotamia remained far longer unknown to European scholarship, its ancient remains either clouded in mystery or wholly forgotten. Likewise, early travels in Mesopotamia have been more or less forgotten in modern studies. The present paper, resulting from study of ca. 140 travel-narratives, will examine how the region of ancient Babylonia slowly moved back into the European view and how the image/knowledge of this land developed over time. Its rediscovery may be said to have taken place in the late 12th century, but it is only in the late-16th and 17th centuries that descriptions of some of the ancient remains appear more frequently. Mixed with these are wildly invented accounts and folk beliefs. Gradually, descriptions become more detailed, as increased numbers visit these lands. The 18th century witnesses a boom in travel accounts and investigations, as attempts are made to use classical literature to reconstruct the ancient land. Finally, interests turn to the archaeological and with the 19th century investigation moves beyond the bounds of traditional travel-routes and into the unknown lands between the rivers and south of the Euphrates.

Eliezer D. OREN (*Ben-Gurion University*)

The Ritual Significance of Dogs and Donkeys in Middle Bronze Age Context in the Southern Levant

The archaeological record of Middle Bronze Age sites in the southern Levant is represented by a variety of ritual practices, most significant of which is that of equine and dog sacrifices. Evidently, donkey sacrifice played prominently in MBA religious behavior. Thus, complete skeletons of donkeys were deposited ceremonially in the temple courtyard at Tel Haror in the western Negev, and many examples of complete, or partially-eaten, donkey skeletons were observed in house foundations and inside fortifications in Syria and Canaan. Numerous donkey burials in Canaan testify to elite mortuary ideology and the symbolic importance of equids in MBA society in the southern Levant (and the Hyksos Nile Delta). Complete skeletons of puppies were, likewise, interred in temple faissae at Tel Haror. The paper will address these diagnostic rituals against textual sources in Middle Bronze Age Syria, particularly the Mari archives, concerning the NW Semitic / Amorite society and religion.

Valentina ORSI (*Dip. di Scienze dell'Antichità "G. Pasquali", Università degli Studi di Firenze*)

Between Continuity and Transformation: The late 3rd Millennium BC Ceramic Sequence from Tell Barri (Syria)

The 1998-2002 excavations in the Area G at Tell Barri (Syria) uncovered a continuous sequence of human occupation that dates back to the late 3rd Millennium BC. Even though the archaeologists have been working in the Khabur basin since the 1930s, this period is still not thoroughly understood and, consequently needs further investigation. Thus, the unpublished data available from Tell Barri will provide scholars with a new set of stratified pottery assemblages, and offer them an important contribution in order to understanding the more general cultural developments happened in the Khabur region during such an important chronological period. The analysis of the diagnostic ceramic types belonging

to an EJ IV horizon will emphasize elements of continuity with the preceding production, whereas reveals a slight discontinuity with the subsequent one, which shows an increasing occurrence of new ceramic groups. Moreover, the emergence of a new Fine Ware assemblage and the transformation of the morphological and technological characteristics might be part of broader changes in Tell Barri social and economic environment. In conclusion, the final aim of this paper is to contextualize the Late 3rd Millennium BC data available from Tell Barri in more general geographical and chronological context.

Adelheid OTTO (*Institut für Vorderasiatische Archäologie der Ludwig-Maximilians-Universität*)

The Functioning of a Late Bronze Age City in the Upper Syrian Euphrates Valley

Late Bronze Age cities in the Upper Syrian Euphrates Valley are divided into two complementary parts – a residential area and a temple area. The 50 excavated houses in the lower town and the temple on top of the Citadel of Bazi allow us to reconstruct daily life (subsistence, manufacturing activities, trade, cultic practice etc.) with the help of textual evidence, natural scientific methods and ethnographic analogies, thereby providing insights into the social practices of the population. Furthermore I will show that Bazi is not unique and a similar spatial organisation can be observed in other sites along the Euphrates (Munbaqa, Emar, Hadidi etc) reflecting the particular social structure of settlements in this region

Mehmet ÖZDOĞAN (*Istanbul University, Prehistory Department*)

Excavations at the Neolithic Site of Mezraa-Teleilat on the Euphrates

The site of Mezraa Teleilat is located on the left bank of the Euphrates, c. 45 km to the north of the Turkish border with Syria. The site, extensively excavated from 1999-2004, have revealed a sequence with well preserved architectural remains from LPPNB to Halaf Period. Within this long sequence, the PPN layers (Phase IV) have only been reached in restricted soundings, nevertheless revealing the remains of a conspicuous massive stone wall by the Euphrates. The overlying cultural horizon (Phase III) is about 2 meters thick and evidently represents the transitional stage from PPN to PN. This unique deposit consists of two stages, IIIB with no pottery and upper IIIA with very few sherds; however, all of them are well shaped and finished, most of them being in the tradition of the so-called DFBW. Both layers have revealed a unique assemblage, that differs notably from both the preceding PPN and from the PN. Whatever architecture recovered, are all small, hut-like structures mostly constructed of very light material, mainly wattle and daub and are ovoid in shape. The most characteristic feature of the assemblage is the limestone seated figurines and phallic symbols, that are found in hundreds. Phase II C marks the appearance of local pottery, very coarse, with organic temper, and rectangular “corridor houses”. Through Phase IIC to II A there is a gradual, but continuous development in the settlement; in II B the corridor houses are replaced with conglomerate structures with cellular units and the mineral tempered coarse wares gradually replaces the organic tempered coarse ones. Through various building levels, there is the gradual development of red slipped pottery as well of the painted wares. One of the most outstanding ware groups recognised at Mezraa Teleilat is the high ratio of impressed and or combed decorated sherds in phase II b that is highly reminiscent of the impresso tradition of the Mediterranean basin. The occupational history seems to have been interrupted by floods that have washed the upper part of the Neolithic fill. However, the presence of Proto Halaf and Halaf sherds in the mixed deposits indicate that the flooding took place during the Halaf period. Following a long period of interruption, the site was later re-occupied at the time of the Neo-Babylonian period (Phase Ib), which is represented by a monumental building. The latest phase (Ia) is of Achaemenid period.

Hatice PAMIR (*Mustafa Kemal University*)

The Survey Results of the Orontes Delta Archaeological Project 2002-2005

The Orontes Delta region is located in southeast Turkey, at the beginning of Levant. The region belongs to the Hatay province and lies between Antakya and Samandag. The Orontes Delta region provides the main access from the Mediterranean coast to the Amuq Plain, which lies northeast of the region. The Amuq has been a major crossroads of civilizations in Anatolia, Meso-potamia, and the Levant. This geographical situation suggests that the Orontes Delta region is closely related to the historical and cultural development of the Amuq Plain and the Mediterranean coastal sites. The survey has been carried out under the auspices of the Mustafa Kemal University since 2002. Major aims of the project are to collect basic archaeological and historical information, as well as determine settlement patterns in the delta region and cultural interaction between the Delta and the Amuq Plain. This presentation aims to give the results of the fieldwork on the Orontes Delta and Orontes River Valley Settlements.

Eleonora PAPPALARDO (*Università degli Studi di Torino*)

Near Eastern Ivories in the First Millennium Aegean: Patterns of Mobility

In the paper presented at 4th ICAANE I've proposed the possibility to apply different concepts of “style” to the ivories found by the Italian Archaeologists at Nimrud in order to find any associations between their traditions and the

distribution of the artefacts in Fort Shalmaneser. The aim of this paper is to analyze the presence of Near Eastern ivories in the Aegean of early Iron Age by applying different patterns of diffusion and distribution. A particular care in discerning discrete traditions of ivories found in each site will be reserved in order to study their meaning and, as a consequence, evaluating the "function", if there is, played by their "style", trying to understand if ivories spread in the Aegean are a conscious form of communication and of social "distinction".

Bradley J. PARKER (*University of Utah*)

"Interregional Interaction in Mesopotamia's Anatolian Frontier: A Diachronic View from Kenan Tepe, Southeastern Turkey"

After many years of seeing frontier areas as peripheral backwaters, subject to the political domination and economic exploitation of more advanced societal cores, recent scholarship has emphasized the complexity, internal dynamism and transregional influence of frontier societies. This paper will examine the ebb and flow of interregional interaction from the perspective of an indigenous Anatolian town across three broad time periods. Located in the Upper Tigris River Valley of southeastern Anatolia - at the edge of the larger Mesopotamian world - the site of Kenan Tepe is yielding evidence from the Ubaid period, Late Chalcolithic period and the Early Second Millennium, all periods of great interregional interaction in Near Eastern history. Preliminary analysis of archaeological data collected over seven seasons of excavation suggests that in all of these periods Kenan Tepe was linked to the larger Mesopotamian world in various ways. These data also suggest that, contrary to previous theories regarding the nature of interaction between Mesopotamia and its neighbors, the inhabitants of Kenan Tepe played a crucial role in shaping interregional interaction.

Yitzhak PAZ (*Tel-Aviv University*)

The Jordan valley rift during the Early Bronze Age: New vistas on an Urbanized megalithic landscape

The Jordan valley rift was the scene of major socio-political changes during the Early Bronze Age. The area that lies between the northern Golan to the dead sea plain may be considered as the 'cradle of southern Levantine urbanization'. Along the valley rift, major urban sites like Jericho, Bad edh-Draa, Tell Abu el-Kharaz, Beth Yerah and Golan 'enclosures' flourished during the EBA and formed a backbone of urban landscape that remained steady until the very last days of the period. Another manifestation of the Jordan valley during the EBA is its megalithic nature. It can be no co-incidence that most megalithic phenomena, such as the Jordanian menhirs and burial structures, the Golan dolmens and the unique Rogem Hiri are all found along the Jordan valley rift. In this theme I will use a post-processual approach in order to try and understand the meaning of the Jordan valley as a 'megalithic landscape', in which 'cosmological engineering' formed new ideological frameworks within which urban societies experienced their role in the universe. The close relation between Jordan valley monuments and urban centers that were founded at the region during the Early Bronze Age dictates us to consider monumental enterprises as a manifestation of urban life at this region.

Yitzhak PAZ, Sarit PAZ (*Tel-Aviv University*)

Tel Bareqet. An Early Bronze Age II Urban Center at Central Israel

Tel Bareqet is located at the Lod valley in central Israel. The mound is comprised of an upper western acropolis and a lower eastern town, which were surrounded by fortification systems. During the summer of 2004, an extensive salvage excavation was conducted at the eastern lower town, revealing 6 dunams out of the 40 of the site. Our excavation revealed a planned urban center that co-existed with well-known Canaanite EBA II towns and cities, like Arad, Yarmouth and Beth Yerah. Its significance lies in its large exposure during excavation and the varied rich material culture that was found, bearing far reaching socio-political implications. Over 200 m of the fortification system comprised of a solid wall, 3.00-3.50 m. wide, was excavated. Two main gates were discovered, the southern one protected by two salient rectangular towers. Inside the town, an elaborate system of streets and alleys divided between residential quarters, where large well-built buildings were found in outstanding good preservation condition. It seems that the fortified town suffered a calamity that ended with a destruction that was reflected, among other things, by large amounts of in situ complete pottery vessels, many metal tools and weapons, jewelry, industrial activity remains, lithic finds and rich zoological assemblage found on floors within houses. The town continued to exist with changes in the layout of the urban center, and later abandoned towards the end of EBII.

Friedhelm PEDDE (*Assur Projekt, Vorderasiatisches Museum, Berlin*)

The Assur Project in Berlin. An old excavation newly analysed

Ashur, the first capital of Assyria, was excavated between 1903 and 1914 by the German Oriental Society under direction of Walter Andrae. The finds were divided between Germany and the Ottoman Empire and were brought to the Vorderasiatisches Museum in Berlin and the Eski Sark Museum in Istanbul. Because the excavators were

architects, the building complexes were published, but most of the 44.000 archaeological finds were not examined and remained unpublished. After the reunification of East and West Germany a cooperation between the German Oriental Society, the Vorderasiatisches Museum and the Free University of Berlin was initiated. The work of the “Assur Project” began in 1997. Thirty archaeologists and assyriologists are examining the documentation of the excavation and the archaeological objects. These finds are made of clay, stone, metal, and other materials. Among them are objects of art and daily life, like manifold written documents, building materials and ornaments, seals and sealings, implements, weapons, jewelry, sculptures, vessels and much more. With the new data bank of the project these objects are to be documented and analysed.

Edgard PELTENBURG (*University of Edinburgh*)

Constructions of political legitimacy: Jerablus and Carchemish gateway spaces

Fortification systems with their imposing walls, ramparts, ditches and gateways present archaeologists with monuments of authority and prestige, as well as with defensive architecture. Ancient Near Eastern systems have often been classified, dated and linked to the evolution of offensive siege techniques, but little attention has been paid to their role in the large-scale mobilisation of labour to actively structure political authority, in other words as the materialisation of institutions of rule. In this paper I examine one spatial dimension of these systems, that of gateways, at the two neighbouring sites of Jerablus Tahtani and Carchemish, respectively belonging to the 3rd and 1st millennium BC. I shall argue that the formal similarities between the two differently scaled productions are no coincidence, and that this spatial organisation and its components show how rulers sought to ensure and enhance their legitimacy as well as the reproduction of that legitimacy.

Leonor PEÑA-CHOCARRO (*CSIC*), **Daniele MORANDI-BONACOSI** (*University of Udine*)
and M. ROTTOLI (*Musei Civici, Como*)

Crop husbandry practices during the Bronze Age and the Iron Age in Tell Mishrifeh (Northwestern Syria)

Several decades of excavations in Syria have produced an interesting corpus of plant remains from different periods and areas of the country. For the Bronze Age most of the archaeobotanical research has focused on the north and north-eastern part of the country, being the western part of the country largely unknown. In this communication we present the results of the archaeobotanical study from Tell Mishrifeh. More than 130 samples coming from different types of structures (mostly storage structures) from Operation J have been studied producing a most interesting botanical dataset characterized by both richness and diversity of species which has allowed to reconstruct interesting aspects of the agricultural production of the site. Two-row barley appears as the main crop followed by emmer and to a lesser extent by free-threshing wheats. Cultivated legumes are represented by lentils, vetches, grass peas, possible broad beans. Both olives and grapes are also represented. Some of the samples represent particular crop-processing steps such as coarse and fine sieving. In addition, it has been possible to identify remains of cereal based foods. Several samples of the sediment from the bottom part and from the walls of the silos have been analyzed. This analysis has helped to understand some of the techniques used to

Carlo PERSIANI (*Comune di Roma - Sovrintendenza Beni Culturali*)

Chemical analysis and time/space distribution of EB2-3 pottery at Arslantepe (Malatya, Turkey)

The Arslantepe pottery of periods VIC and VID (about 2750 – 2000 BC) comprises 2 main classes: painted and burnished wares. The latter can be divided into 2 large groups: Brown Burnished Ware and Red Black Burnished Ware. All are hand-made. Besides, there is a lesser presence of imports among which the highest percent is formed by seemingly North Syrian vessels of several classes, either wheel turned or handmade: Plain Simple Ware, Karababa Painted Ware, Metallic Ware, Smeared Wash Ware, Brittle Orange Ware. This paper deals with the first attempt to analyse a whole lot of such pottery, in order to gain better insights about; 1) possible changes in local pottery paste composition through time and among different functional groups such as cooking pots, storage jars, fine wares. 2) differences among imported pottery so to recognize possible preferred provenance centres, or districts. The third topic deals with the rather thorny question of the stylistic similarities between the local EB2 ware (Gelincitepe style) and the Karababa Painted Ware, a peculiar handmade ware set in a cultural context dominated by wheel turned pottery. BA.

Lucas PETIT (*Faculty of Archaeology, Leiden University*)

Late Iron Age levels at Tell Damieh: New excavation results from the Jordan Valley

This presentation aims to introduce recent excavations at Tell Damieh carried out by the University of Leiden, the Yarmouk University and the Department of Antiquity of Jordan within the larger regional project Settling the Steppe;

the archaeology of changing societies in Syro-Palestinian drylands in the Bronze and Iron Ages. The presented preliminary results are only a small part of the interdisciplinary search for changes in Iron Age intensity of occupation in the Deir 'Alla region. A synchronous use of settlement sites in the area is suggested, based upon the expected irrigation system. First comparison of Tell Damieh with the results of the long-term excavation project at Tell Deir 'Alla corroborates this synchronicity. Both sites show a strong variation of intensity of use during the Iron Ages. This oscillation points to a continuous struggle to survive and to adapt to the harsh climate of the steppe environment and to the social-political situation in the Jordan Valley. Additionally, Tell Damieh represents a significant addition to our understanding of Neo-Assyrian presence in the southern Levant.

Luca PEYRONEL (*Università degli Studi di Roma "La Sapienza"*)

Making images of humans and animals. The clay figurines from the royal palace G at Tell Mardikh-Ebla (EB IVA c. 2400-2300 BC)

More than one hundred clay figurines were found during the excavations of the Royal Palace G at Ebla. They come from undisturbed layers related to the destruction of the building or over the sealed floors. This secure context and its unequivocal chronology (fixed by historical events and by absolute radiocarbon dates) makes the group of figurines very important for the definition of the choroplastic in Inner Syria during the so-called Mature Early Syrian Period (Early Bronze IVA, ca. 2400-2300 BC). A preliminary typology of the main classes of human and animal figurines and model vehicles is presented and compared with the materials from Hama J and with the production of the eastern regions (Euphrates valley, Jezirah). The evolution of the Eblaic EB IVA choroplastic during the Late Early Syrian period (EB IVB, ca. 2300-2000 BC) can be singled out, thanks to new data from stratified contexts in Areas T, P and HH of the Lower Town. The first results of chemical and physical analyses carried out on clay samples are also illustrated, trying to single out possible imports from figurines made with local clay sources.

Raffaella PIEROBON BENOIT (*Università degli Studi di Napoli "Federico II"*)

The stratigraphical sequence of Tell Barri (Syria): New data from the 2005 campaign

As it has been stressed in many occasions the site of Tell Barri revealed a very long, continuous history, from the fourth millennium till the 13th/14th century A.D. Only some sherds scattered on the surface and out of context can be attributed to the oldest period of occupation. The historical frame of the settlement became clearer in the succeeding phases, owing to architectural evidence and related materials. Significant keys to this respect are the rural sanctuary in the area G A-D 1-6, dated to the first half of the third millennium B.C., the Assyrian and neo-Assyrian royal palaces A in the Area G A-D 7-10 and J, respectively, and the Great Fortification Wall for the end of the millennium. In order to verify some of the problems opened by the excavation, the 2005 campaign focused on these three main themes, providing new data for interpretation of the chronology as well as the functional complexity. New evidence is also obtained for the transition from the Babylonian to the Achaemenid period. The anthropological analysis of skeletons of different periods and the archaeometric analysis of the ivory furniture of the Assyrian graves 1368 and 1424 provide new interesting elements in order to reconstruct the historical frame.

Frances PINNOCK (*Università degli Studi di Roma "La Sapienza"*)

Artistic Genres in Early and Old Syrian Syria. Images and Ideology of Power in a Great Pre-Classical Urban Civilization

In ancient Near Eastern societies a complex language was elaborated since the most ancient times in order to assess and explain to local people and foreigners the basis and foundations of the state, resulting in a strict control of the territory, and aiming at the perfect accomplishment of government. The core of the system was the sovereign, charged by gods of the task of protecting his community from hostile nature and human enemies. Thus, the royal workshops were asked to elaborate these concepts in visual forms, which had to be immediately perceived. The paper will deal with the elaboration of these figurative languages of power in Syria during the Early and Old Syrian periods, and will point at the main differences between Syrian and Mesopotamian official art.

Andrea POLCARO (*Università degli Studi di Roma "La Sapienza"*)

EB I settlements and environment in the Wadi Zarqa (Jordan). The Dolmens and Ideology of Death

This paper analyzes the organization of landscape along the Wadi Zarqa during the Early Bronze Age I. The interconnections between settlements and necropolis allow to reconstruct the social process which will lead the semi-nomads shepherds of Transjordan to settle and give birth to early urban communities. The megalithic burial structures typical of this period –the renown dolmens– have been analyzed and interpreted (in typologies, plans, and orientations) to clarify the role of the ideology of death in relationship with sedentarization. From EB I, the environment of Wadi

Zarqa, a route between the arid zones of the East Mafraq and the fertile region of the Jordan Valley, was a canal of interactions among people and ideologies.

Alexander PRUSS (*Germany*)

From Elite Residence to Metal Workshop: The Building P5 at Tell Beydar

Tell Beydar (Nabada) in North-Eastern Syria, though only a medium sized mound, has provided important clues for the understanding of the early urban societies of the 3rd millennium B.C., since one of the earliest archives of administrative cuneiform texts of Northern Mesopotamia and Syria had been found here. After giving a brief overview on the actual state of the knowledge of the 3rd millennium settlement, the talk will concentrate on the presentation of new finds from field P, situated in the east of the tell. Here, a domestic quarter was razed in order to prepare the ground for a large elite residence, which later became a palace-controlled bronze-casting workshop. The significance of this development and of some particular finds will be discussed.

Marina PUCCI (*Freie Universität Berlin*)

Neo-Assyrian Architecture at Tell Shech Hamad: From singular Houses to a large Complex

The excavation area of the so called “Neuassyrischen Residenzen”, one of the research areas which have been archaeologically investigated since more than twenty years in the lower town II at Tell Shech Hamad, brought to light several large structures (Houses 1-4). According to the archaeological record, they date to a time-span from the 9th to the 7th century BC. By analysing the earth record and the floors inside these structures, it is possible to demonstrate that within a long period of continuous use several architectural changes were prompted by daily life while major modifications accounted for a new organisational concept of space in relation to the contemporary Red House.

Gul PULHAN (*KOC University*)

Ottoman Empire and the Archaeology of the Middle East

The recent political turmoil in Iraq and consequently the massive destruction of archaeological and historical assets in the country force us to reconsider the origins and meaning of archaeological activities in the Middle East. Despite its political rule in the area till the end of the First World War, and having one of the earliest laws (1869) for the protection of antiquities, was the Ottoman Empire able to exercise any control over the archaeological heritage in Iraq or in the rest of its territory? Why were the antiquities of Iraq so important for Britain as to make them part of the political negotiations with the Ottomans during the Paris Peace Settlement, and ask for the revision of the existing antiquities laws that would ensure the division and removal of artifacts from the Empire? Who were the actors of this process, particularly from the Ottoman side? What was the impact of Turkey's rejection of Sevres Treaty on the archaeological realm? This paper will address the close relationship between politics and archaeology in the early twentieth century.

Marco RAMAZZOTTI (*Università degli Studi di Roma "La Sapienza"*)

Mesopotamia and Syria. The Rhetoric of the «Right Order» Collapse in the Ancient Near East Historiography of IV and IIIrd millennium BC

The paper will explore paradigmatic readings of the destruction layers in Syria and Mesopotamia during the IV and III millennium B.C. underlining how some historical and anthropological reconstructions have been deeply conditioned by present political interpretations of others, similar, transformations. At the same time it will be discussed where this ‘ideological’ approach structured the scattered evidences in global theories that have strengthened many other contemporary stereotypes as the «Crash of Civilizations». Such stereotypes frequently transformed in epistemological models for archaeological and historical writing of the past while apparently have simulated the Near Eastern Archaeology ‘loss of innocence’ have left the Discipline out of the debate on the ethic of the research.

Clemens REICHEL (*University of Chicago, Oriental Institute*)

Urbanism and Warfare in northern Syria during the Late Chalcolithic period. The 2005 Excavations at Hamoukar

In September/October 2005, following a four-year hiatus, the joint Syrian-American Archaeological Expedition (Oriental Institute, University of Chicago / Department of Antiquities, Damascus) resumed its work at the site of Hamoukar (Syria). This season's work focused on uncovering Late Chalcolithic architectural remains in Area B, where a tripartite building (TpB-A) had been uncovered in 2001. Based on radiocarbon dates, the fire destruction of this building, whose rich inventory included some 200 clay sealings, occurred around 3,500 B.C. This season's work uncovered a second tripartite building (TpB-B); extensive clearance in the surrounding area ascertained that both buildings were part of two large, distinct administrative complexes, where more seals and many more sealings were

found. The ceramic assemblages from both complexes was entirely local, allowing us to add these buildings to the list of features that identify Hamoukar as an early-to-mid 4th millennium B.C. Northern Syrian city, whose origins predate the advance of the Southern Mesopotamian Uruk Culture into this area by centuries. The widespread destruction found in this phase can now be identified as the result of warfare, most likely connected with the expansion of the Uruk Culture into Northern Syria and Southeastern Anatolia.

Simone RIEHL (*Institut für Ur- und Frühgeschichte und Quartärökologie, Tübingen University*)

Bioclimatic assessment of archaeobotanical crop plant assemblages. A criterion for understanding agricultural decision making in the ancient Near East

More than 125 years of archaeobotanical research in the Eastern Mediterranean and the Near East produced a massive amount of data, which is available in the internet under www.cuminum.de/archaeobotany for the periods from the Chalcolithic onwards since April 2005. The analysis of this large body of data is focussed on the recognition of trends in crop production patterns from the Chalcolithic to the Iron Age and their relation to environmental change, socio-political and cultural development in the geographic area of the Eastern Mediterranean and the Near East. The paper will present some first results of a combined approach (distribution patterns of crop plants and crop plant ecology) for the 4200 calBP event. During this time the disappearance of some crops with higher moisture requirements is visible for the Syrian territory.

Beatrice ROBERT (*Université Lyon 2*)

Art and Craft Production between two Periods: The halafian Assemblage of Tell Masaikh (Middle Euphrates)

The Late Halaf assemblage recently excavated at Tell Masaikh site (Middle Euphrates, Syria), appears to be similar to the production of important « centers » localised north of this region, such as Tell Halaf, Arpachiyah or Chagar Bazar. It is composed mainly by a large quantity of polychrome sherds, but now also by complete pottery, animal and human figurines, stone vessels, tokens, clay disks and lithic artefacts (flints, obsidian blades, macrolithic basalts fragments) Tell Masaikh assemblage is important not only because of his quantity and variety, but also for its quality, witnessing a good technological competence. The study of the technological details of the local craft production can bring new information about the settlement itself, and its relationship with the ancient Middle Euphrates landscape. The analysis of this assemblage -still in progress- shows the pertinence of the model of the acculturation to describe the exchanges between Halaf and Obeid cultures and communities. On the other hand, it seems to suggest that one of the functions of this site could have been the distribution and exchange of raw materials and manufactured goods between Southern Anatolia-Northern Mesopotamia and the South of Mesopotamia, along the river.

Arieh ROCHMAN-HALPERIN (*Israel Antiquities Authority*)

Technical Aspects of Carving Iron Age Decorative Cosmetic Palettes in the Southern Levant

Women at the Ancient World held their make-up in tubes or small pixies, surprisingly at the end of the Iron II Age (8-6 century B.C.) it appears for a short time a special and luxury vessels - called cosmetic bowls. They were used to grain make-up (and maybe also medicines). Most of them are in limestone, but also in glass, faïans, basalt, flint, ivory, alabaster, marble, etc. The wide rim was both plain and smooth or decorated with carved geometric designs made by lapidary drill. The technique of the carving and the drilling was not discussed in the research. W.F. Albright says only that it was made by a lapidary drill. How this drill looks and used? The carving probably was done by a lathe. How it looks and used? The decorations were done on the limestone bowls only because it could be worked, the other materials are probably too hard for drilling and carving.

Israel ROLL (*Department of Archaeology, Tel Aviv University*)

Routes and Transportation Across the Negev in the Bronze and Iron Ages

The Negev, which in Biblical times was conceived as the Land of the South, covers today the southern half of the State of Israel, as well as the eastern limits of the Egyptian Sinai on one hand, and the Jordanian side of the Arava on the other. The alignment, nature and destination of the routes that crossed the Negev in these early times seem to have been prescribed by four main factors. First, come the geographical conditions, that is, the sort of terrain, the type of soil and rock, the nature of the passes and passages in difficult areas, and the location of the watering places. Second, are the priorities among the potential roads, which were determined by the central political power that ruled over the region or had strong reason to get involved in its affairs because of military and economic interests. Third in line is the importance of the Negev as a land of transition of international importance, that is, a land bridge between the Red Sea and the Mediterranean, and a converging area of Trans-Arabian trade routes. Fourth, come the destination of the routes in the area itself, that is, the urban centers which flourished in the Negev in various times, and the sites of extensive extraction and smelting of metals – first and foremost of copper. Thus, in the Third Millennium BCE, the chief urban center of the Negev and apparently its main political power was the large fortified city of Arad. The region's main

routes certainly converged upon it, from the copper mines of Punon, from Egypt and from the southern Sinai. During the Second Millennium BCE, Egypt became the dominant political and military power of the southern Levant and the northern Negev became its main corridor towards Canaan. In the early centuries of the First Millennium BCE, the central political powers, which invested great efforts to control the Negev was initially, the United Kingdom of Israel, and later on and to a much greater extent, the Kingdom of Judah. The aim was to secure an open passage to the Red Sea and to achieve that, a series of fortresses were built, and rebuilt, by Kings of Judah, along the two main roads that extended to the south: along the western limits of the Negev, and along the Arava. In the same period another artery of traffic evolved, of an entirely different nature but of international importance. That was the northern segment of what is known today as the "Incense Road", which crossed the Negev from southeast to northwest and ended at Gaza and at other harbors of the Mediterranean.

Wolfgang RÖLLIG (*Universität Tübingen*)

Baron Max von Oppenheim and his excavations at Tall Halaf

At the beginning of the 20th Century Baron M. von Oppenheim organized an excavation at Tall Halaf, ancient Guzana, which unearthed not only spectacular finds of reliefs and plastic works but also an at this time new type of coloured ceramic. My paper will show some aspects of the personality of Max von Oppenheim on the one side, the goal of his work in Northern Syria and his methods of excavating on the other side. This view back will take in consideration the excavations in the same time-span, for example Ninive, Sendschirli and Boghazköy or Babylon and Assur, and give an impression of the modernness in the methods of excavation, documentation and restoration by M. von Oppenheim. His survey-work in Northern Syria, too, will be illuminated in an adequate way.

Eva ROSENSTOCK (*Institut für Ur- und Frühgeschichte, Universität Tübingen*)

Neolithic Tells of Southwest Asia and Southwest Europe in their Natural Setting

Settlements that tend to accumulate habitation debris forming a more or less pronounced artificial landmark are traditionally given a local name such as "tell", "höyük" or "magoula". Their archaeological definition as a settlement site phenomenon is, however, far from clear-cut. There is an undefined grey zone between the antonymic extremes of flat settlements, such as, for example, the Linear Ceramic sites of Central Europe, and the steep tells of Mesopotamia. Similarly, while in the Near East tells are virtually the only known form of settlement site, flat settlements are typical in Europe. Drawing on patterns which are observable in the entire area of Neolithic tell distribution, this study investigates to what extent the origin, distribution and appearance of tells and flat settlements can be attributed to specific climatic and topographic factors. Given the assumption that architecture is the main source of a tell matrix, this paper aims to establish possible links between environment, architecture and the degree of layer build-up, viewing site typology as a continuum rather than stressing a problematic dichotomy between flat and mound sites.

Elisa ROSSBERGER (*Universität Tübingen*)

Beads from the Royal Tomb of Qatna

The Royal Tomb complex excavated at Qatna/Miṣriṣ (Syria) in 2002 yielded a large amount of jewellery. Among it are about 600 individual beads mostly made of gold, semi-precious stones, glass, and frit and a large girdle with 130 beads on three strings of gold wire. Of special interest is a group of amber/resin beads resembling Mycenaean prototypes. Although the beads have been found dispersed along the floors of the grave chambers and inside the sarcophagi, it is in some cases possible to reassess their original stringing order with a high degree of certainty. In the course of detailed documentation of all small finds from the Royal Tomb, a typology of the beads based on shape, material and decorative features has been established. The great diversity of forms and materials used opens up possibilities of comparative studies, not only within Syria-Palestine, but also in adjacent areas such as Egypt and the Aegean, with which patterns of artistic exchange have already previously been established.

Olivier ROUAULT (*Université Lumière Lyon 2*)

Tell Ashara-Terqa (Syria): Recent work on the third millennium levels

The progress of the excavation in Area F, the largest space free in Tell Ashara-Terqa (Syria), gave us, during the last seasons, information on a large and coherent area of private houses, some of them very well preserved, and occupied during several centuries. The lack, until now, of any epigraphic document does not help to place these levels in the general chronology, but the evidence of the material culture (architecture, ceramics, cylinder seals, etc.) show rather ancient characteristics (ED III and Akkad) in spite of a striking proximity, in the stratigraphy, with the Amorite levels. During the last season, it has been possible to begin the study of the oldest levels. They show a clear gap with the EDIII/Akkad phase.

Salah S. RUMAIYDH (*Iraq*)

Excavations of Asmar's Hill

Asmar's hill is the capital of Ashnona's kingdom that lies to the south west of Dyal's governorate, it represents a group of scattered hills that differs in its shape, size and height. The remains of these hills symbolize the city center. Ashnona's kingdom was one of the Babylonian cities prospered mainly before Hamoraby merged it to his emperor; the city took part in the essential events of Mesopotamia especially in the political and military conflicts. Ashnona was the joint road between the North part of Mesopotamia and Elam, and thus was influenced by the cultural effects of the two countries. Despite the fact that Ashnona lies within the area of Sumerian and Akdian region but its location did not effect its close relation with the northern countries. Its main god "Tshabik" is similar to the Horian god "Tshib" in addition to the firm cultural and economical relations with Elam. Ashnona was not the first country that was separated from Or3rd dynasty during the second year of (Aby Sin) rule and thus force their control on Dyalla's valley. Ashnona's kings called themselves 'Tshback Servants' instead of 'Or Servants', they also used Akdian language instead of the Sumerian in the official corpuses, one of Ashnona's kings wrote down his law in Akdian language. The weakness of some of Ashnona's kings and the attacks of the neighbouring countries made the country weaker and weaker, but "Elback Add 2d" one of Ashnona's kings succeeded in developing and glorifying the city. Some scholars called him "Ashnona's Expander", he expanded his kingdom to include Rabikom, Assure, Kibra in Arbil valley and Ashankom on Kabor river. All these expansions gave clear conclusions that Ashnona's rulers tried to dominate upon Tigris valley and the upper island, Kurdistan mountains to force their control upon trade roads which connect their capital with the north and east on their way to Susa. In 1930-1938 the Eastern Institution in Chicago's University started regular excavations in the area which led to many important discoveries that sheds lights upon architectures, technical, economical, political aspects of this important city. This city gained its special place through the discoveries found in other sites that belong to this kingdom, like Harmal hills in which many different tablets were found. Complete studies to these tablets proved the existence of two tablets that belongs to Ashnona's kingdom and it was written two centuries before Hamoraby's law. Iraqi expedition started excavation in the southern part of the city center, the work reveled on four layers differ in its building sketch and belong to Icen Larsa, some features indicated Or3rd. These layers included groups of houses varied in their shape and size, some contrastive worshipping buildings were also discovered, in addition to small streets "lane" which splits these houses. Some features indicated the possibility of connection between these lanes and the streets discovered by the American expedition and those discovered now, especially those near "Azu Zum" building. It is worth mentioning that its rare architectural features distinguished some of the Altars discovered in this area. The tablets founded were different in their shapes and contents, most of them were letters and economical texts, some tablets included countries names. Among the discoveries were potteries in the shape of Jars, vessels, glasses that differ in its shape and size, in addition to the great mount of potteries, dolls that represent persons and animals in different shapes and positions. Among the discoveries were also Seals that represent different features like animals fights, interlocking, banquets, some of the seals included cuneiform writings with person's names. Architectural features were varied and rare in this city. Many Alters found in different rooms corners, these Alters were distinguished by its architectural beauty, accuracy and rarity. Thus we called it by "Special Southern houses quarter". These quarter discovered by the American expedition in 1931-1938 in the Northern parts of Abos temple.

Iman SACA (*Saint Xavier University*)

Involving Communities: An innovative way of doing archaeology

Archaeology is entering a new era, from one based on a strictly scientific and western historical premises about what is important, to an "Action Archaeology" that involves intellectual collaboration with local communities. This is particularly true in the Near East, with its uniquely long archaeological record, as well as a convoluted history of ethnic and religious groups that have merged and emerged over the millennia. Local sites hold the legacy of these changes, which can be revealed through archaeology and provide tangible evidence of the communities' heritage. As archaeologists we owe it to the local people as well as to our broader understanding of human history, to involve the communities where we work in exploring with them the need for and the interpretation of the past. This involvement enriches the research, and integrates different cultural perspectives in interpreting the past. This should not be looked upon as a threat to the field of archaeology or abandonment to the scientific practice of archaeology, but a way to develop a better understanding of the rich and diverse human heritage at the same time allow "local communities" to interpret, understand and appreciate their own heritage. This approach requires archaeologists to add a dimension that is unfamiliar to most of us: "what does our work mean to the people on whose land the sites sit?" "What aspects of our interpretations need to be reconsidered?" "How do insights gained from local communities enrich our understanding?" We will often find, I think, that we gain as much or more through developing real collaborative friendships with local communities than we will gain through writing yet another descriptive, scientific paper for professional consumption only.

Helen SADER

A Middle Bronze Age Palace with Wall Paintings at Tell el Burak, Lebanon

Tell el-Burak-Lebanon is located between Sidon and Sarepta. Four seasons of excavations (2001-2003 and 2005) have uncovered the remains of a Middle Bronze Age palace, the first to be found in Lebanon. In 2003 traces of plaster and paint were identified on the walls of room 10 which is located at the western end of the building. In 2005 the southeast corner of this room was totally excavated and 2,80m high wall paintings came to light. The paper will present the Middle Bronze Age palace and the recently discovered wall paintings with a preliminary assessment of the foreign influences that can be detected.

Elyas SAFFARAN (*Université Share - Kord, Iran*)

L'art rupestre de la region de Ghidou. Splendeur d'art prehistorique l'Iran

La region de Ghidou se trouve en province d'Arak ou Markazi de l'Iran, à 355 Kilometres au sud de Teheran. Dans cette region nous avons trouvé les gravures d'art prehistorique d'Iran. Grace à notre travail et recherche archeologique sur des œuvres cet endroit, les historiens d'art, les archeologues et les ethnographes peuvent reconnaître splendeur d'art prehistorique d'Iran et le role important joué par ce pays pendant cette periode. Donc pour bien connaître cet art, on presente dans cette communication avec des documents archeologiques les différents etaps de notre etudes scientifique, notamment:

- I. Étude sur la situation géographique et historique.
- II. Circonstances de ces decouvertes.
- III. Description et analyse des peintures et des gravures rupestres.

Maura SALA (*Università degli Studi di Roma "La Sapienza"*)

Khirbet Kerak Ware Evidence from Tell es-Sultan/ancient Jericho: A Reassessment in the light of the Italian-Palestinian Expedition (1997-2000)

Up to now a rather large amount of Khirbet Kerak Ware has been retrieved from both the tell and the nearby necropolis by the Expeditions who worked at Tell es-Sultan/ancient Jericho. The aim of this paper is a brief overall presentation of the Khirbet Kerak assemblage found at Tell es-Sultan/ancient Jericho, particularly by the two British Garstang's and Kenyon's Expeditions, in the light of the finds recently recovered by the Italian-Palestinian Expedition in Area F (1997-2000). A rather complete inventory of this specialized production can now be outlined from the findings of Tell es-Sultan, enriching its general attestation in the Southern Levant and testifying to the particular geographic role of this site at one of the main crossroads of the Ancient Near East.

Maria SAÑA (*University of Lisbon*) and **Carlos TORNERO** (*Universidad de Barcelona*)

El proceso de domesticación animal. Visión historiográfica de su concepción y estudio desde la arqueología

La problemática histórica relativa a la domesticación animal ha tendido a abordarse de forma mayoritaria desde una perspectiva exclusivamente económica. Desde esta óptica, la domesticación de los animales se ha tratado y caracterizado como un nuevo proceso productivo cuya práctica supuso cambios trascendentales en las formas de aprovisionamiento de los recursos naturales destinados a la subsistencia. En la explicación de estos cambios trascendentales a menudo se ha tendido a enfatizar los aspectos técnicos que contribuyeron con mayor o menor grado a la estabilización y fijación de la base subsistencial, priorizando las cuestiones relativas a las variaciones en la cantidad y calidad de los recursos per se y relegando normalmente a un segundo plano las condiciones sociales vinculadas a esta nueva forma de producción. Tanto es así que al hablar de recurso doméstico se hace referencia normalmente a aquellos animales criados en cautividad, en condiciones artificiales, destinados, de forma irremediable, a ser consumidos. Las condiciones de producción, distribución y consumo pueden ser, pero, muy variables. Es por esto que el estudio de la dinámica de los procesos de domesticación animal de las principales especies productoras de alimento requiere, en primera instancia, explicitar lo que entendemos por domesticación animal, teniendo en cuenta que bajo el término domesticación se vienen incluyendo problemáticas históricas y arqueológicas muy diversas. Se presenta en este trabajo una reflexión entorno a los conceptos de domesticación y animal doméstico, haciendo incapié en las diferentes tendencias historiográficas que han presidido el estudio de la problemática histórica relativa a las primeras domesticaciones animales. Se examina a continuación, en el plano metodológico, las diferentes maneras de aproximarse al estudio de los restos de fauna con el objetivo de identificar a partir de los mismos a los primeros animales domésticos, remarcando en todo momento la necesidad de llevar a cabo estudios integrados.

Stephan G. SCHMID (*University Montpellier III - Dept. Art and Archaeology*), **Aurélien AMOUR** (*University Montpellier III - Dept. Art and Archaeology*), **André BARMASSE**

(Association for the Understanding of Ancient Cultures, Switzerland), **Sylvie DUCHESNE** (CNRS UMR 8555, Toulouse, France), **Caroline HUGUENOT** (University of Lausanne, Switzerland) and **Lucy WADESON** (Keble College, Oxford University, England)

New insight on nabataean funerary practices

Although the huge rock cut façades of the Nabataean capital, Petra in southern Jordan, are mostly related to funerary monuments and a lot of research has been carried out on them, the funerary practices of the Nabataeans remain rather enigmatic. Recent research in the frame of the International Wadi Farasa Project (www.iwfp.ch.vu) helped to gain a better understanding of the funerary monuments to which the rock cut façades are related. Further, on two occasions small necropoleis were excavated. The first one being situated in a rock cut tomb contained 14 shaft graves dating to the second half of the 1st century AD. The second one is an assemblage of 15 rock cut “outdoor” shaft graves, most of them showing multiple occupations and dating to the late 1st and early 2nd centuries AD. Interestingly, the burial customs showed a great variation. While the burials from the first necropolis were rather homogeneous regarding treatment of the bodies (inhumation) and construction of the tombs, the second necropolis shows a more heterogeneous picture, i.e. different types of constructions, inhumations and incinerations within one single monument etc. Therefore, careful analyses of the archaeological and anthropological data allow obtaining a more differentiated picture about Nabataean funerary customs than what was assumed previously.

Glenn M. SCHWARTZ (Johns Hopkins University)

A “Royal” Cemetery from Third Millennium BC Syria: Umm el-Marra 2002 and 2004

The joint expedition of the Johns Hopkins University and University of Amsterdam has exposed a complex of monumental elite tombs dating to ca. 2500-2200 BC on the site acropolis at Tell Umm el-Marra east of Aleppo in western Syria. In the 2002 and 2004 excavation seasons, five tombs were excavated in the center of the site’s acropolis near Tomb 1 discovered in 2000. Next to the tombs were installations containing the remains of sacrificed equids, presumably associated with rituals honoring high-ranking individuals in the adjacent tombs. The results indicate the importance of ancestral veneration (and, perhaps, desecration) and the ritual role of equids in the construction of hierarchical rule in third-millennium BC Umm el-Marra.

Aydingun SENGUL (Kocaeli University)

A New Interpretation for Western Anatolian Figurines of Early Bronze Age

Many new figurines had been found in Anatolia from EBA in the last 30 years both by legal and illegal excavations. As traditionally described these figurines are related to The Great Mother Goddess of Anatolia. But some of them have specific differences; they appear less powerful and as if they are listening to someone. Expression in their face is sad and solemn, as if they are in the presence of some higher being. These make us believe that they are not depicting the God herself but the priestess of that God and some of them actually praying.

Kemal SERTOK (Gaziantep Museum) and **Filomena FAUSTA SQUADRONE**

Landscape, Space Use and Funerary Practices in the Birecik Eba Cemetery (Turkey)

The Birecik EBA cemetery is located in the Middle Euphrates region, on right bank of the river, about 25 km. north of Carchemish, 45 km east of the modern town of Gaziantep. The cemetery covers an area approximately 6 hectares, where 312 tombs were unearthed in two excavation seasons during 1997 and 1998. Based on grave finds the cemetery is dated to EBA I-II. In addition to tombs, other noteworthy features uncovered were shallow depressions filled with ash, and pits containing sherds, stone and flint tools, and animal bones in an ashy fill. Certain architectural features used in laying out the cemetery were also noted. In order to better understand landscape and space use related to EBA funerary practices in this region, the distribution of the tombs and other related features are presented and discussed.

Ann T. SHAFER (American University in Cairo)

Sacred or Profane?: An Investigation of the Ritual Aspects of Neo-Assyrian Boundary Monuments

Throughout the process of expanding their territorial empire, Neo-Assyrian kings (9th-6th c BCE) erected royal monuments on the empire’s fringes. These monuments – stelae and rock reliefs – are relatively uniform in their content and appearance, and seem to have constituted a particular monument type with a particular function and meaning. This paper will present evidence for an understanding of Neo-Assyrian boundary monuments as important sites of royal ritual. Until recently, much of Assyrian scholarship has viewed royal monuments as expressions of political ideology. In contrast, this paper uses ritual theory as a backdrop for highlighting an important forgotten aspect of Assyrian kingship and society.

Mahnaz SHARIFI (*Iranian Center for Archaeology Research*)

Archaeology and Ethno archaeology surveys in the west of Kermanshah (Iran)

Across a part of the Plain of Kermanshah in western Iran, are located more than ten ancient mounds with different sizes and heights. Old individuals of the local people use the word “Gargashi” to call a piece of the plain. The word reminds the name “Karkashi”, an apparently Median military center governed by the Median ruler, Khashthariti“ (Faravartis), which is mentioned in an Assyrian inscription. Along with some other indicators, this encourages one to ask and challenge: Is “Gargashi” the same as the Median “Karkashi”? We suppose it is possible. Through a field surface survey performed in August 2004, the authors either recognized or introduced 14 archaeological mounds in the area situated between 46° 52' to 46° 57' eastern longitude and 34° 23' to 34° 27' northern latitude. Indeed, there are much more archaeological sites across the region requiring more time and expense to be introduced and studied

Kazuya SHIMOGAMA (*The University of Tokyo*)

Reconsidering the Late Chalcolithic Pottery from Telul eth-Thalathat II, Northern Iraq

Recently many researchers argue on the diverse aspects of growing complexity in the early phases of Late Chalcolithic Mesopotamia. Most of the main issues on social complexity, however, does not seem to be fully understood, especially based on any in-depth analyses of archaeological materials. Among others, craft specialization is still an inextricable problem, though one of the important criteria of social complexity since V. G. Childe. This study focuses on the evidence of craft specialization of pottery in the local Late Chalcolithic society, on the basis of the analysis of the Ubaid-Late Chalcolithic pottery excavated at Telul eth-Thalathat II (Northern Iraq) almost fifty years ago. As a result of the analysis, some technological aspects of the ceramic assemblage, such as firing technique, decorations and tempering materials, clearly show change in ceramic production at the very outset of Late Chalcolithic period. And in comparison with ceramic assemblages found from other sites in the region, including Tepe Gawra, several problems related to the nature and degree of specialization in ceramic production, and interregional interaction are reconsidered.

S. SILVONEN, M. LAVENTO, P. KOUKI, A. MUKKALA, H. YNNILÄ (*University of Helsinki, Institute for Cultural Research, Archaeology*)

Distribution of Nabataean-Roman sites around Jabal Harûn: Analysis of factors causing site patterning

The Finnish Jabal Harûn Project survey team has carried out six seasons of fieldwork, mostly intensive survey, around the mountain of Jabal Harûn, a few kilometers southwest of the Nabataean city of Petra in Jordan. Spatial analysis of the collected data indicates a distinct pattern in the distribution of Nabataean-Roman sites within the surveyed areas. The most significant site types in the area are agricultural and water control installations and small building remains that are most probably related to an ancient road running through the area. Cisterns, burial sites, and cultic installations were also observed. In this paper, we focus on identifying environmental features and cultural factors that explain the observed site distribution. The paper presents a model of the ancient economy and environment of this area in the suburbs of Petra and at the foot of Jabal Harûn, presumably an important cultic site already in Nabataean times.

Ian SIMPSON (*Copenhagen University*)

Illuminating Ancient Streets: GIS-assisted analysis of urban change in Gerasa/Jarash in the Byzantine and Early Islamic periods

Gerasa/Jarash has enjoyed a long history of archaeological investigation but this has also led to a fragmentary body of archaeological data. This paper brings together overlooked and unpublished photographic and cartographic records from late nineteenth and early twentieth century expeditions in order to shed new light on development of the town in the Byzantine and Islamic periods. By integrating these data in a GIS, a picture is presented of buildings over the South Tetraklion, Cardo and Oval Piazza that were cleared away by early excavations. Analysis of urban infilling and changes to the water system demonstrates the expanding commercial role of central Jarash in the Early Islamic period. Examination of the town pattern as a whole reveals continuity, probably into the Islamic period, of a significant neighbourhood west of the Cardo, and indicates the layout of the east side of the ancient city, now built over by modern Jarash.

Natalia F. SOLOVYOVA (*Russian Academy of Sciences*)

Principal rooms. “Sanctuaries” of Ilgynly-depe

The settlement of Ilgynly-depe occupies an area of 14 hectares and the mound of this settlement is approximately 14 m high: it is situated in the eastern part of the foothills of the Kopet-Dag mountains approximately 240 km due southeast of Ashgabat and 110 km northwest of Meshkhed. The Karakum Expedition of the Russian Academy of Sciences'

Institute for the History of Material Culture (IHMC RAS) excavated this site together with Turkmen archaeologists. The settlement was founded in the late 5-th and early 4-th millennium BC. At the very end of the 4-th and beginning of the 3-rd millennium its population most probably moved to the neighbouring settlement of Altyn-depe. The reason for the departure was the shift in the course of the small Meana-chai River. The abandonment of the settlement coincided in time with fairly significant changes in its culture. These found expression in the spread of the “Geoksyur Complex” (with the innovations in iconography, pottery production and the funerary rite intrinsic to it) and could have been stimulated by stress resulting from the increasingly inadequate water resources. Total number of structural levels is about 20, six uppermost were under investigation. All of them presented the remains of mudbrick architecture of domestic complexes. To judge from the size of the settlement and the density of the arrangement of buildings, the community of Ilgynly-depe in the Chalcolithic period must have been fairly large – between one and two thousand. The finds in the Yalangach and Geoksyur layers of the settlement were extremely diverse. The abundance of copper articles found within the confines of the settlement is unique for the Chalcolithic period in Southern Turkmenistan and the adjoining territories. The good quality of the ordinary buildings was striking: the rooms in the houses were spacious and the courtyard areas well laid out. What testified most of all to the prosperity of this society was the creation of a significant number of non-utilitarian objects. There was no temple at Ilgynly-depe. It has been demonstrated archaeologically that ritual ceremonies were enacted by the members of the Ilgynly-depe community in the so-called principal “ceremonial” rooms - “sanctuaries with red benches”, which were probably to be found in every, or almost every household. During the whole period of excavations 23 such “ceremonial” rooms were investigated. Every inhabitant of the settlement would appear to have taken part in these rituals. In any society the system of rituals can be divided up into those, on which the life and prosperity of the collective depend (usually these are seasonal rituals and those in which the theme of world creation is played out), and secondary ones linked with everyday concerns (the alternation of work and leisure, meals, the regulation of certain types of activity and so on). If one takes into account the large area of the rooms, the considerable expenditure of labour and time required for the creation of an interior and, finally, the high concentration of symbolically significant objects in some “sanctuaries” and the smaller, or small area, poor interior and negligible number of symbolically significant objects in other “ceremonial” rooms, then it would not seem an undue exaggeration to suggest that the main rituals were most probably carried out when large numbers of people had come together in large rich households, while secondary rituals were enacted for the ‘narrow circle’ in smaller “ceremonial” rooms of a more ordinary nature. It is possible that a special role was assigned to the largest, richest “ceremonial” rooms, which had been used for this purpose over a long period. The abandonment of the principal rooms was highly ritualised. Decrepit “sanctuaries” were apparently always “buried” according to certain rules, and prestige objects were left behind on the floors or in caches. The “sanctuaries”, although linked with the sphere of worship and ritual, were rather central rooms in the households – some very large and rich and others fairly ordinary. In other words, “sanctuaries” and other rooms in the households were erected in an order that was just as difficult to separate out as at Çatal-Huyuk. Nevertheless, there are three points, which allow distinguishing characteristic features of the principal “ceremonial” rooms:

- 1 – architecture;
- 2 – interior;
- 3 – material traces of the rituals.

Some of the features differentiating the “sanctuaries” are chronological. These apparently include the decor of the boxes and the types of the hearths, the transition from wooden benches to clay ones and the evolution of clay benches.

Karin SOWADA (*University of Sydney*)

Egyptian Stone Vessels in EB II and EB III Canaan

The withdrawal of Egypt from Canaan at the end of the EB IB produced a shift in regional power structures. During the EB II and EB III, the relationship between Egypt and Canaan was based on commodity exchange and diplomatic relations with local elites. This change in the status concerns of each region is apparent in the decline of the visible presence of the Egyptians in Canaan, combined with the appearance of fine Egyptian stone vessels and other elite imports as part of local assemblages. Stone vessels appear at several sites, notably at Tel Yarmuth and Ai. Although the quantity of vessels in Canaan is not great when compared with Byblos and Ebla, their purpose was similar: they were deployed as part of the diplomatic act of royal commerce - as royal 'gifts', trade items and cult offerings linking Egyptian and Canaanite elites. The nature of this contact with Egypt also demonstrates that local elites chose to identify with Egyptian culture, in both secular and sacred contexts. This may suggest that despite the retreat of the Egyptian presence from Canaan at the end of EB IB, cultural influences remained important in the region throughout much of the Old Kingdom.

Gilberta SPREAFICO (*Università degli Studi di Roma "La Sapienza"*)

The Southern Temple of Tell el-Husn/Beth-Shean: The Sacred Architecture of Iron Age Palestine Reconsidered

In the twenties of the 20th century an expedition of the University of Pennsylvania Museum brought to light at Tell el-Husn/Beth-Shean a sacred area of Iron Age I with a pair of temples characterized by an unusual plan. The origin of the

Southern Temple plan, with a large long-room which was divided by two rows of columns into three aisles, was debated for a long time. Mariusz Burdajewicz suggested a possible relation with the Cypriote sacred architecture attested at Kition and Palaepaphos during the 12th-13th centuries B.C., but in Palestine this architectural tradition seemed to be limited to the Beth-Shean temple. The recent discovery of Complex 650 at Khirbet el-Muqanna' / Ekron provides new evidence of a temple with a long-room cella divided into three aisles and surrounded by a peripheral row of auxiliary rooms, posing the question of a possible reappearance of the same type of plan documented at Beth-Shean. I will discuss problems and prospects opened by this hypothesis, proposing a brief review of Iron Age sacred architecture in Palestine and its relations with traditions of neighbouring countries.

Maria Theresia STARZMANN (*Department of Anthropology, Binghamton University*)

Social Use of Space in the Ancient Near Eastern City of Shuruppak: The Cultural Meaning of Houses

A prevailing idea in processualist archaeological theory is that the materiality of space determines human behavior. In contrast to this view, I theorize the use of space in terms of social practices which are organized around but not determined by the material properties of space. The analytical focus of my study is the household. A household is hereby not conceptualized as a structural economic category that is mapped onto an architectural unit, but as a task-focused group of people. Following such a more dynamic and relational definition, a household is meaningfully constructed around a set of embodied activities rather than formed around a bounded unit of space. My research objective is to examine whether the domestic architecture of the Early Dynastic city of Shuruppak constitutes household units. The underlying methodology for detecting such households in the archaeological record is an integrated space-syntax and activity area analysis.

Margreet L. STEINER

Craft Specialization in Iron Age Jerusalem

In Jerusalem the workshop of a metal smith / jeweller has been excavated by Kathleen Kenyon, dating to the 7th century BC. An anvil, several hammer stones, one of which was described as "iron-impregnated", pieces of haematite, bronze and iron objects and a large fire-pit testify to metal working in the building. The find of 34 small stone weights show that precious commodities were exchanged. This is one of the very few workshops of its kind in the Levant. Many Iron II towns have yielded quarters where craftsmen were concentrated, but these were mainly used for the production of food and olive oil and the manufacture of textiles – for examples of such towns see Tell Mishrifeh (Qatna) and Tel Batash (Timnah). This workshop, located in one of the elite areas of Jerusalem, may shed light on the production and consumption of precious goods in the town, the way the exchange between craftsman and consumer was handled, and the status of metal smiths in ancient Israelite society.

Tara STEIMER-HERBET (*IFPO, Damascus*) and **Hélène CRIAUD** (*UMR 7041, Paris*)

Dolmens cemeteries are well known in the Jordan valley, Zarqa area, Ajlun, and Jaulan

Between 2002 and 2004 a Syrian-French team, conducted by M. al-Maqdissi and F. Braemer, did systematically surveyed a basaltic area called Leja (Southern Syria). We found three cemeteries, Mtoukh (20 tombs), Karasa (60 tombs), and Charaya (150 tombs). The survey brought information on typology and spatial localisation of the tombs. No excavation could have been done on a grave, but we collected few pottery sherds from settlement's surfaces. In the case of Charaya's cemetery some dolmens are built on houses allowing us to replace it in a relative chronology and geographic context. Our aim is to establish a link between dolmen's cemeteries and the different kind of settlements such as tell, or spread houses (rectangular or apsidal). Latest studies on dolmen's concluded, maybe to quickly, that dolmens were belonging to nomads or semi-nomadic groups. Our results in South Syria proves that the cultural model could be diversify and that dolmens, in this part of the Levant, are graves of sedentary pastoral people.

Danielle STORDEUR (*CNRS*) and **R. KHAWAM**

A place for the dead in the houses of Tell Aswad (Syria). (Early PPNB Horizon levels and Middle PPNB levels)

Tell Aswad is a large Neolithic tell situated in the Damascus region. Occupied between about 9500 BP and 7500BP its funerary practices are particularly well represented (a hundred individuals). One can observe radical changes in the traditions at specific moments of the occupation. In the levels dated to the early and middle PPNB the funerary deposits are in or near the houses. In contrast during the late PPNB a cemetery was found on the edge of the village. We will present in this workshop only the funerary practices from the early levels giving field observations concerning the precise position of human remains and the implication of the location in relation to the buildings. Depending on the different locations we will analyse variations in the deposits themselves. Funerary contexts may be primary but also secondary, for example the grouping of skulls. The type of burial (exposed, walled, excavated) and the specific arrangement (coffins, baskets, shrouds, etc) and the presence/absence of funerary furnishings will be taken into

account. The final goal is not just to present unpublished data but also to present some preliminary sociological interpretations.

Lynn SWARTZ DODD (*University of Southern California*)

Interpreting the Excavations of the University of Chicago's Oriental Institute at Tell al-Judaidah in the Amuq, Turkey

Tell al-Judaidah was among the large mounds excavated during the 1930s in the so-called Plain of Antioch as part of a regional project undertaken by the Oriental Institute of the University of Chicago under the direction of archaeological pioneer Robert Braidwood. The post-2000 BCE remains from Tell el-Judaidah have languished, largely unknown with the exception of unpublished object studies and a short summary of the architecture published by Robert Haines in 1971. This presentation provides an overview of the post-2000 BCE remains at Tell al-Judaidah and describes progress on a renewed publication effort. The new publication includes both a printed volume and an on-line Internet-accessible database for all the excavated material, such as Tell al-Judaidah's large corpus of figurines, the metal items and seals. This presentation identifies and contextualizes the archaeological methods and assumptions that guided the 1930s excavations and discusses their implications for interpreting results from this important and poorly-published excavation.

Ingrid M. SWINNEN (*Vrije Universiteit Brussel*)

The Early Bronze I pottery from al-Lahun (Central Jordan). Seal impressions, pot marks and decorations

This paper will consider a part of a comprehensive study of the Early Bronze Age material evidence discovered during the Belgian excavations at the necropolis and adjacent settlement of al-Lahun in the Wadi Mujib area. In the Early Bronze I period Lahun seemed to have been a small community of which recently some material was found in a lower stratum of the EB II-III fortified town. First we will deal with the main pottery types and their presumed functions, and secondly we will focus on the different sorts of decorations (painted, incised and plastic), the stamp seal impressions and the pot marks (often referred to as "potter's marks"), to finally compare them with the results from similar settlements in the region. Moreover we attempt to clarify the presumable symbolic meaning of certain pottery decoration forms and impressions, as well as to discuss the possible function of pot marks on the pottery of al-Lahun. Our pottery is always handmade and in many cases rather coarse. From the current evidence it seems that in Lahun there is no clear difference between EB I ceramic vessels from a funerary context and vessels produced for domestic purposes.

Lina G. TAHAN (*University of Cambridge & Ecole des Hautes Etudes en Sciences Sociales*)

Mission de Phénicie: Ernest Renan and his competitors in the territory of Lebanon

This paper wishes to trace the history of the Mission de Phénicie and how Ernest Renan, a philologist, archaeologist and member of the French Academy of the Inscription et Belles Lettres, conducted his first 'scientific' excavations in Lebanon. His motive was to collect epigraphic texts and ancient remains related to the 'Phoenician' civilization. On October 14, 1860, he arrived in Beirut with the French military expedition sent by Napoleon III and discovered that he was not the first and only person to dig in ancient 'Phoenicia'. There were people who were either amateurs, consuls or even famous collectors dealing with antiquities and whose motivation was the 'discovering' of unbroken and beautiful antiquities, and the shipping of these back to France. Their particular agenda was a desire to enrich their national museum, at that time the Louvre, and the recognition which followed from this. This paper will also elaborate on Renan's famous competitors and will try to show that there were no 'scientific' archaeological methods followed while digging the ground, rather the fact that the aim of digging was solely devoted to discovering objects that were to be sold to famous museums. This is something which always irritated Ernest Renan as it interfered with his Mission. Finally the aim of this talk is to examine this rich history of collectors and antiquities dealers which provides us with a clear idea about the fierce and competitive domain of archaeology spreading from the mid-nineteenth century till the early 1920s.

Tugba TANYERI-ERDEMIR (*Middle East Technical University Ankara*)

British explorers in the Ottoman Empire: exploring, excavating, and displaying the Orient

Numerous archaeological expeditions were carried out by British scholars in the Ottoman Empire in the 19th century. For Near Eastern archaeology, the excavations of the Neo-Assyrian palaces, and the excavations at Toprakkale, an Urartian citadel of the 7th century B.C. are particularly important. These archaeological expeditions were constituted of several steps: exploring the area, applying for permits from the Ottoman authorities, fieldwork involving local workmen, and finally transport and display of the excavated artifacts in the British Museum. In each step, field

archaeology offered a unique experience of contact and interaction between the British explorers and the officials and subjects of the Ottoman Empire. This dialogic interaction appears to have effected the production of knowledge by the British archaeologists, and seems to have been influential in the emergence of archaeology in the Ottoman Empire. This paper aims to investigate these interactive processes brought about by archaeological fieldwork as reflected in the travel journals and excavation reports published by the British explorers such as Austin Henry Layard, Henry Rawlinson, and George Smith. Hormuzd Rassam's work will be presented as an example of an archaeologist who was born as an Ottoman citizen, educated in England, and excavated with Layard.

Halil TEKIN (*University of Hacettepe*)

Hakemi Use: A New Discovered Site from Hassuna/Samarra Period in Southeastern Anatolia

The Hassuna/Samarra Period has an important place in Near Eastern Archaeology, however neither its main area nor the distribution has been yet cleared. Till the last two decades, the geographical distribution of this culture was described as the Central and Northern Iraq. The concentration of prehistoric research in Northern Syria proved that this culture was also present in the Balikh and Khabur regions. Nevertheless, the presence of this culture within the borders of Turkey was unknown. Since 2001 excavations are carried out at Hakemi Use, a site in the Upper Tigris region, within the salvage project of the region which will be flooded by the Ilýsu Dam. The salvage excavations revealed an original Hassuna/Samarran settlement - the only excavated site within the borders of Turkey dating to this period. The findings point to very close relations of this region with Northern and Central Mesopotamia as well as with Northern Syria. The most important result of the Excavations of Hakemi Use is that the northern border of the Hassuna/Samarra culture is identified as the Upper Tigris Region.

Margareta TENGBERG (*University of Paris I – Sorbonne*)

Plant exploitation and use at Ulug Depe (Turkmenistan) from the Chalcolithic to the Iron Age. First archaeobotanical results

The Chalcolithic and Bronze Age saw the emergence of several large agglomerations in the northern piedmont plain of the Kopet Dag Mountains, in present-day southern Turkmenistan. Subsistence in these societies seems to have been to a large extent based on agriculture and herding. The present paper will focus on the plant economy at one of these sites, Ulug Depe, excavated since 2000 by a French-Turkmen team under the direction of O. Lecomte and M. Mamedov. The analysis of carbonized macro-remains as well as impressions on mud brick is used to investigate different aspects of the exploitation and use of plant resources from the Chalcolithic (Namazga II-III) until the Achaemenid period (Yaz II-III). The study of charcoal, mostly resulting from the use of wood for fuel, has allowed a reconstruction of the vegetation cover around the site and its changes through time due to human activities. The analysis of seeds and fruits, exceptionally well preserved in ashy layers and pit fills, contributes to the understanding of the evolution of agricultural practices and crop processing techniques through time. Special attention will also be given to the early (Bronze Age) cultivation of grapes in this part of Central Asia.

David THOMAS (*University of Hacettepe*)

Archaeological Investigations at Jam, Afghanistan

Jam is thought to be ancient Firuzkuh, summer capital of the 12-13th century Ghurid empire, which stretched from eastern Iran to the Bay of Bengal in India. This World Heritage Site is famous for its magnificent, 63 m tall baked-brick minaret. The minaret, however, is merely the most visible monument in a rich, diverse archaeological landscape. The site has been little studied, and suffered badly from the looting of antiquities in recent years. The Minaret of Jam Archaeological Project completed its second field season at Jam in August 2005. We focussed on assessing the extent of the robber holes at the site, using a combination of satellite images, GPS and more traditional survey techniques. We also investigated a large courtyard building, possibly a mosque, close to the minaret, domestic and industrial archaeological remains. The wide range of samples which we are currently analysing are providing new insights into Ghurid diets, trade and technology. Virtually no other such studies have been possible on Afghan material for over 30 years.

Sara TRICOLI (*Università degli Studi di Roma "La Sapienza"*)

Cultic Topography: The extended family cult and its projection on the ground in old-babylonian Ur

The paper deals with an interrelated archaeological and textual analysis of the AH sector of old-babylonian Ur. It implies an enucleation of clinal sectors inside the quarters and an explanation of the reasons a kinship-based group conceived the space where the family inhabited. Besides the socio-economic ties by other scholars already ascertained here is an attempt at connecting the architectural and topographical articulation of the clan sectors to the cultic cement

of the extended family which was two-fold: it guaranteed the unity of the clan on a inner way in connection with the hierarchical lines of the family itself and on an outer way through a religious foundation of the the family as a juridical unitary corpus respect the “outside”.

Akira TSUNEKI (University of Tsukuba)

A Large and Complex Neolithic Settlement at Tell el-Kerkh, Syria

Tell el-Kerkh, excavated since 1997, is a really large tell-complex located in northwest Syria. It has the thick Neolithic cultural layers, dating back to at least the Early PPNB period. Based on the excavations, test trenches and systematic surface collections, we concluded that the extent of the Neolithic settlements, especially between the Late PPNB and the middle phase of the Pottery Neolithic (c. 7,500 ~ 6,500 cal. BC.), extended around 16ha. The Neolithic settlements of Tell el-Kerkh not only covered a vast areal expanse but also show signs of complex society. It produced many evidences indicating social complexity, including communal storage, craft specialization, long distance trade, ownership concept and ritual practices. One of the striking evidences is the objects relating to the sealing system. Until now, we have many stamp seals (over 65 specimens) made of imported and indigenous materials. Unfinished stamp seals indicate production of these items within the settlements. Clay sealings show the sealing system had worked there, and we can investigate the development from the basket sealing to the bulla type sealing. I conclude that the large Neolithic settlements at Tell el-Kerkh are characterized by various aspects of social complexity, especially economical ones.

Ayşe Tuba ÖKSE (University of Hacettepe)

Preliminary Results of the Salvage Excavations at Salat Tepe on the Upper Tigris Region

Salat Tepe is one of the ancient settlements within the area to be flooded by the Ilýsu-Dam. The earliest occupation on the natural hill belongs to Late Chalcolithic Period. The stratigraphical sequence on the southern slope points to a dense occupation during this period. The ceramic assemblages and small finds from these layers point to an important Ubaidian outpost to the north of the Tigris Valley. A large mudbrick building complex on the mound summit is dated to the Middle Bronze Age. The inventory of the building and its parallels within the region point to an administrative network of agriculture in the first half of the 2nd Millennium BC. The building was abandoned after the collapse by an earthquake. In the Early Iron Age semi-subterranean rounded dwellings were dug on the mound summit. In the Hellenistic-Roman and Medieval periods granary pits were dug on the mound summit and rests of mud and stone walls as well as hearths point to the existence of temporary dwellings in the Medieval era. After the Medieval Period the mound has been used as a necropolis.

Burcu TUNG (University of Hacettepe)

Creating Place, Doing Tradition. An Example from Çatalhöyük

In this paper, I will be reporting on architectural building materials used in the construction of houses in Neolithic Çatalhöyük, Turkey. I follow the notion of place and place-making, in which I see the settlement bounded to a landscape containing meaning, memory and experience, in which the inhabitants of the settlement formed and transformed their lives for over 50 generations. The houses of Çatalhöyük were built and maintained through the modification of local clay rich sediments into mud brick, mortar, and plaster. I see the house an arena of expression and reception, where the sedimentation is formed through the negotiation between individuals. Geoarchaeological analyses of building materials have implications towards understanding the different practices of house construction, maintenance and abandonment between households, synchronically and diachronically. If knowledge of making a house is seen as an inheritance of different recipes, then it is possible to explore how practice and tradition are both created and passed on, and whether their transformation or stabilization reflects choice, necessity, or practice.

Bora UYSAL (Hacettepe University, Ankara)

Technical Features of the Ninevite 5 Ware in Southeastern Anatolia

Research works carried out on Ninevite 5 culture which is one of the most problematic issues in the third millennium B.C. of Near Eastern Archaeology, have always attracted a considerable attention. Important developments have been experienced in the subject of this culture especially during the last years, which led to validity loss of some of the ex-right and accepted information. In greater part of the evolutions done in the distribution of Nineveh 5 ware, North Mesopotamia (Dohuk, Musul, Erbil, Kerkük, Süleymaniye and Diyala regions in Iraq) and Northeast Syria (Upper and partially Middle Khabur regions) are the most outstanding regions. On the other hand Ninevite 5 culture has been found in Southeastern Anatolia. Archaeological investigations in Southeastern Anatolia have provided considerable information about the distribution of Ninevite 5 culture in this region. Gimavaz located in Nusaybin/Mardin is the only one excavated site that Ninevite 5 culture elements are well attested. If Southeastern Anatolia is compared to Northern Mesopotamia and Northeastern Syria in terms of Ninevite 5 ceramic repertoire, it seems that they share common

features. The examples dated to the last phase of the culture confirm that during this time Southeastern Anatolia is associated with Northeastern Syria.

Carmen VALDÉS PEREIRO (*Instituto del Próximo Oriente Antiguo – UB*)

Qara Quzaq and Tell Hamis (Syrian Euphrates valley): Updating and comparing Bronze Age ceramic and archaeological data

The IPOA has been excavating at the sites of Qara Quzaq and Tell Hamis during the decade of the 90s. The two sites were part of the project to rescue archaeological sites threatened by the Tishrin Dam, in the northern Syrian Euphrates valley. The appearance in both sites of Early and Middle Bronze Age layers, have allowed us to begin a comparative study, of which this lecture is just a first glimpse.

Stefano VALENTINI (*Dipartimento di Scienze dell'Antichità "G. Pasquali", Università di Firenze*)

Some Ritual Objects from III Millennium Rural Shrines of Tell Barri in Jezirah

The interpretation of two buildings excavated in the G Area, which date back to the Early Jezirah II-IIIa, as “shrines” is based not only on architectural and planimetric considerations, but also on the analysis of materials and objects found in these buildings and in the related “temenos”. Inside the structures, besides sealing impressions and anthropomorphic and animal figurines, were found a lot of miniature stands, some andirons (portable hearths) and a particular kind of pottery (Jezirah Polished Ware). All these objects are clearly linked with the vocation of this area and with the rituals celebrated in the shrines. In fact, in the 1980's, examples of domestic architecture were excavated in the B Area of Tell Barri. However none of the objects coming from this buildings, although from the same period, have any similarities with the materials recently discovered in the G Area.

Paul-Louis VAN BERG (*Université Libre Bruxelles*)

Rock art of the southern Hemma Plateau

New surveys carried out, in 2004 and 2005, in four valleys of the southern Hemma Plateau, allowed to discover six new desert-kites, twenty other archaeological sites and more than 1500 carved rocks, providing many new data about location, themes, chronology, meaning, and possible authors of the local rock art. Moreover, they provide informations about the sedentary but non urban fraction of the population, as well as about nomads, depending on the period addressed. They also raise questions about the use of this marginal landscape through time and about the interactions of the dwellers of the Plateau with those of the neighbouring tells and, later, with camel caravans. For instance, in the East of the Plateau, while the carvings seem to belong mainly to the 3rd and 2nd millennia BC, the art of the South belongs mainly to the second and first millennia BC. This chronological shift is probably correlated with the various modes of occupation of the area. Indeed, a dense peopling of the eastern region during the first millennium BC seems to correspond to a decline in the carving activity, while, during the same period, the South is less peopled and shows a larger amount of rock art. This leads to the hypothesis that rock art is rather a rural and nomad activity. Another example can be drawn from the representations of dromedaries. While four representations of these animals are known in the East, fifty to sixty of them were found in the South, suggesting that, during the first millennium BC, the main road of the caravans followed the bank of the Habur and did not pass along the eastern side of the Hemma.

Dianne VAN DE ZANDE (*Faculty of Archaeology, Leiden University*)

Urban structures and private houses as reflections of town-country relations within the Roman imperial systems

The Roman period in the Near East has seen one of the strongest eras of urban and rural expansion until modern times. Especially in the later Roman period, the 4th – 6th centuries AD, the expansion of the settled regions not only incorporated large areas of the countryside but in many cases marginal areas as well. Opinions however differ as to how the character of rural life in these areas should be understood. Was the mode of subsistence of villages in the countryside directed towards sustaining the cities of the Roman empire and other markets, e.g. the army, or did these communities remain the same autarchic peasant communities as they had been through the previous ages, self-sustaining regions, with a small local market-system? A new research project just begun will analyze the remains of domestic structures in rural regions of the Roman Near East in order to shed further light on the character of daily life, and in particular the relations between town and country.

Ana M^a VÁZQUEZ HOYS (*Universidad Nacional de Educación a Distancia*)

Arqueología y continuidad de las ciudades fenicias en épocas helenística y romana

La enorme extensión de Imperio Persa estaba dividida en satrapías, que según Heródoto eran veinte, aunque la inscripción de Persépolis enumera veinticuatro y la de Nag-i-Rugshtem ventiocho. La quinta satrapía, Arabiya o Abar-Nahara comprendía los territorios de Mesopotamia, Siria, Fenicia y Palestina, satrapía que con todas la demás pasó a manos de Alejandro Magno tras la conquista por éste rey del Imperio Persa. En las ciudades fenicias, la dominación persa dejó pocas trazas, que se resumen en algunos restos arquitectónicos en Sidón y Biblos, las esculturas como el llamado “Sarcófago del Sátrapa”, la cerámica, sobre todo rythones y las terracotas, así como la iconografía de las monedas de Sidón, el patrón monetario de Arwad y algunos sellos y joyas, así como en el ámbito espiritual la importación de cultos iraníes, bien representado por las esculturas procedentes del Mitreo de Sidón. A pesar de formar parte del Imperio Persa, estas ciudades constituían “un Estado dentro de otro Estado”, con estructuras socio-políticas autónomas y los interlocutores con el Gran Rey, los Sátrapas y los gobernadores interpuestos eran los reyes fenicios, ya que en ellas, los reyes persas no buscaban más que su interés estratégico, económico y político. Uno de los casos mejor conocidos es el del rey `Abd `Astart I /Straton de Sidón, llamado “Filihelene”, que se mantuvo entre Oriente y Occidente, en un difícil equilibrio entre el pasado y el futuro de su entorno. Con la conquista de Alejandro Magno, las ciudades que se sometieron voluntariamente conservaron su autonomía. Tiro y Gaza, que se habían opuesto, quedaron sojuzgadas, convirtiéndose en plazas fuertes macedonias. En un difícil equilibrio entre los sucesores de Alejandro que se disputaban la zona: Seleucias y Lágidas, se mantuvieron entre Oriente y Occidente hasta ser incorporadas por Antonio a la provincia de Asia en el 64 a.C. Con ello volvió la prosperidad. a la zona que había decaído y Beirut fu la capital comercial y militar de los romanos en Oriente, mientras Biblos y Heliópolis (Baalbek) fueron célebres por sus templos y Tiro por sus estudios filosóficos y de derecho, manteniendo su importancia hasta el Imperio Bizantino, participando en la redacción del Código de Justiniano (527-565) dos eminentes jurisconsultos: Doroteo y Anatolio. Así pues, entre Oriente y Occidente, manteniendo su personalidad, pensadores e investigadores fenicios ilustres mantuvieron su cultura influenciada por sus nuevos conquistadores, a lo largo de los siglos: Sancunation de Beirut, Zénon de Citium, Filón de Biblos; Porfiro y Jamblico, el poeta Antípatro de Sidon; y los juristas, Ulpiano, Papiniano, además de los citados Doroteo y Anatolo. Solo las fuerzas de la naturaleza parecieron acabar con esta floreciente civilización y fue un terremoto, ocurrido en el siglo VI d.C. el que hizo caer la zona y las antiguas civilizaciones en el olvido. De ellas quedan numerosos restos en Fenicia que la excavaciones modernas han sacado a la luz, a la vez que se ponen en valor personajes y documentos antiguos.

Frabrizio VENTURI (*Dip. di Studi Linguistici e Orientali - Università degli Studi di Bologna*)

The Sea People in the Levant: A North-Syrian Perspective

The role of the Sea People in the transformations that affected the Eastern Mediterranean from the late XIII B.C. through the XII B.C., is a long-debated subject. During the last twenty years scholars have been divided on topics such as the reliability of written sources and the continuity/discontinuity in the material culture, without reaching a definitive solution. On archeological grounds, the discussion so far has been based on abundant evidence from south Palestinian coast, Cyprus and the Aegen, whereas the north-Syrian region, because of the scarcity of archaeological information, has rarely appeared in the debate. Nevertheless, following the Medineth Habu inscription and judging by the correspondence between the kings of Alashya and Ugarit before the destruction of the latter, this region must have been part of the phenomenon, but the little information coming from this area has often led scholars to explain the presence of new cultural markers as the result of commercial activities. Renewed research in the related regions of Cilicia and `Amuq together with the material culture coming from the Inner Syria site of Tell Afis allow us to reconsider the problem from a Syro-Anatolian point of view, in the light of the recent excavations.

Harald Alexander VELDHUIJZEN (*Institute of Archaeology, University College London*)

Slags and the City: Archaeological and Archaeometric Interpretation of the First Iron Smelting (Tell Hammeh, Jordan; 930 CalBC) and Iron Smithing (Tel Beth-Shemesh; 900 CalBC) in the Levant

Use of iron in the Near East is first attested by sporadic occurrence of iron artefacts during the Bronze Age. Most are prestige items, likely made from meteoritic iron. By the end of the LBA, however, iron use increases to such a level that one can assume regular production of iron metal from terrestrial ores by smelting. Unfortunately, hardly any iron metallurgical installations are published dating before the Classical period, and these only relate to secondary iron working (smithing). Very few if any have evidence for iron smelting. A major iron smelting operation was found at Tell Hammeh in Jordan (Yarmouk University; Leiden University), dating 930 CalBC. A large smithing workshop was found at Tel Beth-Shemesh, Israel (Tel Aviv University), dating 900 CalBC. Both sites were excavated using especially developed techniques; their metallurgical debris was analysed and compared archaeologically and archaeometrically. This paper discusses the two reconstructed early technologies, examining the peculiar nature of Hammeh slag, implications of ore-slag-ceramic mass balance calculations for reconstruction of the techniques, the apparent use of sacrificial tuyères to achieve a good slag of identical clay at both sites, and their role within the framework of technological choice and craft production in an urban context.

Virginia VERARDI *UMR 7041 (CNRS)*

The different stages of the Acropolis from the Amorite period at Tell Mohammed Diyab

During the last four seasons, the excavations of Tell Mohammed revealed of an Acropolis dating from the first half of the 2nd millennium. The aim of this paper will be to present the stratigraphy of different temple buildings, and their annexes. In addition to original building systems, the excavation enabled the understanding of the religious rituals that took place in the temples (maybe rituals related to aniconism). The stratigraphy of the Acropolis enables us to follow the population changes, with the construction of at least two cities from different cultural horizons.

Oriol VICENTE i CAMPOS *(Universidad Autónoma de Barcelona)*

La aplicación de las nuevas tecnologías de la Información y la Comunicación en el yacimiento arqueológico de Tell Halula

Durante las últimas campañas de excavación en el yacimiento de Tell Halula, valle medio del Éufrates, se ha implementado una nueva metodología de registro y gestión de la documentación arqueológica que responde al uso de las nuevas Tecnologías de la Información y la Comunicación (nTIC). Se ha generado una estructura de Bases de Datos relacionales que permite gestionar de forma eficaz, rápida y precisa la documentación producida durante el proceso de excavación y se ha facilitado el acceso a esta información a través de Internet, en formato de páginas web dinámicas, lo que agiliza el proceso de investigación. Por otro lado se ha implementado la utilización del dibujo asistido por ordenador (CAD) a partir de la aplicación de la fotogrametría de campo y la toma de datos en coordenadas absolutas, a partir de Estaciones Totales. Por último toda la información gráfica y espacial se ha integrado en un Sistema de Información Geográfica (SIG) vinculado a las bases de datos, facilitando así la gestión de los datos para la creación de modelos, análisis de los mismos y su publicación.

Novella VISMARA *(Civici Musei Pavía)*

Lo sviluppo delle metodologie della scienza numismatica e la scoperta di una nuova area di produzione: Il caso dell'identificazione della produzione monetale in Lycia

La numismatica nasce come scienza autonoma relativamente tardi, alle soglie del XIX secolo, con il celebre studioso austriaco Eckhel, che realizzò il primo catalogo generale condotto con una metodologia rigorosa, rendendo giustizia di molte ipotesi precedentemente fatte su basi a dir poco fantasiose. Da allora la metodologia numismatica si è ulteriormente raffinata sino a giungere all'attuale fisionomia: l'analisi degli studi condotti sulla monetazione licia, con la sua lingua poco conosciuta e con le sue emissioni monetali realizzate su piedi ponderali diversi, è un buon "caso" per illustrare questa evoluzione, e per evidenziare come e sino a che punto siano mutati nel tempo i criteri impiegati per analizzare una produzione monetale. In oltre, se pure attraverso il filtro dell'indagine numismatica, è anche possibile osservare alcuni mutamenti nell'approccio alla storia ed all'archeologia della Licia stessa (ad esempio il ruolo giocato dai Greci, e di quale area, ovvero dai Persiani).

Constance VON RÜDEN *(University of Freiburg)*

The wallpaintings of Qatna as evidence of overseas communication

The new findings of wallpaintings in the palace of Qatna are an important example of intercultural exchange in the Eastern Mediterranean in the second half of the second millennium B.C. Excavated between 2000 and 2002 they have been largely reconstructed in the last three years. Some features of these wallpaintings are providing indications of an Aegean influence. Use is made of single Aegean motives, which are then incorporated into a new context. Consequently the material raises the question, how such parallels emerge in a cultural area with its own tradition in conducting wallpaintings. Furthermore how can these kind of assimilations in the decoration of socially important rooms be interpreted? Beside the presentation of the new reconstructions the lecture aims to integrate the material in the interregional exchange and interaction system of the Eastern Mediterranean.

Jill A. WEBER *(University of Pennsylvania)*

Defining the Equid Burial: A "new" tradition from the 3rd millennium BC, from Umm el-Marra, Syria

The Early Bronze Age burial complex at Umm el-Marra, Syria, has yielded large amounts of evidence regarding the mortuary practices of interment and material provisioning of individuals of high status. Precious objects of gold, silver and lapis lazuli complemented finds of the more common ceramic and copper-alloy pieces. Animal bones found in the same complex included the more common sheep, goat, and bird remains, but were distinguished by the recovery of a minimum of 14

complete and partial skeletons of equids. These skeletons were isolated from the burials of adult humans, and were instead interred in specially-built mud-brick chambers. The equids were most typically buried in an upright, standing position, and their burial was often accompanied by puppies and infant humans. The isolation and style of the equid burials, as well as the inclusion of young dogs and infants, were without parallel from elsewhere in the ancient Near East. In this paper, I explore this atypical, local burial tradition.

Bernhard WENINGER (*Universität zu Köln*) and **Olaf JÖRIS**.

Climate and Migration. The Neolithisation of South-East Europe

We further explore the hypothesis that the abrupt drainage of Laurentide lakes and the associated rapid switch of the North Atlantic thermohaline circulation c. 8200 years ago may have had a catastrophic influence on early farming communities in the Levante, North Syria, Cilicia and Anatolia. The cold event at 8200 calBP is attested in a large number of high-resolution climate proxies in the Northern Hemisphere. In most cases this corresponds to markedly cold and arid conditions. We expect that extended arid conditions would have an unfavourable and -under certain socio-economic and environmental settings- even devastating influence on agricultural communities in the Eastern Mediterranean. Based on the analysis of available ^{14}C -data, we can show that the 8.2 ka event was entirely synchronous to the desertion of major settlements in the Near East, and was also synchronous to the first appearance of farming communities in South East Europe. We will have a closer look at the possibility that the 8.2 climate event may have triggered the widespread collapse of the Pre-Pottery Neolithic cultures in the Near East and Anatolia, and the spread of farming to South-East Europe.

Jürgen WUNDERLICH, Heinrich THIEMEYER and Anna KRÄTSCHELL (*Johann Wolfgang Goethe-University, Frankfurt*)

Climate change or human impact? Possible causes of emergence and abandonment of urban settlements in northern Syria during the 3rd millennium B.C.

In northern Syria urban settlements emerged during the 3rd millennium B.C. The ruins of Tell Chuera also date back to this period. However, the archaeological record indicates, that the prominent settlement of Tell Chuera was abandoned after a few hundred years of existence. There is no evidence for warlike events or the banishment of the urban population. It has been discussed that climate change or several years of drought may have caused a lack of water and food supply. Furthermore, it is possible that the fertility of soils decreased due to intensive and unsustainable land use. Geoarchaeological research has been carried out in the region of Tell Chuera (TCH) in order to get evidence for environmental changes that can be related to the period of urban settlement during the 3rd millennium B.C. Soils and the sediments of Wadi Chuera close to TCH have been investigated by drillings and in outcrops. Archaeological material, charcoal, and sediment samples have been taken for age determinations. Further corings have been realized in a sebkha south of TCH. The sedimentary record of this well stratified archive and the analyses of pollen and diatoms should reveal evidence for environmental changes in the entire region. From a sediment section exposed in the floodplain of Wadi Chuera it could be inferred that a change of the discharge and sedimentation pattern of the wadi took place. It can be proved that this change occurred after the onset of urban settlement at TCH. Loamy sediments of two meters in thickness were deposited during the settlement period indicating massive soil erosion. The results of our research corroborate the hypothesis that in the area of TCH human impact caused the degradation of soils which might have diminished the fertility of arable land.

Vadim N. YAGODIN (*Institute of History, Archaeology and Ethnography, Karakalpak Academy of Sciences*) and **Alison BETTS** (*University of Sydney*)

This Batter'd Caravanserai": Work of the Karakalpak-Australian Chorasmian Expedition

Following on the pioneering work of S.P. Tolstov and his colleagues, a joint Karakalpak-Australian expedition has been working for over ten years in the Tash-k'irman oasis in southern Karakalpakstan. Work has focused on two key sites of the Early Antique Period of ancient Chorasmia (4th century BC – 2nd century AD), the massive fortified sacral centre of Kazakl'i-yatkan and the Fire Temple complex of Tash-k'irman-tepe. This paper will give an overview of the results of the excavations including the new and important work at the Kazakl'i-yatkan temple. This elaborate and enigmatic building was richly ornamented with gilded stucco and moulded plaster reliefs. It also houses what promises to be one of the earliest and largest collections of wall paintings so far known from Central Asia.

Eli YANNAI (*Israel Antiquities Authority*)

The Relations of the Urban Centers at Ain Assawir and Magal with the Peripheral Settlements in the Northern Sharon. In the Fourth and Fifth Millennium BCE

In the fifth and fourth millennium BCE, there existed in the Alexander, Hadera and Taninim river basins of the northern Sharon two focal points of settlement, one at Magal and the other at Ain Assawir. These two settlement centers existed uninterrupted from the Pottery Neolithic A until the Early Bronze Age 1B. The settlement at Magal continued to exist until the end of the Early Bronze Age 3. There existed along side the two main settlements some twenty peripheral settlements which maintained ties with main settlements. The peripheral settlements existed for short periods of time and they never exceeded 3-4 dunams in area. The two main settlements extended across large areas and each was c. 400 dunams in size. Beginning in the Pottery Neolithic period, trade was conducted along the main highway that passed through the Sharon, from Afek in the Yarkon river basin to Magal and Ain Assawir. At Ain Assawir the highway split into three different routes: one to the west in the direction of the coast and the port at Dor, the second northward to Tel Yokne'am and the third was the main route that passed through Wadi 'Ara to Megiddo. During the third millennium the swamp land around Ain Assawir expanded and passage through region became difficult and problematic. Ain Assawir's place was succeeded by Tel Magal which continued to be the main settlement in the northern Sharon during the Early Bronze Age 2-3. At the same time the highway's route changed to a more eastern track that connected to Wadi 'Ara near Tel 'Ara. In the Middle Bronze Age the settlement at Magal abandoned the tell and moved c.1 kilometer north to a high hill that was topographically more suitable for fortifications; this is where the city of Gat Carmel was founded. This city was the principal city of the northern coastal plain from the Middle Bronze Age 2A until the destruction of the Samarian Kingdom by the Assyrians in 722-21 BCE.

Eli YANNAI (*Israel Antiquities Authority*)

Bet Dagan. An Early Bronze Age 4 Cemetery in the Nahal Ayalon River Basin. Israel

The cemetery at Bet Dagan was excavated by the Antiquities Authority in 2005. Approximately one hundred shaft tombs hewn in hard hamra soil were exposed. The tombs revealed at Bet Dagan are similar to the shaft tombs in the cemeteries at Dahar Merzbanah and Jericho. Similar tombs were exposed throughout the Land of Israel and in Transjordan. The finds recovered from the tombs at Bet Dagan include mostly pottery vessels, bronze weapons and beads made of various kinds of stone. The pottery vessels found in the tombs resemble the finds from other tombs that were exposed in the Yarkon and Ayalon River basins. The types of vessels are different than the ceramic assemblages that were found in the Samaria Hills and the northern regions of the Land of Israel. There is a clear affinity between them and the ceramic assemblages from the southern part of the country. On the other hand these vessels reflect a regional uniqueness and they can be considered a group that is different and distinct from the other groups characterizing different regions in the Land of Israel and Transjordan. All of the tombs that were excavated contained one skeleton only. Individual burials were also found in other regions of the Land of Israel and Jordan, but until now no single tombs were found in the Yarkon and Ayalon river basins. The single tombs that were found at Bet Dagan allow us to examine similar settlement and cultural processes in different regions of the Land of Israel and examine the settlement processes in the Yarkon and Ayalon river basins relative to the cemetery finds from the Samaria Hills, Judea and Transjordan.

Yasemin YILMAZ (*Université d'Istanbul et Université de Bordeaux*) and **Metin OZBEK** (*Université Hacettepe*)

La pratique funéraire d'Asikli Hoyuk (néolithique précéramique au Centre Anatolie)

Le site néolithique précéramique (8600-8200 av. J.-C. cal.). Le site a été fouillé par le Prof. Dr. Ufuk Esin (1989-1999) de l'Université d'Istanbul; depuis 2000, les fouilles se poursuivent sous la direction du Prof. Dr. Nur Balkan-Atli. Les travaux d'Asikli Hoyuk ont mis en évidence l'organisation du site, l'architecture, l'industrie lithique, l'économie alimentaire des premiers villages de la région. Au moins 65 individus ont été mis au jour dans le contexte funéraire. Les sépultures sont associées aux maisons, la majorité des défunts sont inhumés dans des fosses, sous les sols de pièces d'habitation. Les sépultures primaires individuelles sont les plus fréquentes et semblent constituer le mode d'inhumation standard. La plupart des corps reposent en décubitus latéral gauche ou droit, avec les membres fléchis ou hyper fléchis. Dans cette communication, nous ferons une synthèse à partir des données démographiques, des mobiliers funéraires, du contexte archéologique de sépultures d'Asikli Hoyuk. La rareté des sites archéologiques datant du néolithique précéramique, et le caractère hasardeux de la découverte de restes humains sur le peu de sites existant, limitent notre connaissance des pratiques funéraires d'Anatolie centrale à cette époque. Les nouvelles données apportées par les sépultures nous aideront à comprendre les pratiques culturelles de la population d'Asikli et joueront un rôle clé pour compléter la néolithisation de la région et comparer ses pratiques funéraires avec d'autres.

Rouhollah YOUSEFI (*University of Teheran*)

An ethnoarchaeological approaches to rural settlement patterns, subsistence settlement systems and space use in Southeastern Iran

Archaeological interpretation ultimately depends on analogy, a form of inference which maintains that "if something is like something else in some respects, they would be similar in other features as well. Recognition of the need for ethnographic materials, which analogies are simply based on them, gave rise to a new sub-discipline, entitled as Ethno-

archaeology. Archaeological data does not provide authentic evidence for evaluating the truth, beyond the remaining available materials in hands. Applying ethno-archaeological approach through analogy can shed lights on many vague aspects of past, including abstract conceptions of a culture, which can be materialized through material culture. To have better understanding of settlement pattern of ancient villages, an ethno-archaeological research was carried out in south-eastern Iranian province of Khorassan. Analyzing the community interactions and rural settlement patterns, 28 sample settlements were studied on the basis of Standard Destination Theory, Central Place Theory and Nearest Neighbor Analysis. Among the rural settlements, the village of Arzaneh was chosen to evaluate the subsistence-settlement systems of the region. The sample data consists of social class of target settlement and its rank among other settlements as well. In general, the results indicate that there are meaningful relation between the location, size and rank of settlements and hierarchy of the rural settlements.

Marta ZAMBELLO (Université Libre de Bruxelles)

Aspects de l'industrie lithique du III^e millénaire av. J.C. en Haute Mésopotamie: Le site de Tell Beydar

Le site de Tell Beydar, localisé dans la Djézireh syrienne et daté du III^e millénaire av. J.-C., a livré une importante collection d'artefacts en pierre taillée. L'étude de l'ensemble lithique a mis en évidence des données qui, même en ayant des caractéristiques spécifiques, sont en continuité avec nos connaissances actuelles sur les industries lithiques du III^e millénaire dans cette région. L'analyse a démontré l'existence; 1) d'un outillage essentiellement en silex contre une faible présence d'outils en obsidienne, 2) d'une industrie laminaire de grande taille (débitage « cananéen »), 3) d'un débitage local lamellaire spécialisé, 4) d'une nette majorité d'outillage domestique. Les thèmes principaux concernent; 1) le débitage spécialisé et le débitage domestique: relation et rôle dans l'outillage, 2) la provenance et gestion de la matière première, 3) le débitage « cananéen »: les aspects de cette industrie laminaire à Tell Beydar, 4) la provenance des artefacts en obsidienne. L'analyse confirme que l'outillage en pierre taillée a toujours joué un rôle important dans l'économie des sociétés du III^e millénaire.

Massimo ZANFINI Barbara CERASETTI, Valentina A. GIRELLI, Giampaolo LUGLIO and Bernardo RONDELLI

From monument to town and country: Integrated techniques of surveying at Tilmen Höyük in south-east Turkey

Through their application on the case study of Tilmen Höyük (a 2nd mill. BC town in south-eastern Turkey excavated by Bologna University and Gaziantep Museum), this work stresses the close connection of different survey methods, effective and of limited cost. They are all needed at the same time if one aims at fully extracting the historical information carried by ancient monuments and landscape. The philological surveying of a monument is a goal in itself building techniques and structural details add substantially to the information from the excavations. Close-Range Photogrammetry is applied for 3D description of the monument. The use of a total station combined with low altitude shots (through a kite) and photomosaics (through a pole) allow to create the basis for detailed surveying, after processing in monoscopic photogrammetry for orthorectification. Absolute georeferencing of the site, by means of spatial geodesy (through long GPS static observation), must be coupled to topographical and morphological surveys (through kinematic and fast-static GPS methodologies). The setting of the site within its landscape is done, at survey level, not only with GPS, but also through remote sensing methodologies, working on high and medium resolution satellite images (multispectral and radar), allowing for a close GIS archive.

Sharon ZUCKERMAN (The Hebrew University of Jerusalem, Institute of Archaeology)

Canaanite Feasting at Hazor: Archaeological Evidence from the Late Bronze Age Royal Precinct

The social and political role of feasting and public consumption of food and drink has recently been emphasized in discussions of Bronze Age societies in the Near East and the Mediterranean. As anthropological and ethnographic studies demonstrate, feasts and communal meals are an effective vehicle of manifesting elite power and dominant ideology, and an important social mechanism used in the construction of social identities and forging of group cohesion. Feasts can be traced in the archaeological record through the study of zoological and botanical remains, the investigation of architectural features connected with such public gatherings, and the analysis of vessels assemblages used on such occasions. The present paper will present the archaeological evidence of feasting at Late Bronze Age Hazor. The discussion will focus on the ceramic assemblages of the "Royal Sanctuary" located on the acropolis of the tell, but will take into account also the architectural features of this royal precinct, the non-ceramic finds and the faunal remains attributed to it. The social and political functions of feasting in the context of the Canaanite kingdom of Hazor and its contemporaries will be examined in light of theoretical and comparative discussions.

Marta ZUCHOWSKA (*Institute of Archaeology, University of Warsaw*)

Artisan production at Palmyra and caravan trade. A question of interrelations

In the Roman period Palmyra was a rapidly developing city, and its economical growth is usually considered to be a result of the Palmyreans taking control over the caravan road passing the town. People from Palmyra organised caravans and collected taxes from the many categories of goods from the East and West that were exchanged in their city. They therefore used many imported objects, such as silk clothes made in China, and pottery from western Europe, but they of course had also their own artisan production, which is known from the archaeological excavation as well as from the epigraphic sources, even if we do not know much about some branches of this craft. The main aim of this presentation is to find if and eventually how, this production could be influenced by the interest of the city in the caravan trade and also, if we can observe this interrelation in the limited material that we have at our disposal.

ABSTRACTS OF PAPERS SUBMITTED IN WORKSHOPS

RESÚMENES DE LAS COMUNICACIONES PRESENTADAS EN LOS TALLERES

WORKSHOP / TALLER I

Houses for the living and a place for the dead.

Relationships between domestic buildings and their use as a burial space in prehistoric societies of Near East between the 12th and 5th millennium.

(Studies in memory of J. Cauvin)

Organized by / *Organizado por*: **M. Molist, N. Balkan and D. Stordeur**

The aim is to discuss and to think about the relation between domestic buildings and the burial practices associated in the chrono-cultural frame of the last hunters and gatherers and the first agricultural societies of the ancient Near East. From the analysis of the archaeological record of some sites in the Near East (the south Levant, the north Levant, Mesopotamia, Anatolia...), some problematics will be approached to looking for by which means we can demonstrate the processes. Can we determine the real coexistence among houses used as domestic spaces with their sepulchral use? The later reuse of some of them as a burial space? The prediction of their sepulchral use from their construction? Which are the different burial practices observed (individual or collective graves, symbolic evidences, presence, or not, of associated objects,...) in this type of graves? The presentation, discussion and final synthesis about the observed evidences should contribute to a more global approach to the knowledge of the burial practices and their relation with the society, so much from a sociological and economical since from a cultural and symbolic perspective.

El objetivo es discutir y reflexionar sobre la relación entre unidades domésticas y los espacios funerarios asociados en el marco espacio-temporal de los últimos cazadores-recolectores y primeras sociedades campesinas del Próximo Oriente Antiguo. Se abordarán, a partir del análisis de documentos arqueológicos procedentes de yacimientos del Próximo Oriente (Levante sur, Levante norte, Mesopotamia, Anatolia,...) una serie de problemáticas buscando los medios a partir de los cuales podemos analizar el proceso. ¿Se puede determinar la coexistencia real entre casas en curso de utilización doméstica y su uso funerario? ¿La reutilización sepulcral de algunas casas? ¿La previsión del uso funerario desde la etapa constructiva? ¿Cuáles son las variantes de los gestos funerarios observados (sepulturas individuales, colectivas, evidencias simbólicas, presencia o no de objetos de acompañamiento,...) en este tipo de sepulturas? La presentación, la discusión y una síntesis final sobre las evidencias observadas deberían contribuir a la aproximación global del conocimiento de los rituales funerarios y de su relación con la sociedad, tanto desde una perspectiva sociológica y económica como cultural y simbólica.

Peter AKKERMANS

Burning down the house: The relationship between fire and the dead in the late Neolithic Near East

Although the data sets are still restricted, a number of sites in the Late Neolithic Near East provide evidence for an intriguing relationship between (storage) buildings, their destruction by fire, and the occurrence of dead persons in them. This burning of buildings and the associated placement of dead people, it will be argued, was intentional and preconceived, not accidental. The paper will discuss the deliberate act of destruction in more detail and will offer possible scenarios for interpretation.

Eric COQUEUGNIOT (*CNRS, UMR Archéorient, Maison de l'Orient et de la Méditerranée, Lyon*)

Diversified funerary practices: The case of Dja'de (Syria, Euphrates valley, 9th millenium cal. BC, late PPNB and EPPNB)

The PPN settlement at Dja'de covers the whole 9th millenium and presents various funerary practices: primary and secondary burials, single and multiple burials, in «houses» or outside, under the floors or in the walls. The lack of funerary assemblage is however a specificity that contrasts with practices we know for the Middle PPNB. Other funerary practices are suggested by the special use of crania or parts of them. The end of “early PPNB” (phase DJ III) is characterized by both a house specialized in the funerary use (the “house of the dead”) with a long “lifetime” and burials in domestic buildings. For the previous phases (DJ I and II), only burials associated with domestic units have been detected.

Bleda Serge DÜRING (*Leiden University*)

Sub-floor burials in houses at Çatalhöyük

Amongst the richest burial assemblages linked to houses in the Prehistory of Near East is that of Çatalhöyük. Hundreds of burials have been excavated at the site. The sub-floor burials at this site have often been interpreted as: first, representing the deceased inhabitants of the houses; and second, as evidence for ancestor cults. Only 20% of the buildings contain sub-floor burials, however, and some of these buildings contain too many burials to encompass only the deceased of the households inhabiting these buildings. Further, the sub-floor burials include both sexes and all age categories, which makes it highly unlikely that we are dealing with ancestors. In this paper it will be argued that: first, specific houses were particularly appropriate as burial sites and were used for interring people from multiple houses; and second, that only a selection of the deceased were buried inside the houses at Çatalhöyük. These two observations have considerable ramifications for the manner in which the sub-floor burials at Çatalhöyük can be interpreted, and in particular for the manner in which the burials relate to the houses in which they were placed. In the final part of the paper I will evaluate some of the models that have so far been proposed for the Near Eastern Neolithic sub-floor burials in general and those of Çatalhöyük in particular, in relation to the patterns emerging from the burial data at that site.

Phillip C. EDWARDS (*La Trobe University, Australia*)

Symbolic dimensions of material culture at Wadi Hammeh 27, Jordan

This paper explores the dual nature of dwellings at the Natufian site of Wadi Hammeh 27 in Jordan as residences for the living and as repositories for the dead. In some cases, the site occupants maintained long-term memories of antecedent burials, but in others, mortuary remains seem to have been summarily abandoned on occupied floors. Natufian houses were by no means the first to incorporate human burials in residential space, but they do indicate initial trends in the development of the concept of property tenure. The symbolic dimensions of Neolithic life have recently commanded considerable attention as a consequence of the discoveries of elaborate symbolic paraphernalia at various sites across the Levant. Evidence for Natufian symbolic behaviour is rather different, and indeed, much more subtle. At Wadi Hammeh 27, as at other Natufian sites, there exists intriguing evidence to indicate that utilitarian objects were imbued with special significance by their makers, and that various features and artefacts were deliberately fashioned, arranged, and even colour-coded according to a series of enigmatic principles.

Nigel GORING-MORRIS and Anna BELFER-COHEN

Fathers and sons: Natufian to Neolithic burial traditions. Current state of knowledge

Until recently, there was a wide spread assumption that burial practices during the Late Epipalaeolithic (Natufian) and Pre-Pottery Neolithic centered upon disposal of the dead within domestic contexts. However, ongoing research, based on detailed field observations, as well as a critical reappraisal of burial data, clearly indicates that burial customs were far more complex than hitherto assumed. While there is a clear association between burial and architectural features, the latter are commonly of a non-domestic nature. Moreover, when the context is domestic it is usually impossible to prove absolute contemporaneity between the burial and domestic activities. It is quite clear that the primary function of certain sites or parts of sites were reserved as cemeteries (almost certainly within ritual context). In addition, manipulation of the deceased was an intricate process, sometimes comprising more than a single event, on occasion involving various portions of the corpse (beyond simply skull removal). Many elements of mortuary practices appeared to have been initiated during the Natufian at the onset of sedentism appearing hand in hand with changes in the social fabric of the human group. During the Pre-Pottery Neolithic various aspects, including obvious differential burial practices, continued and intensified. We also would like to address the fact that contrary to popular opinion burial practices during the Pottery Neolithic were probably less different than is commonly assumed and the changes were of a cumulative nature rather than an abrupt shift from the practices of their forebears.

Emma GUERRERO, Miquel MOLIST and Josep ANFRUNS (*SAPPO, University Autònoma of Barcelona*)

Burials in PPNB houses at Tell Halula (Syria). Social and economic approaches

Tell Halula is a neolithic tell placed in the middle valley of the Euphrates river (Syria), with a nearly continuous occupation from 7.900 to 5.700 cal BC. In the oldest phases, belonging to Middle PPNB, there has been excavated 16 houses; inside them, 107 burials has been found in all, where 127 individuals were interred. These burials are excavated under the floors and the most of them are placed in the entrance area of the main room of each house. In the frame of this Workshop, we present in detail the features of these burials, defining their particular burial practices and some different aspects related to them (constructive elements of the graves, specific treatment of the deads, associated finds...). Other aim of this paper would be our contribution on the general discussion concerning the relationship between the burial world and the domestic use of the houses during the Prepottery Neolithic at tell Halula.

Ian HODDER

Burial and the construction of house histories at Catalhoyuk

There is some evidence at Catalhoyuk for the sequencing of art motifs in particular houses, and for the recovery of earlier art installations in order to create house histories. Burial also plays a role in this process, especially as regards the use, circulation and reuse of human heads. There is some evidence that the houses that most invested in the production of histories were dominant houses. Even new dominant houses used the dead to found their position.

Ian KUIJT (*Department of Anthropology, University of Notre Dame*)

Homes of the Living Dead: Time, Place and Life Cycles within Neolithic Households

In this paper I explore some of the physical and symbolic interrelationships between Middle Pre-Pottery Neolithic mortuary practices and the organization of space within settlements. As one aspect to this I argue that secondary mortuary practices, focused on the removal and reuse of skulls, illustrate the emergence of shared social practices. Drawing on ethnographic examples, I explore how the act and organization of skulls caching must have involved multiple families, and probably required the use and recirculation of skulls as ritual heirlooms. I also consider how Neolithic skull removal and plastering from the perspective of the development of personhood and embodiment that were visually centered on the head and face. Skull plastering linked the social and physical body with the past, present and future projecting community members forward and backwards in time. Manufacture, repeated use, and modification of these objects as heirlooms illustrate a process of embedding personhood and materiality of social bodies in the mundane and ritual spheres.

Mehmet ÖZDOĞAN (*Istanbul University*)

"Dead houses": The burial of houses

Since the time of their recovery, architectural remains in sites such as Jericho, Çatal Höyük or Can Hasan had been noted for the exceptional degree of their preservation. In excavating sites of later periods, to recover remains that would be as intact, for example as the mud brick walls of Çatal Höyük with the painting on their plastered surfaces showing no signs of erosion, preserved almost in their original height, or as the amazingly high standing tower of Jericho, occurs only under extremely rare conditions. If the well preserved Neolithic remains would have been restricted to these early examples, then it would still have been possible to surmise their preservation to some sort of depositional conditions. However, since then, amazingly well preserved architectural remains have been recovered in almost every excavated site of the Neolithic period; besides the mud brick or dry stone walls sometimes still standing as high as 4 m., like at Göbeklitepe, is common to all sites. Likewise, in sites such as Nevalı Çori or Çayönü overlying building remains have been recovered with almost no single stone of the underlying one missing. Thus, the state of preservation in Neolithic sites strongly suggests that there was an intentional care to preserve them and that they were deliberately buried. Moreover, there are now increasing number of excavation reports where the excavators have noted that the deposits within the "well preserved" buildings have been intentionally brought in fills, and that they are not accumulated by the of the collapse of the structure, but by intentionally brought in material. This, inevitably brings in the possibility that the items found in such structures are not left overs from the use of these structures, but are placed for the burying process. It all leads to conclude that during the Neolithic Period. Certain structures, were not only used as the houses for the dead, but themselves were buried like human beings, together with burial gifts. The paper will consider the evidence on the burial of buildings.

Danielle STORDEUR and Rima KHAWAM (*CNRS, UMR Archéorient*)

A place for the dead in the houses of Tell Aswad (Syria). (Early PPNB Horizon levels and Middle PPNB levels)

Tell Aswad is a large Neolithic tell situated in the Damascus region. Occupied between about 9500 BP and 7500BP its funerary practices are particularly well represented (a hundred individuals). One can observe radical changes in the traditions at specific moments of the occupation. In the levels dated to the early and middle PPNB the funerary deposits are in or near the houses. In contrast during the late PPNB a cemetery was found on the edge of the village. We will present in this workshop only the funerary practices from the early levels giving field observations concerning the precise position of human remains and the implication of the location in relation to the buildings. Depending on the different locations we will analyse variations in the deposits themselves. Funerary contexts may be primary but also secondary, for example the grouping of skulls. The type of burial (exposed, walled, excavated) and the specific arrangement (coffins, baskets, shrouds, etc) and the presence/absence of funerary furnishings will be taken into account. The final goal is not just to present unpublished data but also to present some preliminary sociological interpretations.

François VALLA and Fanny BOCQUENTIN (*CNRS, Paris*)

Houses and graves: The case of Mallaha (Eynan), Israel.

Sites from the Natufian culture (ca. 12.500-10.200 BP) in the Carmel and the Galilee, as well as in adjacent areas, produce what is currently understood as indications of living quarters (either large quantities of refuses, either architectural remains, or both) and graves, numerous in some places. This recurrent phenomenon suggests a conscious link between living quarters and burial places. Nevertheless, according to observations conducted in the field, nor intersite homogeneity nor intrasite uniformity through time can be detected. Therefore, individual situations must be analysed in order to examine the precise relation established between living areas, houses and graves. Because both houses and graves are observed at Mallaha, this site offers a good case study for this apparent link. For two phases, the Early Natufian and the Final Natufian (but not for the Late Natufian in between) houses and graves are almost systematically superimposed at the same place. This seems to warrant a closer association between the two kinds of structure than simple grouping within the living perimeter of the « village ». Difficulties arise when trying to understand how this association works. Usually, both houses and graves are dug into the ground. But it is hard to reach solid conclusions about the relative stratigraphy of structures dug at the same place when original floors have been removed or cannot be detected. Even a superficial review of theoretical possibilities reveals a diversity of situations, which may result in similar archaeological record. Finally, a few specific cases are analysed in order to illustrate these ambiguities and to investigate possibilities and limits of tentative interpretations.

Trevor WATKINS (*Archaeology, University of Edinburgh*)

Ordering time and space: Creating a cultural world

At the beginning of the Neolithic there was an extraordinary explosion of architecture, in the form of domestic and communal buildings, and the layout and organization of whole settlements. In common with modern architectural practice, the built environment was designed to facilitate the range of people's aspirations and activities, both material and immaterial. The Neolithic built environment provided arenas for symbolic display and ritual activity, which together constituted a multi-modal expression of people's ordering of their world – who they were, how they related to the world around them, rooting them in space and time. For the first time in human history, communities had the cognitive and cultural facility to surround themselves with a cultural environment, within which they were born, grew up and learned what it was to be a member of their community. From that time, the selective pressures that have been most important in the evolution of humans have been cultural rather than those of the physical environment.

Yasemin YILMAZ (*Université d'Istanbul et UMR 5199 LAPP Talence*) and **Metin Özbek** (*Université Hacettepe*)

La pratique funéraire d'Asikli Hoyuk (Néolithique précéramique au Centre Anatolie)

Le site néolithique précéramique (8600-8200 av. J.-C. cal.). Le site a été fouillé par le Prof. Dr. Ufuk Esin (1989-1999) de l'Université d'Istanbul; depuis 2000, les fouilles se poursuivent sous la direction du Prof. Dr. Nur Balkan-Atli. Les travaux d'Asikli Hoyuk ont mis en évidence l'organisation du site, l'architecture, l'industrie lithique, l'économie alimentaire des premiers villages de la région. Au moins 65 individus ont été mis au jour dans le contexte funéraire. Les sépultures sont associées aux maisons, la majorité des défunts sont inhumés dans des fosses, sous les sols de pièces d'habitation. Les sépultures primaires individuelles sont les plus fréquentes et semblent constituer le mode d'inhumation standard. La plupart des corps reposent en décubitus latéral gauche ou droit, avec les membres fléchis ou hyper fléchis. Dans cette communication, nous ferons une synthèse à partir des données démographiques, des mobiliers funéraires, du contexte archéologique de sépultures d'Asikli Hoyuk. La rareté des sites archéologiques datant du néolithique précéramique, et le caractère hasardeux de la découverte de restes humains sur le peu de sites existant,

limitent notre connaissance des pratiques funéraires d'Anatolie centrale à cette époque. Les nouvelles données apportées par les sépultures nous aideront à comprendre les pratiques culturelles de la population d'Asikli et joueront un rôle clé pour compléter la néolithisation de la région et comparer ses pratiques funéraires avec d'autres.

WORKSHOP / TALLER II

Culture, Chronology and the Chalcolithic: Transitions in the Late Prehistory of the Southern Levant.

Organized by / *Organizado por*: **Y. M. Rowan, J. Lovell**

The central themes of 5ICAANE include archaeological understandings of ancient Near Eastern craft production and the environment of villages and cities from the 4th millennium BCE onwards. One of the pivotal debates in the preceding periods concerns the arrangement and interaction of differentially identified 'material culture' groups. In addition there is a growing series of radiometric dates that are yet to be fully debated. This workshop will address the transition from the final phase of the Neolithic to the early phase of the Chalcolithic, and the transition from the Chalcolithic to the initial phases of the Early Bronze Age (late 6th to mid 4th millennium BCE). Major developments in craft specialisation occurred during the Late Neolithic and Chalcolithic. The relationship between this phenomenon and the, later, 'urbanising' Early Bronze Age is obscured by differential conceptions of the sequences and dates of sites in varied environmental zones. In keeping with the themes of 5ICAANE, we invite participants to address the question of chronological and cultural development in the 6th-4th millennium from the perspective of the technology, manufacture, and spread of artefacts associated with particular material culture groupings. We particularly encourage participants to bring material culture (sherds, lithics, etc.) to the workshop in order to facilitate discussion. We further invite comment in regard to environmental factors: site distribution, micro-environmental context, communication routes and interaction zones.

Los temas centrales del 5 ICAANE incluyen la comprensión arqueológica de la producción del arte en el Oriente Próximo antiguo y el entorno de pueblos y ciudades del IV milenio a.C. en adelante. Uno de los debates principales en los períodos precedentes concierne la ordenación y la interacción de diferentes grupos de cultura material identificados. Además hay una serie creciente de fechas radiométricas que deben aún ser totalmente discutidas. Este taller dirigirá la transición de la fase final del Neolítico a la fase temprana del Calcolítico, y la transición del Calcolítico a las fases iniciales de la Edad de Bronce Temprana (finales del VI hasta mediados del IV milenio). Durante el Neolítico Tardío y el Calcolítico tuvieron lugar los principales avances en la especialización del arte. La relación entre este fenómeno y la posterior "urbanización" del Bronce Temprano se ve oscurecida por distintas concepciones de las secuencias y fechas de los yacimientos en zonas de entornos diferentes. De acuerdo con los temas de 5 ICAANE, invitamos a los participantes a realizar preguntas sobre el desarrollo cronológico y cultural en los milenios VI a IV desde la perspectiva de la tecnología, la fabricación y la extensión de artefactos asociados con agrupaciones culturales concretas de material. En particular, animamos a los participantes a traer material al taller para facilitar la discusión. También invitamos a realizar comentarios respecto a factores del entorno: la distribución de yacimientos, el contexto microambiental, rutas de comunicación y zonas de interacción.

Edward BANNING (*University of Toronto*)

Wadi Rabah and Related Assemblages in the Southern Levant: Interpreting the Radiocarbon Evidence

In the half-century since Kaplan identified the "Wadi Rabah culture," our understanding of this entity, its place in the transition from the Neolithic to the Chalcolithic, or its relationship to other entities, such as Halaf has improved but little. In part, this failure is due to a dearth of radiocarbon evidence and misapplication of such evidence as we have. In part, it is due to lack of agreement over what Wadi Rabah is, and how assemblages from sites outside its core area are related to it. This paper will present analyses of dating evidence for sites with "Late Neolithic" or "Early Chalcolithic" assemblages in the southern Levant and point out directions that new research must take if we are to solve this dilemma.

Stephen J. BOURKE (*University of Sydney*)

Alpha and Omega of the Ghassulian: C14 and the Beginning and the End of the Chalcolithic Period at Teleilat Ghassul

Recent field research at Teleilat Ghassul has clarified both the timing and the nature of the beginning of Chalcolithic period occupation and its end at Teleilat Ghassul. We now have nearly 30 new short-life C14 dates from the site. Three key issues will be addressed. One will focus on determining the timing of the transition from the semi-subterranean roundhouse 'Neolithic' strata (Hennessy Phases H-I) to the first substantial rectilinear mudbrick and stone architectural phases of the Early Chalcolithic (Hennessy Phases G-F). The second concerns the timing of the end of occupation across the site, with terminal horizons in Areas E, G, H, N and Q now all reliably dated. A third issue, to relate the 10-phase sequence outlined by Hennessy to the earlier 4-5 phase sequence proposed by PBI excavators, will be explored. In this presentation, the new C14 data from Ghassul will be discussed, these three specific concerns addressed, and more general relative and absolute chronological issues discussed.

Eliot BRAUN (*Centre de Recherche Français de Jérusalem*)

The Transition from Chalcolithic to EB I in the Southern Levant: A 'Lost Horizon' Slowly Revealed

Evidence for the transitional period between Final Chalcolithic and the onset and very earliest stages of EB I in the archaeological record of the southern Levant has, until relatively recent developments, eluded discernment of most researchers. The reasons are multiple, but primarily involve perception of what constitutes a 'transition' between two material culture configurations identified by archaeologists. Long perceived as well-defined entities distinct from each other, the Chalcolithic and EB I chrono-cultural entities actually represent a lengthy chronological range of continuous human occupation, activity and development. Since the process of change was continuous and cumulative, only when it reached a 'critical mass' or 'degree of incontestable visibility' did researchers feel obligated to define a phase subsequent to Chalcolithic by another designation. Perception of this transitional phase was also limited by an exceptionally and regionally imbalanced knowledge of the archaeological record. In addition, imperfectly understood chrono-cultural sequences for both the Chalcolithic and EB I periods were substantial deficiencies that further obscured researchers' perception. Thus, the link between the latest Chalcolithic and Early Bronze I cultural traditions remained either unrecognized or only dimly perceived. Recent discoveries combined with increasing work on details of sequencing have greatly ameliorated many of these deficiencies and allow for better comprehension of the archaeological record. In particular, discoveries along the Mediterranean Littoral of Israel, at sites both of the Chalcolithic and Early Bronze I periods, have yielded assemblages of ceramics, architectural remains, and to a more limited extent, 14C dates that allow for greatly improved perception of a 'lost horizon' in the archaeological record of the southern Levant. This presentation briefly reviews this new information and offers some challenging proposals for further study.

Margie BURTON (*University of California, San Diego*)

The End of the Chalcolithic (ca. 4500-3600 BC) in the Northern Negev Desert, Israel

The northern Negev desert was a major focus of settlement expansion and technological development during the Chalcolithic period. However, the large villages that were established and flourished during the late 5th into the first centuries of the 4th millennium were abandoned by ca. 3700 BC and never reoccupied. This paper examines the cultural and chronological trajectory of Chalcolithic northern Negev settlement and abandonment as evidenced by ceramic typology and technology in concert with new 14C dates. Four habitation sites (Abu Hof Village, Shiqmim, Nahal Tillah/Halif Terrace, and Wadi Fidan 4) that temporally span the Chalcolithic/Early Bronze IA horizon in the northern Negev and a related resource zone, the Faynan copper district in southern Jordan, are used as case studies. Cluster analysis of ceramic data from these sites suggests vectors of population movement and interaction at the close of the Chalcolithic. These provide important clues to the social factors that contributed to the demise of the vibrant northern Negev Chalcolithic communities and helped to transform the cultural landscape.

Yosef GARFINKEL (*Institute of Archaeology, Hebrew University, Jerusalem*)

The Middle Chalcolithic of the Southern Levant

The transition from the Early Chalcolithic (Wadi Rabah/PNB Jericho) to the Late Chalcolithic (Ghassul/Beersheva) is not clear and various ideas have been suggested over the years for this process. However, in the last years, following excavations at various new sites, it became clear that an additional stage existed between the two – the Middle Chalcolithic (Beth Shean XVIII/Qatifian). The lecture will discuss the lower levels at the site of Teleilat el-Ghassul in light of new data (published or unpublished) from various sites in the Jordan valley: Tel 'Ali, Tel Beth Shean and Tel Tsaf.

Isaac GILEAD (*Ben-Gurion University of the Negev*)

Fifth Millennium Culture History: Ghassulian and other Chalcolithic Entities in the Southern Levant.

It is currently common to date the Chalcolithic period to the time span of 4,500-3,500 B.C. cal., and to subdivide the period into temporal units (i.e., Early, Late). In the first part of the paper it is argued that the boundaries of the period call for revision and that the temporal subdivision is problematic. Recent finds and radiometric dates suggest that the period started and terminated earlier than hitherto thought. The temporal division of the period is loosely defined and contributes very little, if at all, to a better understanding of cultural and organizational aspects of the Chalcolithic societies. The prospects of a Chalcolithic culture history are discussed in the second part of the paper. It is argued that understanding socio-economic dynamics is either biased or impossible without recognition, in time and space, of cultural entities. The Ghassulian and its sub-cultures, local and temporal variants, are essential in this context, along additional entities such as the Besorian and the Golan Chalcolithic to name three examples. Recently published Chalcolithic sites located in the hilly part of the town of Beer Sheva, the pottery and the radiometric dates of Gilat, and pottery, stratigraphy and new radiometric dates of Teleilat Ghassul suggest that different entities can be determined, that cultures and sub-cultures can be defined spatially and temporally, and that it is possible to start constructing a Chalcolithic culture history.

Amir GOLANI, Yossi NAGAR and Amir GORZALCZANY (*Israel Antiquities Authority*)

Newly Discovered Burial Practices of the Chalcolithic and the Early Bronze Age I in Southern Canaan - Evidence of Cultural and Ethnic Continuity?

Recent studies of the very early Early Bronze Age I material culture in Southern Canaan during the 4th millennium BCE have indicated continuity with the preceding Chalcolithic culture of the Northern Negev that thrived in the late 5th millennium BCE. The early EB I occupation at Ashqelon is proposed as representing the material culture of Chalcolithic cultural groups that relocated to the southern coastal plain after the collapse of the Chalcolithic geo-cultural sphere of the Northern Negev. New evidence may now serve to bolster the suggestion of cultural continuity and possibly imply an ethnic continuity as well in Southern Canaan. In this region, Chalcolithic burials are usually found as intra-site infant burials while adults and sub-adults were generally accorded secondary burials in clay or stone ossuaries in caves or burial structures outside sites. Primary burials are usually not the norm, and may represent a preparatory stage to the more common secondary burial stage. During the EB I in Southern Canaan, infants and adults are usually found in primary and possibly also secondary burials in caves or cemeteries with burial goods, all outside the habitational sites. Excavations at the Early Bronze Age site of Ashqelon Barnea have revealed numerous intra-site infant burials, uncommon for this period, in jars and within small mudbrick cists. In addition, a hitherto unknown form of secondary burial of adults in small stone cists attached to one another in "ladder" form was revealed outside and adjacent to the site. Similar burials have also been found at Chalcolithic burial ground near Palmahim, also located in the southern Canaanian coastal plain. The intra-site infant burials associated to the EB occupation at Ashqelon and common at Chalcolithic sites as well, in addition to secondary adult cist burials at both Ashqelon and Palmahim, suggest a cultural continuity between these two periods that may be attributed to the same cultural and ethnic group that resided in Southern Canaan during the Chalcolithic and into the EB I. These findings are in contrast to those from other, more northern portions of the Southern Levant where a more distinct break in burial customs is recognized in the transition from the Chalcolithic to the Early Bronze Age.

Zeidan KAFABI (*Yarmouk University, Irbid, Jordan*)

Ghrubba: Ware or Culture?

In 1953 James Mellaart excavated the site of Ghrubba, Jordan, located in the southern part of the Jordan Valley 1.5 km from Shuneh South. The excavated pottery and flint assemblages were recovered from a pit in strata located under Chalcolithic material. Mellaart assigned these materials to the Pottery Neolithic period. At the time, Ghrubba was the only Neolithic site to produce such a pottery type, and thus scholars thought that this type of pottery was limited only to this site. However, recent archaeological excavations conducted at the sites of Abu Hamid, Abu Thawwab and Ain Ghazal produced similar pottery sherds. This paper seeks to clarify whether the Ghrubba pottery assemblage represents a pottery ware tradition or a culture. In addition, an attempt will be made to place this assemblage in chronological sequence with other Pottery Neolithic assemblages.

Susanne KERNER (*Carsten Niebuhr Institute, University of Copenhagen*)

The transition from social complexity to urbanisation was not smooth but bumpy

While it has become increasingly clear that the social and political organisation of the Late Chalcolithic period in the southern Levant was rather complex and showed in certain areas (such as the Jordan Valley and even more so in the Negev) clear signs of ranked societies, we are still not too sure about the exact nature of this complexity. Questions of wealth-prestige financing compared to staple goods financing are only mentioned here to show one field in which

discussions are still necessary. Recent research has shown that the following period of urbanisation is not the logical next step in an evolution of growing complexity, but happens at least in parts of the southern Levant after an “un-evolutionary” detour, which involves a very different level of socio-political as well as economical organisation. In the moment we are still in the stage of asking questions about this transition and not very close to giving certain answers. The transition however can be shown in the change of material culture as e.g. in the pottery material from Hujeirat al-Ghuzlan (Aqaba, Jordan).

Ianir MILEVSKI, Peter FABIAN and Ofer MARDER (*Israel Antiquities Authority*)

Canaanite blades in the Chalcolithic of the southern Levant?

In the last years some scholars have suggested that flint Canaanite blades, a hallmark of the Early Bronze Age in the southern Levant, have begun to be produced already in the end of the Chalcolithic period. This short presentation will hint at the problems in such suggestions through an analysis of the evidence we possess from recent excavations.

Graham PHILIP (*Durham University*)

Subsistence, resource procurement and manufacture in the southern Levant c. 5000-3000 BC: Tell esh-Shuna its regional context

The site of Tell esh-Shuna has produced a well-dated sequence of occupation which covers the beginning of the 5th millennium cal. BC (early Chalcolithic) and much of the middle (early EB I) and late (late EB I) 4th millennium cal. bc. This paper: Compares the material evidence for the nature of the subsistence economy, craft production and resource procurement at these three distinct stages of the sequence Compares the evidence from Shuna with that from other broadly contemporary sites in the region Reviews that evidence in the context of what are generally perceived as the key changes in social and economic structures during the period 5000-3000 BC.

Steven A. ROSEN (*Ben-Gurion University of the Negev*)

Desert Chronologies and Periodization Systems

Archaeological analyses of the cultural and social systems of the desert regions of the Levant suggest that chronological frameworks for proto-historic periods in the Negev, Sinai, and southern Jordan need to be constructed independently of those of the Mediterranean and sub-Mediterranean zones. The developmental trajectories of the desert zone societies, in these periods based primarily on variations of pastoralism and hunting-gathering, contrast significantly with those of their agricultural and village based northern neighbors. As a result, periodization schemes based on events, trends, and technological changes in the northern zone are both basically irrelevant to the desert, and in some cases actually out of phase with local desert trends and changes. Indeed, in some cases the adoption of the non-local sequence, such as the sharp distinction between the Chalcolithic and Early Bronze Ages, masks clear desert cultural continuities. Furthermore, differences in material culture, especially in the relative scarcity of ceramics in the desert societies, renders periodization schemes based on ceramic typologies (or for that matter, technologies) unusable. A hierarchical framework is presented based on local materials, including architectural changes, trade systems, and most especially chipped stone tools. This is calibrated by reference to radiocarbon dates and fossil indices taken from external systems.

Valentine ROUX, Marie-Agnès COURTY and Geneviève DOLLFUS (*CNRS, Maison de l'Archéologie et de l'Ethnologie, Nanterre*)

Ceramic practices as markers of cultural continuity and discontinuity: Abu Hamid ceramics as a case study

Abu Hamid presents an occupation spanning from the 6th millennium to mid of the 4th millennium BC. A succession of different cultural phases has been established from the stratigraphical sequence. In this paper, our focus concerns the ceramic practices during the two last phases -4200-3800 BC, and 3800-3500 BC-, here characterized in terms of techniques, methods, tools and skills. Because ceramic practices are “a way of doing”, they reflect the cultural traditions in use by the producers. The multiple provenance of the ceramic containers specific to Abu Hamid also helps to consider the ceramic practices at the scale of the South Levant. Results tend to show an homogeneity of practices at the scale of the South Levant for the two phases even though there are regional differences. Between the two last phases, continuity of ceramic practices is visible for utilitarian ceramics. Discontinuity is observed for wheel shaped bowls only. The latter are supposed to have a ceremonial value. Hypotheses follow concerning ceramic producers and consumers, i.e. respectively social and cultural groups. They raise the question of the meaning of the discontinuities characterizing the EBI ceramic practices compared to the previous ones.

Aaron N. SHUGAR, Christopher J. GOHM (*Smithsonian Center for Materials Research and Education. SCMRE*)

Developmental Trends in Chalcolithic Copper Metallurgy: A Radiometric Perspective

With a surge of scholarly interest in Chalcolithic copper metallurgy in the Southern Levant, many studies have been put forth concerning the technological characteristics, art-historical value and socio-cultural implications of the metal artifacts attributed to this period. Important early studies by Key, Shalev, Northover and others have demonstrated that two classes of artifacts were produced by the ancient smiths, each with unique compositional properties. These include complex casts of alloyed copper (As, Sb, and Ni) and simple tools of pure copper. Recent analyses by Tadmor, Namdar, Segal and Kamenski have suggested that this dichotomy may be more complex than previously assumed, as complex 'prestige' goods from Nahal Mishmar, Givat Ha-oranim, Peqi'in and Ketef Jericho have exhibited little or no evidence of alloying. The possibility that these varying compositional results may be related to chronological developments in the copper industry has not yet been considered. This study aims to elucidate this problem by correlating extant radiometric datasets from sites across the southern Levant with associated copper artifacts and/or metallurgical remains. Through an intensive investigation and reevaluation of the contexts from which copper remains have been recovered and radiocarbon samples taken, coupled with an integration of the radiometric data and the results of archaeometallurgical sampling, patterns relating to developmental trends in the industry can be observed. While it is true that these radiocarbon dates cannot be linked with certainty to the production of a given artifact, the assumption of a close correlation between production and use enables the assemblages from these sites to be arranged in relative chronological terms. This is especially plausible given the fact that most sites were not occupied for the entire millennium of the period, but instead usually only for several centuries. The implementation of an arbitrary ranking scheme based on the distribution and frequency of attested radiocarbon years from the relevant samples at each site further clarifies these relationships (i.e. sub-periods A through F; 45th through 35th centuries cal BCE). This integration of radiometric data and archaeometallurgical analyses indicate that the metallurgists of the period produced complex artifacts with varying compositions over time. The results suggest possible technological explanations for the recognized changes in chemical compositions of the metal artifacts so far uncovered. While still preliminary, and based on the assumed rough contemporaneity of the radiocarbon samples and artifactual production, these results provide the first hints about the chronological development of Chalcolithic metallurgical techniques.

Hamdan TAHA, Nils ANFINSET, Yehad YASSINE and Muhammed MUKBIL (*University of Bergen*)

Results of the Joint Palestinian-Norwegian Excavation at Tell el-Mafjar, Jericho 2002-03

This presentation will focus on the outline of the Joint Palestinian-Norwegian excavation at Tell el-Mafjar, including major goals and research history of the site. The main part of the presentation will focus on the two seasons of excavation and its results of the archaeological material in general, C-14 dates and analysis of botanical remains. Further the site will be placed in a local context as well as to draw some lines to other contemporary sites in the region in general. The site of Tell el-Mafjar was discovered by James Mellaart in the early 1950's and has after this been subject to a number of brief surface surveys. In 2002 and 2003 the first two seasons of excavation of the site was launched, which have revealed substantial material on the Late Neolithic-Chalcolithic in the Jericho Oasis.

Katherine WRIGHT (*Institute of Archaeology, University College London*)

Chronological Developments in Beadmaking and Personal Ornaments in the Southern Levant, Late Neolithic to Early Bronze

Discoveries at beadmaking sites from Jordan suggest that personal ornaments played a significant role in the development of complex social hierarchies by Chalcolithic times. Data from Late Neolithic to Early Bronze 1 beadmaking workshops from Jordan (Wadis Jilat and Faynan) suggest that developments in beadmaking technologies were significant and perhaps played a significant role in emergence of other technologies characteristic of the Chalcolithic. This paper discusses chronological developments in beadmaking from perspectives of production technology. Recommendations for excavation and study of beadmaking technologies are also presented.

WORKSHOP / TALLER III

The Origins of the Halaf and the Rise of Styles. International workshop on the Late Neolithic in the Near East (ca. 6300-5700 BC)

Organized by / Organizado por: **O. Nieuwenhuys, P. Akkermans, W. Cruells, M. Molist**

The last two decades have seen a tremendous increase in fieldwork projects concentrating on the later Neolithic. A major emerging theme concerns the 'origins' of the Halaf culture, or, in a wider sense, the introduction and subsequent rise of supra-regional styles of decorated pottery at the close of the 7th millennium. It has become clear that there was a 'Transitional' or 'Proto-Halaf' period, during which the Early Halaf gradually emerged from a variety of earlier, Pre-Halaf cultures. This stage is currently dated to 6100-5900 cal. BC. As the Transitional pottery shows strong influences of the Samarra culture, hitherto believed to be largely restricted to northern and central Iraq, the discovery goes beyond simply finding the 'missing link'. There is the urgent need to discuss issues of chronological and regional boundaries, as well as the conceptual frameworks we use to approach the Late Neolithic. As yet there has been no concerted effort to bring together independent scholars working on the Late Neolithic, to share important new data, to discuss new insights, and to formulate central themes for research and further study. As part of the SICANE, a first workshop is proposed, with the provisional title 'The Origins of the Halaf and the Rise of Styles'.

Las dos décadas pasadas han visto un aumento enorme de proyectos de trabajos de campo que se concentran en el Neolítico Tardío. Un tema principal emergente concierne a “los orígenes” de la cultura Halaf, o, en un más amplio sentido, la introducción y el consecuente ascenso de los estilos supra-regionales de cerámica decorada en el final del 7º milenio. Se ha hecho claro que había un período “de transición” o “Proto-Halaf”, durante el cual el Halaf temprano surgió gradualmente de una variedad de temprana, las culturas Pre-Halaf. Esta etapa actualmente es datada en 6100-5900 cal. a.C. Como la cerámica de transición muestra fuertes influencias de la cultura Samarra, hasta ahora creída estar en gran parte restringida al norte y centro de Irak, el descubrimiento va más allá de simplemente encontrar “el eslabón perdido”. Hay una necesidad urgente de hablar de las cuestiones de fronteras cronológicas y regionales, así como los marcos conceptuales que usamos para acercarnos al Neolítico Tardío. Aún no ha habido ningún esfuerzo conjunto para reunir a investigadores que trabajan sobre el Neolítico Tardío, para compartir nuevos datos importantes, hablar de nuevas ideas, y formular temas centrales para la investigación y estudios posteriores.

Reinhard BERNBECK (*State University of New York at Binghamton*)

The dialectical relations of period and cultural definitions such as “Halaf” or “Transitional Halaf” and research questions

In this paper, I discuss the dialectical relations of period and cultural definitions such as “Halaf” or “Transitional Halaf” and research questions. Our categorizing terminologies imply a longue duree narrative, a spatio-temporal exclusivity that draws boundaries where there are none, and suggests commonalities which are just as spurious. I illustrate my abstract argumentation by referring to mobility patterns, ceramic production and architectural planning in the so-called Transitional and Early Halaf periods.

Walter CRUELLS (*UAB*)

General introduction to the 'Proto-Halaf' issue. Chronological and regional framework, definition of terms, broad cultural change and continuity during the Proto-Halaf stage

The Proto-Halaf period (also known as 'Transitional' period) has been recently defined as the link between the end of the late Pottery Neolithic stage (known as Pre-Halaf and/or Hassuna) and the Early Halaf. During this stage, currently dated about 6100-5900 cal. BC., the ceramics show a mixture of influences, combining elements from previous stages with those from the Samarra culture, previously thought to have been largely restricted to northern and central Iraq. Apart from the ceramics, however, there appears to have been considerable continuity in most other aspects of society. Although the Proto-Halaf stage was firstly defined at Tell Sabi Abyad, in the Balikh valley of northern Syria, other sites followed swiftly, such as in northern Iraq (Khirbet Garsour), the Euphrates valley (Tell Halula) and in the Khabur basin (Tell Boueid II and Chagar Bazar). In addition, projects in south-eastern Anatolia, a region with a strong recent history of archaeological research into the Late Neolithic, show that this region participated in the Proto-Halaf phenomenon as well. This paper presents the chronological and regional framework of the Proto-Halaf period.

Marie LE MIERE (*CNRS, Maison de l'Orient et de la Méditerranée, Lyon*), **M. PICON** (*CNRS, Maison de l'Orient et de la Méditerranée, Lyon*)

May chemical analyses of pottery help finding the origins of the Halaf?

The “Transition” between the Pre-Halaf and the Early Halaf is mainly characterized by the appearance of new types of pottery. And these new wares do not seem to interact with the traditional pre-Halaf ones. Both groups develop along independent lines, as is shown by the sequence of Tell Sabi Abyad, currently the only available sequence that includes Pre-Halaf “Transitional” and Early Halaf occupation levels. Since these new wares, and in particular the Samarra ware, might have played a role in the development of the Halaf, it is essential to determine if the various Pre-Halaf and Transitional wares are local or non-local productions, even if the precise determination of the provenance of the imported pottery remains rather unlikely. In our paper we will consider the results of the chemical analyses of pottery from Sabi Abyad as well as those from “Transitional” wares from some other sites.

Olivier NIEUWENHUYSE (*National Museum of Antiquities, Leiden*)

Feasting in the steppe: Patterns of ceramic change and the transition to the Halaf

Traditional approaches to Late Neolithic cultures in the Near East tend to share the implicit assumption that material culture, in particular ceramic style, reflects existing social entities, be they forms of social organization ('chieftdom' versus 'tribal'), ethnic groups (Halafian tribal migration) or subsistence adaptations (rain-fed versus irrigation agriculture). Moreover, pottery styles are generally thought to be mutually discrete and internally homogeneous. Coupled with a lack of carefully excavated sequences this has contributed to a mosaic of cultures, mostly based on pottery style. Today, the investigation of 'Transitional' (or 'Proto-Halaf') sites between the Pre-Halaf and the Early Halaf (see the paper by Cruells), brings the inadequacies of our implicit assumptions to the foreground. In this paper I shall investigate patterns of gradual ceramic change at Tell Sabi Abyad from about 6300-5900 cal. BC, the period during which the transition from Pre-Halaf to Early Halaf occurred. After briefly discussing changes in ceramic technology and style, I shall concentrate on changes and continuities in pottery use. A more 'active' perspective is promoted, in which ceramic style is seen as actively engaged in the creation of social identities. Specifically, feasting may be a useful concept to explain much of the ceramic innovations observed.

Beatrice ROBERT (*Maison de l'Orient Méditerranéen, France*), **A. LASSALLE and R. CHAPOULIE** (*IRAMAT, CRPAA Université Michel de Montaigne, Bordeaux, France*)

New insights into the ceramic technology of the Proto-Halaf ('Transitional') period by using physico-chemical method

Ceramic classification and pottery technology are crucial issues in the discussions concerning the transition from Pre-Halaf to Early Halaf ('Proto-Halaf'). Within the general framework of a multi-disciplinary research project concerning the origins of the Halafian culture, we have investigated the ceramic technology of sherds from Tell Shimshara (Iraq) and from Tell Sabi Abyad (Syria), in particular the paste. We investigated the clay fabric, the selection of plant or mineral temper, and the firing atmosphere and temperature. In this paper we focus on data brought forward by analytical methods used in physics and chemistry. We present the results obtained with cathodoluminescence on Hassunan-Samaritan and pre-Halafian sherds from two different geographical and cultural regions. This method yielded two sets of information: 1) an alternative way for classifying these sherds; 2) a better understanding of firing circumstances. These insights complement the traditional, archaeological and typological, data, and they may explain certain technological properties of the material.

Halil TEKIN (*Hacettepe University, Ankara*)

Late Neolithic Pottery Traditions in Southeastern Anatolia and Its Environments

Our limited knowledge of the Late Neolithic societies of Southeastern Anatolia and its environments has begun to flourish over the last few decades. Recent excavations carried out on the Turkish Middle Euphrates and on the Upper Tigris are yielding exciting new data concerning the Late Neolithic cultures of the region. The most important results of this recent work show that the Hassuna/Samarra culture of Northern Mesopotamia existed in the region bordered by the Taurus Range since the end of the 7th millennium BC. Southeastern Anatolia seems to have been a major part of this culture since its beginnings.

Marc VERHOEVEN (*The University of Tokyo*)

Neolithic ritual in transition

Discussing 'Proto-Halaf' ritual in a wider context, in this paper attention will be paid to continuities and changes of Pre-Pottery- and Pottery Neolithic ritual practices in Syria and surrounding areas. Following the Annales paradigm, the evidence for ritual at different sites is arranged according to three timescales: the short-term (the 'Proto-Halaf', or the

transition from Pre-Halaf to Early Halaf), the medium-term (from Late PPNB to Halaf) and the long-term (from PPNA to Halaf). In particular, the meanings of figurines, animals and death -all playing a central role in Neolithic ritual- are addressed. On the basis of this overview, two different ritual ideologies, or mentalités, for respectively the early and late phases of the Neolithic are proposed. It shall be argued that the apparent distinctions can be understood as developments in the establishment of socio-cosmic relationships which were part and parcel of the Neolithic way of life.

WORKSHOP / TALLER IV

New Directions in Silk Road Archaeology

Organized by / *Organizado por*: **A. Betts**

For much of the 20th century, research in many of the lands along the Silk Road was hampered by political constraints. In some areas, while local archaeologists were active, the language of publication restricted its availability to the wider scholarly community. In other countries brief periods of stability permitted occasional international fieldwork, but these intervals were limited and sporadic. With the start of the 21st century a new era of research has begun. International collaborative projects are now widespread across the whole region. New methodological and analytical techniques are being applied with spectacular results. The aim of the workshop is to bring together researchers from all along the Silk Road to present new research and particularly to focus on new directions in their work. It is hoped that presenting and sharing this information will stimulate ideas and lead to new collaborative partnerships.

Durante la mayor parte del siglo XX, la investigación en muchas de las tierras a lo largo de la Ruta de la Seda fue obstaculizada por coacciones políticas. En algunas áreas, aún existiendo actividad por parte de arqueólogos locales, la lengua de publicación restringió su disponibilidad a una más amplia comunidad académica. En otros países, breves períodos de estabilidad permitieron ocasionales trabajos de campo internacionales, pero estos intervalos fueron limitados y esporádicos. Con el principio del siglo XXI comienza una nueva era de investigación. Varios proyectos de colaboración internacional están repartidos por toda la región. Se están aplicando nuevas técnicas metodológicas y analíticas con resultados espectaculares. El objetivo del taller es reunir a investigadores que trabajen a lo largo de la Ruta de la Seda para presentar nuevas investigaciones y, en particular, focalizar sobre nuevas direcciones en sus trabajos. Esperamos que la presentación y compartición de esta información estimulará las ideas y llevará a nuevas colaboraciones.

Bahram ADJERLOO (*Iran*)

Expansion of the Kura Araxes culture into the Qazvin Plain and the Iranian Zagros and its effect on the archaic Silk Road through the 3rd millennium BC

The Late Chalcolithic societies of the Iranian central plateau and Iranian Zagros across the archaic Silk Road had their development during ca. 3200-3000 B.C. According to archaeological research by Tehran University, there were also economic relationships between Uruk Mesopotamia and the Iranian central plateau. However, there is not enough evidence to prove such relationships with eastern Anatolia. By ca. 3000 B.C Chalcolithic societies of the Qazvin plain and the Iranian Zagros collapsed. According to the author that collapse is related to the migration of Kura – Araxes culture into Iranian plateau. Archaeological data suggests that expansion of the Kura-Araxes migrant culture cut the archaic silk road; the so-called the Great Road of Khorassan in Persian. The Late Chalcolithic societies of the Iranian central plateau, such as Tepe Qabristan and Sialk, and the Iranian Zagros zone, for instance Godin Tepe, lost their economic relations with the Uruk World. The Kura-Araxes expansion may have become a major factor.

Shamil AMIROV (*Russia*)

Archaeological Aspects of the Early Islamic Period in Khorezm

In the early 8th century Khorezm fell under the influence of the Arabian Caliphate, thus commencing the gradual process of acculturation and conversion of the Khorezmian population to Islam. Research on historical sources relating

to Khorezm in the early Islamic period dates back to the beginning of the 20th century but very limited attention has been paid to the archaeological evidence, despite the excavation of a number of Muslim necropolises. The archaeological study of necropolises focuses on questions of typology, classification and dating. The results of these analyses can shed new light on our understanding of the adoption of Islam into Khorezmian culture and its relationship with indigenous culture and pre-Islamic religious beliefs. This paper addresses these questions.

Julio BENDEZU-SARMIENTO (*France*) and **Vadim N. YAGODIN** (*Uzbekistan*)

Les rites mortuaires à l'âge du Fer (Ier millénaire) chez les Saka de la mer d'Aral (Ouzbékistan)

Il s'agit de l'étude d'un matériel anthropologique inédit provenant des fouilles anciennes sur des kourganes des nomades Saka de l'âge du Fer (Ier millénaire avant J.-C.) sur le plateau d'Ust'jurt situé entre la mer d'Aral et la mer Caspienne (Karakalpakstan). Le travail archéologique réalisé sur la région est important mais très peu diffusé. L'étude du matériel anthropologique a déjà partiellement fait l'objet d'une approche crâniologique qui semble montrer un «rapprochement» avec les populations Sarmate de l'Oural et de la culture Tagar en Sibérie (datées tous deux de l'âge du Fer). Nos résultats préliminaires montrent des sujets dont l'état sanitaire est particulièrement dégradé en comparaison avec des populations contemporaines étudiées sur le territoire du Kazakhstan. Au niveau des pratiques funéraires nous retrouvons des sépultures individuelles mais également multiples, voire collectives (contenant des femmes, des hommes et des enfants) qui restent exceptionnelles pour cette période dans l'histoire de l'Asie centrale steppique.

Alison BETTS (*Australia*)

Temples and Cult Practice in the Tash-k'irman oasis, Karakalpakstan

A collaborative Karakalpak-Australian expedition has been excavating two important sites of the Early Antique Period in ancient Chorasmia (4th century BC – 2nd century AD). One, Tash-k'irman-tepe, is a Fire Temple complex. The other, Kazakl'i-yatkan, is a major sacral centre containing within it a richly decorated monumental building of unique design, believed to be a temple of a quite different style. Chorasmia was briefly a satrapy of the Persian Achaemenid Empire but reverted to independence at sometime around the late 5th to early 4th centuries BC. While to a degree Chorasmia absorbed Achaemenid religious beliefs, the population also developed its own local traditions, strongly influenced by earlier Indo-Iranian and nomadic cult practice. The paper will present evidence for religion and cult in ancient Chorasmia and discuss the information provided by these new and important discoveries.

Matteo COMPARETI (*Italy*)

The Indian Iconography of the Sogdian Divinities: the archaeological and the textual evidence

Thanks to the archaeological activity in modern southeastern Uzbekistan and western Tajikistan, the culture of the Sogdians in their motherland is becoming less mysterious. In particular, it is now possible to state that the Iranian-culture population of Sogdiana worshipped local divinities slightly different than the Persian ones but still belonging to the Mazdean pantheon. An interesting aspect of these divinities is constituted by their iconography: at least since the 6th century the Sogdians adopted iconographic formulae proper of Indian gods. Traces of such an adoption can be found in archaeological and literary contexts although the passages are not always clear. There is then the problem of the arrival of the Indian iconography. There are two main hypotheses: the iconography arrived with Buddhism, a religion which had not many followers in Sogdiana but in the numerous Sogdian colonies abroad. The Buddhist creed itself was expelled and the Sogdians adopted the images of Hindu divinities to represent their own ones. According to the second hypothesis, the Hindu iconography arrived directly from India and evidences of such a path can be traced, also considering similar phenomena in other parts of Central Asia. The second hypothesis seems to be the most convincing even if many gaps still need to be filled. The argument of this paper has been also the focus of my Ph.D. thesis defended at the University of Naples "L'Orientale", Italy.

Irene GOOD (*USA*)

When East Met West: Interpretive problems involved with assessing East-West contact and exchange in antiquity

The theme of this paper is to highlight some of the interpretive problems involved with assessing East-West contact and exchange in antiquity, from a materials science point of view and from the vantage point of material culture studies. Much of our understanding of the development of civilizations rests on our understanding of contact between culture groups in prehistory. This is particularly so for the area of inner Eurasia, and it is therefore of utmost scientific interest to refine and revise, when necessary, our evidentiary interpretations of past contact and exchange between East

and West. There are also more basic problems to deal with in Central Asian studies, which range from differences (and lacunae) in chronometric data from relevant sites, to problems of access to published site reports due to language barriers. This paper overviews current problems and suggests practice towards amelioration for future, international collaborative archaeologies of the Silk Road.

Kai KANIUTH (*Institut für Vorderasiatische Archäologie, Munich, Germany*)

The Bronze Age Relations of Southern Central Asia

The contribution reviews the external relations of Southern Central Asia in the Middle- and Late Bronze Age (late third and early second millennium BC). During this time period, several larger cultural entities, the Eurasian steppes, the eastern Iranian and Indus spheres, interacted with Bactria, Margiana and the Kopet Dagh foothill zone, exerting varying degrees of influence on the local communities. Similarly, objects of Central Asian derivation have been found all the way down to the Persian Gulf, suggesting that it was a very active participant in a larger exchange system rather than a migratory zone. It shall be attempted to go beyond using imports merely as a convenient means for cross-cultural synchronization by showing patterns of association that will help to improve our understanding of the nature of the prehistory of the Silk Roads.

Nikolay KRADIN (*Russia*)

Between East and West: The frontier city of Liao Empire Chintolgoi balgas in the Mongolian steppe

In the summer of 2004 an international Mongolian-Russian expedition undertook archaeological research in the Kitan epoch Chintolgoi balgas mediaeval town. At the beginning of the 11th century the Kitan empire reached its floruit. Simultaneously with success against Song in the south, the Kitans consolidated their grip on the western borders. As early as 994 the Kitans conducted a campaign to “pacify” the “western border” (Liao shi, ch.13). They also started construction of a network of frontier fortresses in the valleys of Kerulen and Tola rivers. Garrisons of these fortresses consisted of transferred subdued peoples from the eastern borders of Liao – Jurchens, Bohais, and Hans (Northern Chinese). In 1004, Zhenzhou fortress –most north-western boundary town of Kitan Empire– was built in the place of “old town Kedun”. 20000 Kitan horsemen were sent to serve here. Also 700 households of Bohai, Jurchen, and Han people were attached to provide them with provisions. It is a very important point of transit trade in this period between Northern China and Central Asia. We have found evidence for several different cultural traditions: China, Manchuria, Mongolia, Central Asia.

Fiona KIDD (*Australia*)

Sogdian costume inside out. The identification of “Sogdians” on the basis of their costume

Sogdiana was a nexus between China and the West, whose interactions with its nomad neighbours to the east and north, particularly prior to the 4th century CE, has rendered it highly enigmatic. The period between the 2nd-1st century BCE and the 4th century CE was a formative one, a prelude to the increasing internationalism of the early medieval period. Terracotta figurines are the only source of visual evidence from the Samarkand region of Sogdiana dated to this period. The costume portrayed on these figurines provides a rich database for exploring regional identity in Samarkand. Yet when compared with the costume portrayed on figures identified as Sogdian outside the Sogdian heartland of the Zerafshan Valley – dated before and after, but only rarely contemporary with this period - there are few parallels. This paper will explore internal and external evidence regarding the identification of “Sogdians” on the basis of their costume prior to the Arab invasions of the early 8th century.

Bernardo RONDELLI and Sebastian STRIDE (*Spain*)

Silk Roads in the Digital Era: Creating an Archaeological Information System of Central Asia

AISCA (Archaeological Information System of Central Asia) aims to manage the ever-increasing data mountain created by scholars working in many different countries and languages. Although AISCA is first and foremost a practical and technical project, we believe that it will profoundly influence future research along the Silk Road from all points of view – including the theoretical. It includes a Geographical Information System (GIS) of Central Asia, a Site Database, various other Databases (such as statuettes, coins, etc.), an E-library and a link to the teams whose work is included in the system. It is an open, evolutive, system, which allows easy access to any data about Central Asia and will be directly accessible via the Internet. AISCA aims to function as a platform for collaboration between institutions and to guarantee that all Data included is linked exclusively to the original author – even in the case where this data has been digitised at a later date.

Sadegh Malek SHAHMIRZADI (*Iran*)

Neolithic Sites on the Natural Pass of the later known Silk Road on the central Iranian plateau

Almost 1000 Kms of the well known Silk Road that connects the most eastern part of Asia to Europe passes through the Central Iranian Plateau. Many early sites have been investigated on this part of the route. They date from the Neolithic period to medieval times. A few important Neolithic sites such as Agh Tepe in the Gorgan Plain, Sang-e Chakhmagh in the Shahrood district, which is located in one of the valley of the Alborz Mountain, Tepe Zaghe in the Qazvin Plain and Hajji Firuz in Azarbayjan have been investigated already by archaeologists. The similarities between the archaeological inventories show that there was some kind of cultural interactions between the occupants of these sites. I have excavated in Agh Tepe and Zagheh in the central part of this route and recently I have been digging at Sialk of Kashan. Considering the extreme similarities that existed between the cultural material and materials of culture obtained from the excavations of these sites, it seems that the historically known Silk Road was originated on the natural pass that used to connect these locally developed communities in the Neolithic era. To document my arguments I will consider and present the architectural remains and the techniques applied for building the houses, pottery traditions and stone artifacts from some of these Neolithic sites. During the Bronze and Iron Ages the nature of the cultural exchange between the sites on this road was even more clearly indicated. The last part of my arguments will be devoted to the immigration of the Iron Age nomads from east, Central Asia, to Iran via the northern branch, or as have been mentioned by some scholars the Summer Route, of the Silk Road.

Sören STARK (*Department of Oriental Art and Archaeology, University Halle, Germany*)

Resource exploitation and settlement dynamics in high mountain areas. The case of Medieval Ustrushana (Northern Tajikistan)

The valley systems in the northern slopes of the Turkestan range form a distinct micro-region immediately to the south of the irrigation oases of medieval Ustrushana. Historical and ethnographical data mostly emphasize their seasonal use by nomads and transhumant pastoralists as summer pastures. But archaeological data from the north of the Turkestan range are still very scarce. Since 2005 a joint Tajik-German expedition is carrying out archaeological prospections in the high mountain zone south of present-day Shahrison. The paper will present results from the first field season which point to complex resource exploitation and settlement dynamics in this area. In particular, there is evidence of significant changes in the high mountain zone from the 11th to the early 13th cent. AD. At the same time, ties with the Shahrison oasis seem to increase remarkably.

Vadim N. YAGODIN (*Uzbekistan*)

Strangers at the gates: Nomads of the Aralo Caspian region

The flourish of the Great Silk Roads in the period from the 2nd century BC to the 14th century AD created a system of communication and trade across the vast stretch of Eurasia from Xi'an and Lanzhou in China to the Black Sea and the Mediterranean. The Great Silk Roads linked together a system of prehistoric trade routes and was a strong factor in the development of cultural communications between China, India, Central Asia, the Near East and Eastern Europe. This massive redistribution system encompassed not only the inhabitants of cities and towns along the routes, but also the many nomadic peoples of the Eurasian steppes. Using selected examples, this paper will illustrate some aspects of the involvement of the early nomads of the Aral-Caspian deserts with the trade networks of the Great Silk Roads. The nomads regularly exchanged goods in the Silk Road trading centres that lay along their natural migration routes as an integral part of their economic system. The existence of a waterway linking the lower reaches of the Amu-dar'ya river with the Caspian Sea by the old branch of the river known as the Uzboi will also be discussed.

Sergey A. YATSENKO (*Russia*)

Some Costume Contacts of Ancient Central Asia

Among the manifestations of the costume contacts the sets of some elements or separate garments acquired by nomadic aristocracy of the Central Asia present significant interest. The gifts of kings of the Persian Achaemenid empire to foreign ambassadors (Aelian. Var. Hist. 1.22) as well as supposed presents of satraps influenced the decoration of fabrics and costume accessories of different northern tribes from Pazyrykians of the Altai mountains to European Scythians. Among the gifts of Chinese emperors to the nomads the garments, in contrast to cuts of silk, formed only 1% for Hsiung-nu (49-1 BC) and approximately 10% for Early Turks (612 AD). The garments of sedentary neighbours were often not only wanted presents for members of the families of the aristocrats from the foreign diplomats and merchants but also the single "permit" on territory of the certain tribe (the long sleeved coats and the female head shawls of Early Islamic Kwarezm). The diplomatic presents, as judged by pictorial materials and discoveries in burials of nobility, rendered only indirect influence; in the context of nomadic culture they had usually marginal status. The tradition to make the parties of the garments for regular trade with nomads with provision for their taste as was known in East Mediterranean region since the turn of the era (Strabo. Geogr. 11.2.3), probably had no analogues in the Central

Asia. The direct import, booty or imitations of the gala belts of big and culturally related “nomadic empires” and communities (Yuezhi of Bactria, Hsiung-nu, Early Turks) among the nomads of the Central Asia were of the greatest importance.

WORKSHOP / TALLER V

Bronze Age Trade in the Eastern Mediterranean and the Near East

Organized by / *Organizado por*: P. M. Fischer, I. Milevski

The aim of the workshop is to gather scholars studying cultural interactions based on regional and “international” exchange of goods in the Eastern Mediterranean and the Near East. Far-reaching “international” contacts were established at the beginning of the Early Bronze Age and reached a peak during the Late Bronze Age. The study of the pattern of these intercultural contacts are today one of most powerful tools as regards the synchronisation of Bronze Age civilisations. The aim of the workshop is also to discuss sources of raw material and manufactured goods. Theoretical debates on the nature of trade and exchange in the region during the period in question will be welcomed. In addition the workshop will deal with local and regional patterns of exchange in particular areas, and the interpretation of these processes within the economic and political settings of the different cultural entities in the region.

El objetivo del taller es reunir estudiosos que se ocupan de las relaciones entre civilizaciones basadas en el intercambio de mercancías regional e "internacional" dentro del área del Mediterráneo oriental y el Cercano Oriente. Los contactos "internacionales" de largo alcance se establecieron a comienzos de la Edad del Bronce Antiguo y llegaron a su culminación durante la Edad del Bronce Tardío. El estudio de los patrones de esos contactos constituye hoy en día uno de los más poderosos instrumentos en relación con la sincronización de las civilizaciones de la Edad del Bronce. El objetivo del taller es también la discusión de las fuentes de materias primas y bienes manufacturados. Las discusiones sobre cuestiones teóricas relacionadas con el intercambio comercial en la Edad del Bronce serán igualmente bienvenidas. El taller se ocupará también de los patrones de intercambio local y regional en áreas particulares, y de la interpretación de esos procesos de intercambio a la luz de los sistemas económicos y políticos de las diversas entidades culturales en la región.

Daniella E. BAR-YOSEF MAYER (*University of Haifa, Israel*)

Shell Artefacts in the Bronze Age of the Levant: Their Contribution to the Reconstruction of Trade and Exchange.

During the Bronze Age of the Levant shells were often made into artefacts. Some are simple beads (perforated bivalves and gastropods) but others are more distinct artefacts. Many Early Bronze Age I sites contain bangles made of the large Red Sea gastropods, *Lambis truncata*. *Chambardia rubens* from the Nile is found as a serrated artefact. Both testify to contacts with Egypt. Several Early Bronze Age II sites contain *Conus* apex beads that are almost always found in burial contexts. At the height of the urbanization period of Early Bronze Age III, *Cerastoderma* valves were perforated, and apparently used as “counters” associated with olive oil production. The intermediate Bronze Age sees again exploitation of *Lambis*, this time to be made into inlays associated with wooden furniture, testifying to contacts ranging from the Negev to Mesopotamia. A lacuna exists in our knowledge of shell exploitation during the Middle Bronze Age, but during the Late Bronze Age a new type of square *Conus* beads emerges with a broad geographic distribution. At the same time *Glycymeris* valves from the Mediterranean are used as construction material. These artefacts usually represent a well-defined cultural stage and provide information on local traditions (burial customs, decoration, economic practices and construction) as well as short and long-range trade and exchange systems.

Michèle CASANOVA (*University of Rennes 2 - CNRS, France*)

Prestige Objects in the Ancient Near East: Typology, Exchange, Value, 4th-2nd Millennia B.C.

The circulation of the materials used to manufacture objects of prestige plays an essential role in the networks of medium and long distance trade in the societies of the Near East, from the 4th through the 2nd millennia B.C. We will concentrate on the large number of prestige objects found in the Royal Cemetery at Ur (stone vessels, seals, weapons, jewellery, etc.) made of materials imported into Mesopotamia, generally stone (calcite, lapis lazuli, steatite), but also metals. Objects/materials originally coming from Eastern Iran or Central and Southern Asia reached southern Mesopotamia via land routes crossing Iran or by the maritime route passing via the Persian Gulf and thus Bahrain. The diffusion of these products in Mesopotamia and the neighbouring regions raises the problem of identifying the details of their circulation, locating the original sources and the processing centres as well as their social functions and their value. Thus, stone vessels and lapis lazuli are among the most important and best documented elements in this exchange network, simultaneously imbued with economic, political and symbolic value. We will employ comparisons with the material from Susa, Shahr-i Sokhta, and Jiroft in Iran, as well as Altyn-depe (Turkmenistan), Bahrain, Ur (Iraq) and Mari (Syria).

John Coleman DARNELL (*Yale University, USA*)

Two Pharaonic Trading Outposts in the Egyptian Western Desert

Following the collapse of the Middle Kingdom and Hyksos takeover of the Delta, the Egyptian Seventeenth Dynasty, ruling from Thebes, was mostly severed from direct Nilotic trade with the Mediterranean world. Consequently, the Seventeenth Dynasty has been characterized as an isolated enclave dependent on the Hyksos as middlemen in Mediterranean trade. The Theban Desert Road Survey in the Egyptian Western Desert has discovered exciting new evidence which contradicts this view. At a site midway between the Nile Valley and Kharga Oasis and another site within Kharga Oasis itself, the Theban Seventeenth Dynasty established military and trading outposts. The ceramic material includes a number of foreign imports, including Canaanite amphorae, suggesting that the Thebans used routes in the eastern Sahara to pursue extensive trade with the Mediterranean world, thereby bypassing the Hyksos. The strong connections with the Mediterranean littoral suggested by these archaeological discoveries are reinforced by textual evidence and royal epithets of the Seventeenth Dynasty. Far from a weak, parochial state, the Seventeenth Dynasty drew economic strength from its powerful desert network.

Peter M. FISCHER (*Gothenburg University, Sweden / SCIEM2000 Austrian Academy and Science Fund*)

Tell Abu al-Kharaz, Jordan Valley: Evidence of Trade in the Early Bronze Age

The Early Bronze Age settlement of Tell Abu al-Kharaz in the Central Jordan Valley flourished during a limited period which, in relative terms, corresponds to the conventional Early Bronze Age IB and (part of) II of the Southern Levant, or between approximately 3,200 to 2,900 B.C. according to a set of 16 high-precision radiocarbon dates. The site was then abandoned and not re-occupied before the later part of the Middle Bronze Age, or approximately the Seventeenth Century B.C. The backbone of the Early Bronze Age economy of Tell Abu al-Kharaz was farming and cattle breeding which allowed the exchange of coveted goods such as copper and other raw materials. There is evidence of Egyptian pottery and vessels from Syria / Lebanon. Some theories about the rise and fall of the Early Bronze Age societies of Tell Abu al-Kharaz will be presented.

Srinivasan KALYANARAMAN (*Sarasvati Research Centre, India*)

Bronze Age Trade and Writing System of Meluhha (Mleccha) Evidenced by Tin Ingots from the Vicinity of Haifa

The discovery of two pure tin ingots in a ship-wreck near Haifa has produced two “Rosetta” stones to decode the “Indus script”. The epigraphs on the tin ingots have been deciphered as related to ranku “antelope”, “liquid measure”; read rebus: ranku 'tin'. As J.D. Muhly noted, the emergence of Bronze Age trade and writing system may be two related initiatives which started approximately in the Third Millennium B.C. It is surmised that the maritime-trade links between Ugarit and Meluhha might have extended from Crete to Haifa. Linking archaeology and philology is a challenging task. What language could the writings on Haifa tin ingots be? The breakthrough invention of alloying may have orthographic parallels of ligatured signs and ligatured pictorial motifs (such as a bovine body with multiple animal heads, combination of animal heads, combination of lathe and furnace on a standard device, ligaturing on a heifer, damr.a -- unicorn -- with one curved horn, pannier, kammarsala). A ligature of a tiger's face to the upper body of a woman is also presented in the round. The hieroglyphic code has been deciphered as words of Mleccha. Mleccha (Meluhha) was the language in which Yudhishtira and Vidura converse in the Mahabharata about the non-metallic killer devices of a fortification that was made of shellac. There is a depiction of a Meluhha trader accompanied by a woman carrying a kamandalu. There are, however, substratum words in Sumerian such as tibira “merchant” and sanga “priest” which are cognate with tam(b)ra “copper” (Santali) and sanghvi “priest” (Gujarati).

Colleen MANASSA (*Yale University, USA*)

Trade in Mercenaries at the End of the Bronze Age

Among the countless goods that were traded among the Mediterranean civilizations towards the end of the Bronze Age, one stands out because of its role in the catastrophe of the Twelfth Century B.C. As early as the Battle of Kadesh, the Hittite king employed the fierce Sea Peoples as mercenaries against the army of Ramesses II. During the fifth year of the reign of Merneptah, ca. 1,208 B.C., the Libyans similarly employed Sea Peoples in a multipronged attack against Egypt. Historical texts from the reign of Merneptah combined with archaeological evidence at Bates' Island and rock inscriptions from Libya all provide information about the economic conditions and participation in trade throughout the Mediterranean that enabled the Libyans to mount such a daring attack. Trade in mercenary forces, particularly heavily armoured infantry troops, at the end of the Bronze Age enabled the Sea Peoples and similar groups to learn the strategy necessary to overcome the chariot forces of the great Mediterranean powers and help usher in the end of the Bronze Age.

Diederik J.W. MEIJER (*Leiden University, Netherlands*)

Some Thoughts on Early Bronze Age. Relations between Syria and Anatolia

It is often said that complexity in a social group may be the result of increasing contacts with other groups, and one of the more frequent kinds of contact is "trade". It is also said that an important impetus toward complexity emanated from Syria-Mesopotamia and influenced "peripheral" regions like Anatolia. This is an antiquated notion that needs amending. Autochthonous developments in Anatolia provided a firm basis on which influences from abroad are certainly visible but cannot be said to have been indispensable. The present paper treats a few principles of trade. It deals with the treatment of trade by archaeologists, and it will illustrate its points with examples from the Early, Middle and Late Bronze Ages, trying not to fall into its own trap.

Ianir MILEVSKI (*Israel Antiquities Authority*)

Local Exchange in the Southern Levant during the Early Bronze Age. Methods and Practice

The trade and relations between the Southern Levant and other regions of the Near East (mainly Egypt) during the Early Bronze Age (ca. 3,500-2,200 B.C.) were the subjects of many recent studies. Research concerning the exchange of local commodities was almost disregarded or was discussed in parochial studies, focusing on specific archaeological finds. It is the intention of this lecture to present the results of a recent research that examined the exchange of commodities provided by the archaeological data from the excavations in the Southern Levant with regard to the economic theories on exchange-values of goods and exchange networks. Conclusions regarding the type of society and the forms of government in the Southern Levant during the Early Bronze Age are also presented, on the basis of the results of this research.

Caroline SAUVAGE (*Maison de l'Orient et de la Méditerranée, France*)

Warehouses and the Economic System of Ugarit

Maritime relations among cities and states in the Eastern Mediterranean increased significantly during the Second Millennium B.C. and peaked during the Late Bronze Age. At that time, the region experienced general prosperity thanks to international political harmony among all Near-Eastern lands, including Cyprus and Egypt. The city of Ugarit became an important maritime trade centre because of the auspicious location of its harbour, Minet el-Beida. During the Late Bronze Age, the Kingdom prospered and was a leader of international exchange. After 75 years of excavations at Ugarit, the physical and cultural city is better understood, however, the nature of its economic system is still unclear. Archaeological research and textual evidence have revealed the existence of many trade agreements. This paper re-examines trade-related finds in Minet el-Beida and on the tell itself, and compares them with trade clauses from textual sources. Cross-referencing archaeological data on international trade allows a better understanding of mechanisms of the city's economic system.

David A. WARBURTON (*University of Copenhagen, Denmark*)

The Mediterranean Stone Anchors and their Value for the Understanding Late Bronze Age Trade Systems: A Proposal for a Discussion

The value of the stone anchors of the Second Millennium Mediterranean for the understanding of Bronze Age trade has not been entirely exhausted. These anchors have been found from the Gulf to the English Channel and have been assigned to specific identities, including Cypriot and Egyptian. Some have been found in wrecks and some were incorporated into "religious" contexts without ever having been used. This presentation will begin by simply trying to sketch a map of their distribution in the Mediterranean and beyond as a means of delimiting the general geographical scope of the trade system. The next subject would be a quick review of the typology leading into the specific findspots

of the known anchors. The questions of their social identity and practical purpose have been frequently discussed, yet there is still no agreement about the most suitable way of integrating them into analytical models. This will allow an opening for the discussion of identity and usage where the author really would like to pose questions about the opinions of the workshop participants concerning their symbolic roles in antiquity and their analytical value for us.

Eli YANNAI (*Israel Antiquities Authority*)

The Trade in Black Lustrous Wheel Made Juglets from Cyprus, the Coast of Lebanon and the Land of Israel

Black Lustrous juglets were first found in the excavations at Tell el-cAjjul on the Gaza coast and in Egypt. Since they were first studied they have been considered foreign to the ceramic repertoire of the Land of Israel and many scholars believe they have their origins on the Syrian coast. Petrographic analysis has demonstrated that most of the juglets originated in Cyprus. Other studies have shown that the early juglets from this group were made in Cyprus during the Middle Cypriot period and that these juglets were also produced during the Late Bronze Age in Israel and on the coast of Lebanon. The trade in imported juglets and the production of similar juglets raises several questions: What was the reason for trading these juglets? What was the motivation behind the production of similar juglets on the coast of the Land of Israel and Lebanon? What were the dynamics and how did the Cypriot potters know to select the juglets that were traded with the Land of Israel? What was the reason that the population in the Land of Israel preferred Black Lustrous juglets? What are the similarity and relationship between preferring Black Lustrous juglets and the Base-ring juglets from Cyprus?

WORKSHOP / TALLER VI

The State of Iraqi Archaeological Heritage

(In memoriam G. Gullini)

Organized by / *Organizado por*: The Organising Committee

During the last editions of the ICAANE, the problems related to the archaeological patrimony of Iraq have always been object of attention. The effects of the impound and those caused by both wars, by the looting of the archaeological sites and the cultural patrimony and by the impunity of illegal international traffic in works of art have been treated in different manners. This Workshop wishes to re-examine the situation of the patrimony in its actual state, to value the results obtained in the different initiatives, to know the situation of the Iraq's National Museum and of the rest of the museums in the country, to support the efforts of the Iraqi professionals and to emphasize all what the professionals from all over the world are able to do in defense of the Iraqi patrimony, that is part of the Human Patrimony.

Durante las pasadas ediciones del ICAANE, los problemas relacionados con el patrimonio arqueológico de Iraq han sido siempre objeto de atención. Los efectos del embargo, los sobrenidos por ambas guerras, el expolio de los yacimientos arqueológicos y el patrimonio cultural, y la impunidad del tráfico internacional ilegal de obras artísticas han sido atendidos de distintas formas. Este taller quiere volver a plantear la situación del patrimonio en su estado actual, evaluar los resultados obtenidos por las diferentes iniciativas, conocer la situación del Museo de Iraq y los restantes museos del país, apoyar los esfuerzos de los profesionales iraquíes y hacer hincapié en todo cuanto los profesionales de todo el mundo podemos hacer en defensa del patrimonio iraquí, una parte más del Patrimonio de la Humanidad.

McGuire GIBSON (*University of Chicago, USA*)

Overview of the damage to cultural property in Iraq

I will give a brief overview of the damage to cultural property in Iraq, focusing especially on the looting of the complex housing the State Board of Antiquities and the Iraq National Museum. I will also discuss the continuing

destruction of sites through looting, military action, and development efforts. After some treatment of actions taken by various national and international bodies, I will and then invite the participants to give details on their own work to remedy the situation.

Carlo LIPPOLIS (*Centro Ricerche Archeologiche e Scavi di Torino, Italia*)

Italian restoration and conservation works on materials in the Iraq Museum

From the end of the 2003 conflict the Centro Ricerche Archeologiche e Scavi di Torino, in collaboration with Italian Directorate General for Antiquities, ICR and the State Board of Antiquities and Heritage of Iraq, has planned and organised first recovery measures on artefacts and new restoration laboratories in the Iraq Museum. The paper shortly summarize the works carried out by Italian restorers in 2004 and briefly illustrate some results of a previous project (2002) in Sennacherib's Palace at Ninive.

Roberto PARAPETTI (*Centro Ricerche Archeologiche e Scavi di Torino, Italia*)

Partial Reopening of the Iraq-Museum

In agreement with the State Board of Antiquity and Heritage of Iraq, Centro Ricerche Archeologiche e Scavi di Torino, already in the fall of 2003 started the necessary steps to make possible the re-opening of a sector of the Iraq Museum. The project aims at providing Iraqi citizens and visitors with the starting signal of a reconstruction process of the national identity through the re-conquest of their cultural heritage. In order to assure the highest security conditions on a medium-short term basis, the project foresees the re-opening of a few exhibition areas, where unmovable artefacts are already exposed, excluding those which were originally exhibited in show-cases. Therefore, the gallery of the monumental Assyrian sculpture from Nimrud and Khorsabad and the Islamic hall that gather a rich repertory of the architectural decoration, seemed to be the most appropriate spaces for the implementation of the project. Besides the above mentioned halls, the main porticoed courtyard was considered suitable for the exhibition of samples of Parthian sculptures from Hatra that since 1991, were transferred, for safety reason, to the Iraq Museum, but not exhibited.

Roberta MENEGAZZI (*Centro Ricerche Archeologiche e Scavi di Torino, Italia*)

Training program for restorers and archaeological conservators of the Iraq Museum

After the summer 2004 the Centro Ricerche Archeologiche e Scavi di Torino decided to develop the training activities for the restorers of the Iraq Museum in Amman. In December 2004, at the local Department of Antiquities started a full-immersion training program for restorers and archaeological conservators. During the whole period of the courses, the trainees had the chance to practise restoring Iraqi archaeological artefacts. The storerooms of the Amman Department of Antiquities preserved a large amount of antiquities confiscated by the Jordanian Customs and Police Authorities. Apart from the above mentioned training session, the archaeologists and experts of the Centro Scavi di Torino recorded the seized materials. The result of this working phase is the recently published catalogue "An Endangered Cultural Heritage: Iraqi Antiquities Recovered in Jordan".

ABSTRACTS OF POSTERS

RESÚMENES DE LOS PANELES

H. AKBARI
Ziwieh Ivories

Hala ALARASHI (*Maison de l'Orient et de la Méditerranée, Lyon*)

Les premières traces du nomadisme pastoral au Proche-Orient à la fin du Néolithique précéramique (7600-6400 avant J.-C.)

La domestication animale apparaît au Proche-Orient. Vers la fin du 9^{ème} et le début du 8^{ème} millénaire. Selon les données archéologiques, la naissance d'un nouveau mode de vie, «le nomadisme pastoral», pourrait alors remonter à la fin du PPNB (fin du 7^{ème} millénaire), dans les régions arides ou semi-arides de Syrie et de Jordanie, peu favorables en principe à des installations sédentaires. Ce mode de vie est caractérisé par une économie de subsistance reposant principalement sur l'élevage des caprinés (moutons, chèvres) et par une forte mobilité de toute la communauté. Ce poster se propose de dresser un inventaire des sites archéologiques dits «campements de pasteurs nomades» et d'examiner leur nature selon des critères archéologiques, ethnographiques et environnementaux. Il rassemble également les modèles et les hypothèses proposés par les archéologues concernant les origines du nomadisme pastoral.

M. AL-MAQDISSI, J. BRETSCHEIDER, H. HAMEEUW, G. JANS, K. VANSTEENHUYSE, G. VOET and K. VAN LERBERGHE (*Directorate-General of Antiquities (Syria) and Katholieke Universiteit Leuven (Belgium)*)

Living with the dead Tell Tweini: Middle Bronze Age tombs in urban context

The excavations at Tell Tweini/Syria have unearthed several types of Middle Bronze age tombs. During seven seasons the Syro-Belgian team discovered several jar and simple burials, a bee-hive structure and chamber tombs in an urban context. The rich inventories of these graves consist of seals, bronze ornaments, jewellery, a fenestrated bronze axe (duckbill variety), figurines and numerous red and black slipped juglets, Syro-Cilician ware vases and Cypriote White Painted jugs. Nearly all burials were undisturbed. Of particular interest is a collective chamber tomb containing 30 individuals built under the floor of a larger building. A red coloured basin and other installations seem to be connected to this grave. Middle Bronze Age funerary practices are viewed in a larger area of the northern Levant, focussing on the architectural connection between the living and the dead.

Dorothee ARCHAMBAULT, Olivier BARGE and Corinne CASTEL (*CNRS, Maison de l'Orient et de la Méditerranée, Lyon*)

Graves in the micro-région of Al-Rawda; diversity of types = diversity of populations?

379 graves have been counted so far in the micro-region of Al-Rawda, Central Syria. This region is 100 km² and centred on the site of al-Rawda which is a circular purposed built town dated from the last third of the 3rd millennium BC. This new town has been founded in a marginal zone, on the very edge of Bronze Age settlement in the steppe lands. The graves are either located in a necropolis zone or are isolated. They are mainly located in high-relief, in order to make them clearly visible. Al-Rawda's necropolis contains 78 graves settled on the occidental's board of the limestone plateau which dominates the town. In the micro-region itself, we can notice a broader diversity of the grave types. A Geographic Information System (GIS) has been specifically built in order to draft a first cartography of the different types of the graves encountered. As a result, it seems that the shaft tombs are consistently associated to habitation sites occupied by sedentary people during the Early Bronze Age. The other types of graves seem to be associated to pastoral's people which were travelling around the area. The excavation of each type of grave shows us a new picture of burial practices at the end of the Early Bronze Age in Central Syria.

Carolina A. AZNAR (*Harvard University-Universidad Complutense de Madrid*)

The Phoenician 'Red Slip Ware Thin-Walled Bowls'

The 'Red slip ware thin-walled bowls' are delicate, beautiful vessels with walls as thin as 2-3 mm that are mainly found in the Mediterranean Levant and Cyprus dating to ca. 9th - 7th centuries BCE. In the southern Levant, they are

one of the finest pottery types of the Iron Age II. Although these vessels were originally called ‘Samaria ware bowls’ because they were first identified in the Israelite capital city of Samaria, they had long been suspected to be a Phoenician manufacture on stylistic grounds (by scholars such as Bikai, Culican, and Mazar). A petrographic analysis of a group of these bowls from the southern Levant conducted by Aznar has proven most of the bowls were Phoenician indeed. It is probable they imitated metal bowls. In this poster, Aznar presents the refined ‘Red slip ware thin-walled bowls’ and their appearance, typology, and chronology; the main techniques used to make and decorate them; as well as the likely origin of manufacture of the type on the basis of the petrographic analysis of a group of these bowls from the southern Levant the author has conducted.

Los ‘cuencos de engobe rojo bruñido con paredes delgadas’ fenicios

Los ‘cuencos de engobe rojo bruñido con paredes delgadas’ (‘Red slip ware thin-walled bowls’) son delicados y bellos vasos con paredes con un grosor que puede llegar a los 2-3 mm que se encuentran sobre todo en el Levante Mediterráneo y Chipre, y que datan de los siglos IX a VII a.C. En el Levante meridional, estos cuencos son de los tipos de cerámica más exquisitos de la Edad del Hierro II. Aunque fueron originalmente llamados ‘cuencos de la cerámica de Samaria’ (‘Samaria ware bowls’) porque fueron identificados por primera vez en la ciudad capital israelita de Samaria, desde hace tiempo se venía sospechando, por criterios estilísticos, que en realidad eran una manufactura fenicia (como sugirieron investigadores como Bikai, Culican, y Mazar). El análisis petrográfico de un grupo de estos cuencos procedentes del Levante meridional llevado a cabo por Aznar ha probado que la mayoría de estos cuencos son, efectivamente, fenicios. Es probable que imitaran cuencos de metal. En este póster, Aznar presenta los refinados ‘cuencos de engobe rojo bruñido con paredes delgadas’ y su aparición, tipología, y cronología; las principales técnicas utilizadas para fabricarlos y decorarlos; así como el probable origen de manufactura del tipo según el análisis petrográfico de un grupo de estos cuencos procedente del Levante meridional que la autora ha realizado.

Leticia BARDA (*Israel Antiquities Authority*)

El aporte de mapas y descripciones antiguas en el ensayo de reconstrucción de sitios arqueológicos, periferias y rutas (con el uso del SIG)

El propósito de este poster es presentar un trabajo en el cual se combinarán los datos aportados por las descripciones y mapas de Conder, C.R. and Kitchen, H. H. (1881-1883 *The Survey of Western Palestine*) y Guérin, V. (1868-1869 *Description géographique, historique et archéologique de la Palestine*), con los datos de prospecciones y excavaciones actuales, obtenidos por medio de técnicas modernas como el GPS (Global Positioning System) y el GIS (Geographic Information System). ¿Por qué puede ser útil este trabajo? Todavía no se ha hecho una investigación sistemática de los datos aportados por prospectores de mediados y finales del siglo XIX, que sin embargo en sus mapas son de una sorprendente precisión. Visualizando esos datos y los nuevos aportes de prospecciones y excavaciones se puede llegar a una comprensión más concreta de límites, de la periferia agrícola y de rutas de acceso de lugares tales como Jerusalem, Yavne y otros lugares en diferentes períodos (en el poster se propondrán los períodos Romano y Bizantino).

Cristina BELLINO and Ada VALLORANI (*Università degli Studi di Roma “La Sapienza”*)

The Stela of Tell Ashara

The purpose of the present paper is to analyse the stela of Tell Ashara as emblematic monument exemplifying the stratification-process that occurs when cultures meet. Since its discovery, this piece of art has been the subject of several studies that examined the characters of its representation, its iconography and style as well as the cuneiform inscription. These studies have provided a detailed description enriched by a horizon of pertinent comparisons with the intent to understand the cultural context of the stela. However these same studies have pointed out basic problems that interfere with the ability to comprehend the meaning of the monument as a whole. Our aim is therefore to offer a further interpretation trying to determine the identity of the “commission order” and the “function” in the setting of a rather complex historical context in which different but close political spheres act.

Nicolas CAUWE (*Université Catholique de Louvain*) **P. L. VAN BERG** (*Université Libre Bruxelles*)

The archaeological site of Khishâm-2 (Hemma plateau, Hassake, Syria)

The site of Khishâm-2 is located in a valley cutting the eastern side of the Hemma basaltic Plateau. Area IV, covering ca half 5000 m², is built on the interfluvium of the wadi Kakhort and of a small tributary. After four seasons of fieldwork, the nature and function of most of the buildings on Terraces 2 and 4 has been determined. The soils belong to two occupation levels. The pottery found on the soils of the 4th Terrace as well as the stratigraphies studied in various locations suggest to assign the tested buildings to the neo-Assyrian period. Area IV was entirely enclosed by thick walls. Materials discovered so far show that we are dealing with an area of crafts and services, probably a walled outbuilding of a residential area located higher on the slope.

Serena Maria CECCHINI, Giorgio AFFANNI, Angelo DI MICHELE (*Dipartimento Studi Linguistici e Orientali - Università degli Studi di Bologna*)

Tell Afis, the walled Acropolis (Middle Bronze Age to Iron Age I) – A work in progress

Campaigns 2001-2005 revealed that the eastern side of the Acropolis of Tell Afis was continuously fortified from Middle Bronze Age to Iron Age I by various forms of architectural elements, well identified in distinct types for each period, even though some intra-site variability in the construction of the defences of Tell Afis citadel appears to have been the norm. The remains of huge foundationsless fortification mudbrick walls, dating to Middle Bronze Age, later covered by an earth rampart, were made of interseped fill layers. A Late Bronze Age defence stands over the rampart fortification mudbrick wall, built upon stone foundations. In this phase the slope was protected by a mudbrick glacis. Upon the latter wall, in Iron Age I, a fortification wall was set, built with mixed technique: a parallel double stone foundation, the inner one set up on a higher level, with the space between them filled by cast of clay soil and mudbricks; a rectangular shaped mudbrick wall was built over this masonry. In 2006 campaign a trench across the fortifications will enable us to recognize the most ancient defences phase.

Barbara CERASETTI, Valentina A. GIRELLI, Giampaolo LUGLIO, Bernardo RONDELLI and Massimo ZANFINI (*Università di Bologna*)

From monument to town and country: integrated techniques of surveying at Tilmen Höyük in south-east Turkey.

Through their application on the case study of Tilmen Höyük (a 2nd mill. BC town in south-eastern Turkey excavated by Bologna University and Gaziantep Museum), this work stresses the close connection of different survey methods, effective and of limited cost. They are all needed at the same time if one aims at fully extracting the historical information carried by ancient monuments and landscape. The philological surveying of a monument is a goal in itself building techniques and structural details add substantially to the information from the excavations. Close-Range Photogrammetry is applied for 3D description of the monument. The use of a total station combined with low altitude shots (through a kite) and photomosaics (through a pole) allow to create the basis for detailed surveying, after processing in monoscopic photogrammetry for orthorectification. Absolute georeferencing of the site, by means of spatial geodesy (through long GPS static observation), must be coupled to topographical and morphological surveys (through kinematic and fast-static GPS methodologies). The setting of the site within its landscape is done, at survey level, not only with GPS, but also through remote sensing methodologies, working on high and medium resolution satellite images (multispectral and radar), allowing for a close GIS archive.

Nicholas J. CONARD, Elham GHASIDIAN, Saman HEYDARI (*Universität Tübingen*)

Paleolithic Settlement of the Qaleh Gusheh Sand Dunes, Esfahan Province, Iran

Qaleh Gusheh is located several kilometers north of Arisman and is a low dune field within the Rig Boland, a belt of mobile dunes that lie to the northeast of the Karkas Mountains and southwest of the Latif Mountains of central Iran. Following the initial discovery of lithic artefacts on the surface of the dunes by members of the German Archaeological Institute in 2003, members of the Tübingen-Iranian Stone Age Research Project (TISARP) began systematic documentation of the sites in the Qaleh Gusheh region in 2004 and 2005. So far 26 sites have been studied, and we have documented occupation of the dune field as far back as the Middle Paleolithic. Unfortunately the sites in the Qaleh Gusheh region are being destroyed rapidly as irrigation-based agriculture expands into the dune fields. The TISARP team studied a number of localities and focused work in 2005 on the site of Bardia. Here we collected finds on the surface and conducted shallow excavations over an area of 196 m². The crew recovered 7680 chipped lithic artefacts that appear to date to the Epipaleolithic. The cores are mostly bi- and multidirectional platform cores, and tools include laterally retouched blades and bladelets, points, end scrapers and lunates. The diverse lithic raw materials provide excellent conditions for refitting and technological analysis. This paper presents an overview of the archaeology of the Qaleh Gusheh dune field and focuses on the site of Bardia to illustrate the region's potential for Paleolithic research.

Anna Maria CONTI (*Società Cooperativa ARX-Roma*) and **Carlo PERSIANI** (*Comune di Roma - Sovrintendenza Beni Culturali*).

The building sequence of the EB 3 settlement at Arslantepe (Malatya - Turkey)

Recent work on the former documentation of the Arslantepe VID period levels (about 2500 - 2000 BC), together with the restart of excavation from top of the tepe permitted a general reassessment of the local stratigraphic sequence. It was possible to reconnect the levels of different areas separated by later disturbances. It is now apparent that VID period comprises at least 4 main building levels, and the interposition of the so called "round houses" is related to different times all along the sequence. It is also clear that, after the "foundation" of the settlement on the southwestern slope at the end of period VIC, any renewal of the overall layout was undergone house by house and room by room,

using the main terraces formed by the larger buildings. This is a sign, together with other excavation data, of a cultural continuity lasted almost 8 centuries along the middle and late EBA.

C. CHATAIGNER (*CNRS, Maison de l'Orient et de la Méditerranée*), **P. LOMBARD**, **R. BADALYAN** and **P. AVETISYAN**

Aratashen, a 6th millennium BC settlement in the southern Caucasus: Where does this culture come from?

The Southern Caucasus remains poorly known for the prehistoric period. The excavation campaigns recently conducted by a French-Armenian mission at Aratashen in the Ararat plain have considerably advanced our knowledge of late prehistory in this region. The earliest layers of Aratashen (5900-5700 cal. BC) give evidence of an already well developed culture with a dense network of circular constructions, a remarkable development of the obsidian and bone industries, a near absence of pottery... Even if the mastery of cereal cultivation and preponderance of herding suggest links with the Fertile Crescent, the other cultural features differ profoundly from the 7th/6th mill. neighbouring Mesopotamian cultures (Proto-Hassuna and Hassuna), which are characterised by a rectilinear architecture, a pottery with varied decoration... This appears to exclude for the Aratashen culture an origin directly related to the northern Near East. Much more similar to Aratashen is the contemporary culture of Shulaveri-Shomutepe in the Kura basin, with the same circular buildings, the same rich obsidian and bone industries... It is then possible to postulate, at this stage of research, that Aratashen (plain of Ararat) and Shulaveri-Shomu (valley of the Kura) could be two variants of one culture, the exact origin of which remains to be defined.

Aurelie DAEMS (*Ghent University Belgium – Dept. of Languages and Cultures of the Near East and North Africa*)

Human Figurines from Neolithic and Chalcolithic Iran and Iraq: A Reassessment of Function and Use through material, morphology, type, damage and context

When it comes to understanding parts of the Neolithic and Chalcolithic Near East, human figurines always seem to come in handy. Up to today their function has often singularly been classified as 'ritual' or 'religious'. However, reassessing the material, morphology, type, damage patterns and archaeological contexts of groups of figurines can give us insights into other matters and issues with which people seem to have been concerned. In the present poster, some figurine samples will be highlighted in order to demonstrate that function and use can vary greatly according to material and morphology used for shaping a figurine or the damage patterns it encountered and the archaeological context in which it has been retrieved.

Maria Bianca D'ANNA, Romina LAURITO, Andrea RICCI (*Dipartimento di Scienze Storiche, Archeologiche e Antropologiche dell'Antichità, Università di Roma "La Sapienza"*)

Walking in the Malatya Plain (Turkey): Preliminary remarks on the Chalcolithic pottery and occupation.

During the three years (2003-2005) Archaeological Survey project conducted in the Malatya plain (Turkey), a meaningful Chalcolithic presence was recorded. These new data - integrated with results from previous surveys and excavations in the area - shed light as well as raise new questions on the 5th and 4th millennium B.C. occupation.

Ilaria DE ALOE (Collab. E. Rova) (*Scuola di Specializzazione in Archeologia Classica, Milano*)
A Preliminary Report on the 1995 Tell Leilan Survey: The Ceramic from the Hellenistic to the Sasanian Period

This poster presents a preliminary report on the results of study of the Hellenistic, Roman-Parthian and Sasanian pottery (III cent. B.C. – VII cent. A.D) collected during the 1995 Leilan survey directed by Prof. Harvey Weiss (Yale University). It describes the main diagnostic types used, the problems concerning their choice and dating, and discusses the pattern of settlement occupation derived from their distribution in the survey area. Hellenistic occupation was identified on the basis of well-known diagnostics which have a wide distribution all over northern Mesopotamia. It appears to have been widespread and homogeneously distributed on the territory, and suggests a period of relative peace and prosperity. The settlement rarefaction observed during the Roman-Parthian period can be correlated with the continuous fluctuations of the limes and the border-buffer function of the region. After the rise of the Sasanians, settled occupation suffered a drastic decline: large parts of the surveyed area were virtually abandoned, and probably given over to nomads and pastoralists. This depends on the continuing border function of the area, but is also in accordance with textual evidence by Ammianus Marcellinus which suggests a general drying up of the region, and a consequent

northwards shift of the dry farming isohyet. The study of pottery was made under the supervision of E. Rova (Venice University).

Kaatje DE LANGHE (*University of Ghent*)

Archaeological research concerning Early Christian material in the Arabian Peninsula and surrounding areas remains to suffer from a lack of popularity

Research in this area is quite new and it's only during the last two decades that some serious investigation concerning Early Christianity has been done. In my research I've tried, depending on trade routes, toponyms, cultural and architectural evidence, to clarify the spread, importance and downfall of the Christian community before the rise of Islam. This resulted in an overview of the sites in the region and their place within the whole of Eastern Christianity. A lot of sites haven't been thoroughly investigated or haven't been investigated at all. There are still a lot of questions concerning the role of the Christian community and their impact on the social organization of this area. Furthermore it is important to look into the role that the Nestorian cloisters played within the trade routes towards India and China. In short, there is need for attention towards this area of research and most of all there is great need for more research.

Johnny DE MEULEMEESTER (*Ministère de la Région wallonne, Direction de l'Archéologie, Namur (Belgium)*), **Denys PRINGLE** (*School of History and Archaeology, Cardiff University, Cardiff, Wales (Great-Britain)*), **Reem SHQOUR** (*Archaeologia Mediaevalis, Ghent (Belgium)*)

The Aqaba Castle Project. New excavation facts

It was probably not until the 1160s that a permanent Crusader military presence was established in Aqaba. Analysis of the historical documents however, shows that the Crusader castle that Saladin captured was on the island of Jazirat Fara'un. The Crusader attack probably gave the final blow to the early Islamic town. Subsequently, in Mamluk times the settlement, called al-'Aqaba developed in the vicinity of the present castle. The actual standing structures, have a later Mamluk layout. So the possibility that the fortification to which the Mamluk governor of Ayla transferred his residence around 1320 lay under the actual castle had to be considered. After 4 seasons of limited excavations, we can conclude that the site of Aqaba Castle has a much longer occupation history than was known; the overall structural phasing of the site may be summarized as follows:

subterranean

1. 9th-13th c.: Traces of hydraulic structures
2. 13th c.: First buildings
3. c.1260s: 1st khan
4. 14th/15th c.: 2nd khan

above-ground

5. c.1515-17th c.: 3rd khan or 'Castle'
6. 17th-18th c.: Rebuilding
7. c.1830 - present: Military fort, 1st W.W. destruction, 20th c. use

Tijs DE SCHACHT (*Ghent University*) and **Wouter GHEYLE**

Archaeological research and Corona: On the use, misuse and full potential of historical remote sensing data

In recent years, archaeological practice has shown the scientific value and relevance of declassified US satellite images, codenamed Corona. The use of cheap and easy to interpret high-resolution Corona images from the sixties and seventies has been promoted throughout several publications, especially publications concerning archaeological research in the Near East. However, most of the times the imagery is used in a purely visual interpretation on a single image, thereby neglecting the stereoscopic character, and thus full potential of the dataset. It can only be stressed that a stereoscopic combination of forward and afterward shots provides the archaeologist with a real three dimensional view: topes rise from the surface and morphographic details (relief) provide a full contextual base for further interpretation. Furthermore, a close look at the methodology of these projects shows that even the elementary photogrammetric characteristics are too easily ignored and/or remain unstated. As is the case for most high-resolution satellite data, Corona images are not orthophotos, and can therefore not be seen as a realistic depiction of the surface of the earth. Mapping sites, structures and features solely based on one geo-referenced (wrapped) photo therefore still incorporates structural errors.

Martine DE VRIES-MELEIN (*Institute for Geo- and BioArchaeology (IGBA), Vrije Universiteit Amsterdam*)

Hematite in Mesopotamia

Hematite in Mesopotamia was used for weights, seals and in metallurgy. The advanced communities of Mesopotamia relied heavily upon their environs for the supply of many raw materials. To understand these relationships is essential to our knowledge of Mesopotamian society, because the import of e.g. timber, metals and precious stones was vital to its social, political and religious development. The use of hematite is illustrative of the use of other non-indigenous materials in Mesopotamia. In my PhD-research I combine archaeological data, textual evidence, geochemical and mineralogical techniques to provenance the hematite, and investigate the diachronic fluctuations of its use.

Alessandro DI LUDOVICO, Cristiana PEZZETTA and Marco RAMAZZOTTI (*Università degli Studi di Roma "La Sapienza"*)

The Ninevite V Pottery in the Ideography of III and II Millennium Mesopotamian Geometric Patterns

Looking at the ancient geometrical patterns of Ninevite V pottery, it is possible to enucleate some physical constraints of the technique (incised, painted, excised) that are probably part of a communication system. This system seems to codify, in other compositional frames, the long experience of the more ancient Halaf and Samarra techniques passing by the Sumerian pictograms. The communication system that could be recognized in the Ninevite V figurative glossary has to be analyzed, on the one hand, in the light of the sender-receiver dialectic. On the other hand, it brings important testimony of a stage in the use of pottery as a medium for multi-level communication.

Alejandro EGEA VIVANCOS (*IPOA-Universidad de Murcia*)

Viajeros y primeras expediciones arqueológicas en Siria. Su contribución al redescubrimiento de Hierapolis y su entorno.

Frente al río actual, metamorfoseado por la creación de embalses y presas, el Éufrates del siglo XIX aún era empleado como río navegable, como lo había sido en la antigüedad. La información que ha perdurado de estos viajes resulta insustituible ya que muchos de los vados y puntos de barcazas de su tiempo eran, con seguridad, los empleados hace dos mil años, al igual que son vitales los datos sobre ruinas y restos a lo largo de la orilla. El valor de las expediciones de Henry Maundrell, Richard Pococke, conde de Volney, Francis Rawdon Chesney, von Oppenheim, Gertrude Lowthian Bell, Woolley o René Dussaud es incalculable. Muchas de ellas conocieron el país aún intacto, sin que hubiera actuado todavía el progreso y los medios de transporte sobre el paisaje. Estos primeros exploradores se encontraron con la oportunidad de apreciar el entorno natural tal y como lo describían los autores clásicos. De gran valor nos resultan las distintas descripciones de la antigua ciudad sagrada, Hierapolis, la actual Manbiç.

Yilmaz Selim ERDAL (*Department of Anthropology, Hacettepe University*)

Sign of yarn production on the anterior dentition among Kovuklukaya female skeletons

The purpose of the study is to describe an unusual dental wear on anterior dentition of the human skeletal remains unearthed from Kovuklukaya (Sinop, Northern Anatolia; 8th-9th century AD). Skeletons of 5 females out of 25 individuals (20%) have transversal grooves on occlusal surfaces of the incisors. The grooves on the anterior dentition were found only on female skeletons. The findings are interpreted with ethnographic study due to the lack of archaeological data reflecting the lifestyle of the Kovuklukaya people. According to the direction of grooves and the ethnographic data, the idea that the unusual abrasion observed in the Kovuklukaya population may be linked to passing yarn between the anterior teeth to wet it. Ecological characteristics and ethnographic data indicate that the possible sources of the grooves are animal fibers like wool and mohair rather than vegetal fibers. That the grooves in the population were found only on female skeletons indicate the existence of a sex-based division of labor in the yarn production; the origin of present day yarn production by females may have descended from past communities, constituting a cultural continuity throughout ages.

Mücella ERDALKIRAN (*Ege Universtiy*)

The Halaf Ceramics Şırnak Area in Turkey

The province of Şırnak is located at the southeastern Anatolia and shares the same borders with Syria and Iraq. This region, surrounded by the Tigris river and its tributaries is considered as a part of the Upper Tigris region. Şırnak, as an extension of Upper Mesopotamia, has housed an amassed settlement from the Neolithic period until today. In Şırnak, mainly in Cizre-Silopi plain, the systematic archaeological surveys have been executed since 2004. In this context, so far totally 44 settlements were determined in the region. In 17 of these sites, such as Takyan, Basorin, Amarzava, Nervan and Gire Tehali, ceramics belonging to the Halafian period were uncovered. Halafian ceramics are

grouped into 3 different wares like Monochrome Painted Ware or undecorated Halaf Fine Ware, Lustrous Polychrome Painted Fine Ware and Mat Polychrome Painted Fine Ware. On the other hand, the forms can generally be grouped as convex-sided bowls with simple, incurving or flat rims, carinated bowls, goblets, cream bowls, hole mouth pots, necked jars with simple or everted rims, flat bases and lids. Even though the decoration is frequently geometric, some naturalistic patterns can also be detected. The rich decoration and form corpus of the ceramics of Şırmak region corresponds to all phases of the Halafian period. The Halaf period was more extensively searched in Northern Syria and Northern Iraq. Hopefully, by this study which is being carried out in Şırmak area, a better understanding for the Halafian culture, especially within Anatolian borders, may be supplied. The aim of this poster is to illuminate the role of Şırmak, which is found in the heartland of the Halafian landscape, in the whole Halafian ceramic assemblage and culture. This work may enable us to figure out one more missing piece of the Halafian puzzle.

Doris FEHLMANN, Mechthild LADURNER, Anne LYKKE (*University of Vienna, Austria*)

Broadening Horizons in Nabatean Archaeology: The Wadi ath-Thamad Regional Project.

This poster deals with the application of earth-science methods to our forthcoming nabatean archaeology project in the Wadi ath-Thamad region in central Jordan. Our project is a part of the multinational "Wadi ath-Thamad Regional Project", directed by Prof. Dr. M. P. Daviau, Wilfrid Laurier University, CA. - A historical overview of the development of "geoarchaeology" provides the base for a discussion of current contextual studies in landscape archaeology such as the "Wadi ath-Thamad Regional Project". Our project deals with the study of Nabatean settlements, agriculture and trading routes in the Wadi ath-Thamad region. The study area is a region consisting of plateaus and often deeply cut wadis where it is particularly inevitable to know and consider the geological context when carrying out archaeological field research. Primary geological studies provide a dynamic physical context for dates retrieved by archaeological surveys. In order to develop theories concerning settlement patterns, it is necessary to know about the percentage of sites still remaining as well as about their nature. Therefore it is essential to be able to determine what portions of sites have been lost through erosion or been buried by later sedimentation. Additional geological studies such as soil micro-morphology, particle size analysis and soil profile description, provide a rather good insight in features as (wadi) water supply, precipitations as well as palaeo-climatology in general.

Elena FELLUCA (*Italian Archaeological Expedition at Ebla, University of Rome "La Sapienza"*)
and Silvia MOGLIAZZA (*Laboratorio di Antropologia della Soprintendenza per i beni Archeologici del Lazio*).

Under-floor burials in a middle bronze age domestic quarter at Tell Mardikh – Ebla, Syria

The Italian Archeological Expedition at Ebla carried out excavations from 2002 in the Old Syrian domestic quarter in Area B East located in the Lower Town, at the foots of the Acropolis, between Sanctuary B2 to the West and the Southern Palace on east side.

Several well-preserved houses were brought to light, separated by streets and provided by installations such as wells, water-channels and pipes, platforms, fireplaces and ovens. Two funerary contexts the floors in two different houses were found during the 2003 and 2004 seasons: D.9375 in L.8668, is a single infant-burial inside a vessel buried under SW corner of the room; D.8974, under NE corner of L.8665, is a seven infants-burial: two childrens were placed into a jar closed with a plate, three infants or fetus were buried in a cooking pot and two other infants or fetus were placed in small pits near the vessels. The burials can be dated to the very end of the Middle Bronze IIB (ca. 1700-1600 BC), and they are related to the last architectural phase of the houses. The rituals and funerary practices are compared with those attested in other contexts at Ebla and in Syria-Palestine during Middle Bronze I-II (ca. 2000-1550 BC).

S.FESTUCCIA- M. ROSSI (*Università degli Studi "La Sapienza" di Roma*)

Latest Phases of Tell Mardikh/Ebla (Syria): Area P Lower Town.

Within the framework of the project to turn Ebla into an open archaeological museum, new restoration operations called for the opening up of new trenches in the lower city sector where the main sacred area of the Middle Bronze (P area) had been discovered. New excavations were performed in front of Temple P2 and reached westwards to the area border. Late stratification data observed at Ebla are the results of the last ten years of excavation in the western sector of the lower town. This investigation covers the phase between Persian-Hellenistic and Roman periods.

Dr Francesca FRANCESCHINI (*Italy*)

The Kurgan tumuli in the Middle Zeravshan: New technologies and new excavations for the study of nomadic peoples in Samarkand region.

The Middle Zeravshan Valley and the Samarkand region represent one of the principal geopolitical and cultural knots for the ancient population of Central Asia. One of the keys to reading and to reconstruct the dynamics of this territory

exploitation are the definition of the spaces among nomadic and sedentary peoples. Since 2003, within the joined project italo-uzbek “Archaeological Map of the Middle Zeravshan Valley”, archaeological excavations have been effected in the kurgan necropolis near the village of Sazagan. The interest for the study of the nomadic necropolises is born from the idea that the grave was for the nomads not only the container of the rests of the ancestors or the symbol of a social hierarchy, but also a tangible sign of the occupation of the territory. Therefore, the burials further to be analyzed as testimony of the rituality and the relationship with the death, will be analyzed in the project as territorial marker. An important contribution, has been the employment of the remote sensing and survey for the recognition of sites and for the study of the evolution of landscape.

Elena FELLUCA (*University of Rome “La Sapienza”*)

Ceramic evidences from Bampur: A “key” site to reconstruct the cultural development in the Bampur valley during the third millennium B.C.

Bampur is a Third Millennium settlement in south-eastern Iran, Persian Baluchistan, located on the banks of the Bampur river which flows from east to west emptying into Hamun-i Jaz-Murian depression. The archaeological interest of the Bampur Valley was first revealed by Sir Aurel Stein’s survey in 1932. Later on B. De Cardi led in 1966 a short excavation campaign at the base of the modern fort (tranches Y and Z for a total of 24 m²). In the trench Z, the virgin soil was reached at the depth of about 7 m and six interlocked layers of superimposed mud-brick wall structures excavation were brought to light, with a Third Millennium B.C. sequence, important to relate the pottery of those periods to the cultural facies of the surroundings regions. B. de Cardi points out that there are two main cultural complexes in this sequence: Bampur I-IV and Bampur V-VI. In 2004, S.M.S. Sajjadi led a brief excavation campaign, digging some trenches, which did not reached laers dating to the Bronze Age. The chronology of Bampur was controversial, with some scholars suggesting a high chronology (half of the Forth Millennium B.C. – half of the Third Millennium B.C.) and other preferring a low chronology (from the half of the Third Millennium B.C. to the early Second Millennium B.C.). Nevertheless, pottery recovered at Bampur in the 1960s can now be better dated and understood, thanking to recent discoveries in the Halil valley (Kerman Province) and in the Oman peninsula. The Bampur I-IV culture was marked by a strong local style that point to the persisting and omogeneous character of the pottery and its external affinities, notably with Shahr-i Sokhta II-III and Mundigak IV, 1-2 in Sistan, and Tepe Yahya IVC in Kerman province. In phase V the stratigraphical and stylistic evidence points to the end of the Bampur I-IV and its replacement by a culture probably alien origin that submerged of the local inhabitants. The intrusive pottery of phase V, and its pahase VI derivative, show strong links with Kulli culture and reflecting Harappan influences. The pottery of Bampur V-VI show cultural contacts with Fars, Makran and Oman, notably with Hili, Umm an-Nar and a late Third Millennium B.C. tomb at Tell Aqrab. Other links there are with Shahr-i Sokhta IV, Mundigak IV and the Shahdad Cemetery A. The Bampur pottery show omogeneous characters with several sites in Bampur valley and Halil valley.

Agnès GARCIA VENTURA (*Universitat Pompeu Fabra, Barcelona*)

Textile wrappings in the Ur III period: Textile remains and impressions

Textiles are one of the less studied archaeological remains. On the one hand, in contexts like Mesopotamia in the second millenium BC, few textile remains have been preserved because of the climatic conditions. On the other hand, textiles have been ignored in places, like Egypt, with abundant remains, because they have been considered secondary archaeological remains in comparison with the discoveries which are found next to the textiles. This last circumstance could be explained because textiles have often been used as wrappings for people or for goods; thus research has given priority to the study of contents versus the containers. In this poster we focus textiles that are good containers, especially those from the Third Dynasty of Ur. We also consider textile remains as such and textile impressions on clay tablets and seals too. The study of the materials includes the contexts and uses of the wrapped goods and the technological features of the fabrics to make the analysis of the relationship between contents and containers possible.

Elham GHASIDIAN (*Universität Tübingen*), **Ahmad AZADI** (*ICTHO*), **Saman HEYDARI** (*Universität Tübingen*) and **Nicholas J. CONARD** (*Universität Tübingen*)

Paleolithic Survey in the Basht Region of the Southwestern Zagros, Iran

The Basht region is located in southwestern Iran near the foothills of Zagros Mountains and on the edge of the Khuzestan Plain. Recent archaeological research has documented many new Epipaleolithic, Upper Paleolithic and several Middle Paleolithic sites. So far the members of the Tübingen-Iranian Stone Age Research Project (TISARP) have collected lithic assemblages from 15 sites, most of which are associated with caves and rockshelters. Compared with published data from other sites of Zagros region including Yafeh, Gar Arjaneh and Pasangar, the assemblages from the Basht region document new patterns of blade and bladelet production. Particularly noteworthy are diminutive, single platform, conical and semi-conical bladelet cores. We assume that assemblages containing these cores and associate débitage date to the Epipaleolithic, or to the Late Baradostian and Zarsian in Solecki’s terminology. This paper presents the technology and typology of the new sites from the Basht region and compares the laminar

technologies documented at these sites in the southwestern Zagros with laminar technologies known from other parts of the Zagros Mountains. While this report focuses on the late Paleolithic occupation of the region, we will also present data from Middle Paleolithic, Upper Paleolithic and Neolithic sites located during the surveys done in 2004 and 2005.

Kevin GIBBS (*Department of Anthropology, University of Toronto*)

Pierced Clay Disks and Late Neolithic Textile Production

Pierced clay disks, fashioned from potsherds, are often found on Late Neolithic sites in the Near East. Several suggestions have been offered to explain the occurrence of these objects (e.g. gaming pieces, accounting tokens, pendants, jar-stoppers), but the most common suggestion is that they were used as spindle whorls for spinning yarn or thread for textile production. A collection of pierced disks from the Late Neolithic site of Tabaqat al-Bûma in Wadi Ziqlab, Jordan, was examined to determine the production sequence of these objects and to assess their suitability for use as spindle whorls. In accordance with the determined production sequence, replicas of a number of the disks were affixed to wooden spindles and used to spin several types of fibres, including flax and animal hair. The results of the analysis and experimental testing suggest that the pierced disks could have been expedient spindle whorls. This fits with a model that sees Late Neolithic textile production as a part-time household craft.

Amir GOLANI (*Israel Antiquities Authority*), **Amir GORZALCZANY** and **Yossi NAGAR**

Newly Discovered Burial Practices of the Chalcolithic and the Early Bronze Age I in Southern Canaan – Evidence of Cultural and Ethnic Continuity?

Recent studies of the early Early Bronze Age I material culture in Southern Canaan during the 4th millennium BCE have indicated a certain continuity with the preceding Chalcolithic culture of the Northern Negev that thrived in the late 5th millennium. The early EB I occupation at Ashqelon, among other sites in the southern coastal plain, has been proposed as representing the material culture of Chalcolithic cultural groups that relocated to the southern coastal plain after the collapse of the Chalcolithic geo-cultural sphere of the Northern Negev. New evidence may now serve to bolster the suggestion of cultural continuity and possibly imply an ethnic continuity as well. In Southern Canaan, Chalcolithic burials are usually found as intra-site child and infant burials while adults and sub-adults were generally accorded secondary burials in clay or stone ossuaries or troughs in caves or burial structures outside of sites. Primary burials are usually not the norm, and may represent a preparatory stage to the more common secondary burial stage. During the EB I in Southern Canaan, infants and adults are usually found in primary and possibly also secondary burials in caves with burial goods, all outside the habitational sites. Excavations at the Early Bronze Age site of Ashqelon Barnea have revealed numerous intra-site infant burials, uncommon for this period, in jars and within small mudbrick cists that resemble ossuaries or burial troughs. In addition, a hitherto unknown form of secondary burial of adults in small stone cists attached to one another in “ladder” form was revealed outside and adjacent to the site. Similar burials have also been found at Chalcolithic burial ground near Palmahim, also located in the southern Canaanese coastal plain. The intra-site infant burials associated to the EB occupation at Ashqelon and common at Chalcolithic sites as well, in addition to secondary adult cist burials at both Ashqelon and Palmahim, suggest a cultural continuity between these two periods that may be attributed to the same cultural and ethnic group that resided in Southern Canaan throughout the Chalcolithic and into the Early Bronze Age.

Anna GÓMEZ BACH (*SAPPO, Universidad Autònoma de Barcelona*)

Las producciones cerámicas del Halaf final en Siria: Tell Halula (valle del Éufrates) y Tell Chagar Bazar (valle del Khabour)

Las producciones cerámicas procedentes de Tell Halula y Tell Chagar Bazar pertenecientes al horizonte Halaf ponen de manifiesto la complejidad económica y social de esta comunidad a partir de unas series cerámicas y para dos zonas bien diferenciadas de la Jezirah siriana: El Valle del Éufrates y el valle del alto Khabour. A partir del estudio de dos conjuntos cerámicos procedentes de las excavaciones arqueológicas realizadas entre 1996-2002 en los dos yacimientos se hace un análisis de la morfología, técnica y tipología de estas producciones y un estado de la cuestión de la cultura Halaf, en su última fase conocida como el Halaf final.

Sébastien GONDET and **Corinne CASTEL** (*CNRS, Maison de l’Orient et de la Méditerranée, Lyon*).

Geophysical Survey and Urbanism on the Site of Al-Rawda (Central Syria, Early Bronze Age).

The site of Al-Rawda which is excavated since 2002 by a franco-syrian team is situated in the Shamiyeh, on the very edge of Early Bronze Age settlements in the steppe lands. The very slight disturbance of the archaeological levels of the latter part of the Early Bronze Age, accessible on the surface, has led us to carry out a geophysical survey on the

tell of Al-Rawda in 2003 and 2005 to understand the urbanism of the site and explore its surroundings. These surveys reveal a regular urban plan with a dense infrastructure. This infrastructure is organised around a radio-concentric road network. The domestic and monumental buildings respect generally the general organisation of the town. One of the temples in antis has been discovered thanks to the geophysical survey without any excavation. The organisation of the constructions and the road network reveals an elaborate urban plan which was not subjected to any later disturbance. These results combined with those obtained from excavation enable the site of Al-Rawda to be considered a new town founded at the end of Early Bronze III or the beginning of Early Bronze IV by a sedentary population. Its situation, far from the usually urbanized regions, confirms the existence of a conquest of the Syrian steppe at the end of the third millennium. The comparison with other sites occupied during the same period seems to show that an urban pattern existed which is characteristic of Syria during the Early Bronze Age. These towns are circular, fortified and organised around a radio-concentric road network. Furthermore, the geomagnetic survey conducted in the depression where Al-Rawda is installed indicates an extension of the town out of the city wall. It confirms also the existence of divided plots and crude hydraulic structures to take advantage of natural water flows for agriculture.

A. GOTTARELLI (*Università di Bologna*) and **Alessandro COLANTONI** (*Università degli Studi di Roma «La Sapienza»*)

A Formalized Approach to Pottery Typology: The Case of Some Typical Shapes from the Late Bronze Age in Northern Syria

Through the application of an experimental automatic process for the classification of pottery shapes, the development of some typical typologies from the Late Bronze Age in Northern Syria has been preliminarily studied here. From the Middle Euphrates to the Middle Orontes valleys to the Amuq plain, pottery coming from stratified contexts have been organized into a formalized typology for each of the various subphases of the LBA, trying to use both intuitive and an experimental automatic process methods. A relative chronology for the excavated contexts of the sites of this area is also put forward.

Raphael GREENBERG, Mark ISERLIS, Sarit PAZ and Ron SCHIMMELMITZ (*Tel Aviv University*)

The Potter's Craft at Tel Bet Yerah: Early Bronze II—Middle Bronze I

Three case-studies will be presented:

- 1) The Southern Potter (EB II—III): Convincing evidence for the activity of a potter based in the southern part of Tel Bet Yerah has emerged from several excavations. 15 tournette elements, unfired pottery, flint burnishers and a rich pottery repertoire testify to the nature and extent of this activity.
- 2) The Granary Kiln (EB III): Several installations found in the latest occupation of the Granary testify to the activity of an EB III potter. The installations include a kiln and a series of stepped pools. A possible relation with Khirbet Kerak Ware—found in quantity near these installations—is proposed.
- 3) A Syrian Potter? (MB I = MB IIA): Kilns and large quantities of pottery from the early 2nd millennium were found at the southeast tip of Tel Bet Yerah. The forms presented have remarkable affinities with contemporaneous North Syrian products

E.B. GROOTVELD (*Leiden University*)

Settling the steppe – botanical research

The multidisciplinary project “Settling the Steppe; the archaeology of changing societies in Syro-Palestinian drylands in the Bronze and Iron Ages” focuses on human settlement in marginal zones or drylands. The project started in 2004. The research of the archaeobotanical remains from the Deir 'Alla region in Jordan will contribute to the understanding of the agricultural use of space in the Iron Age II and III. By focussing on the weeds, hopefully by the end of the four year project it will be possible to say whether irrigation was used, and on what soils people had their agricultural fields. Therefore, the archaeobotanical research is done in close cooperation with the geophysical research. After two seasons of fieldwork, the archaeobotanical remains from Tell Adliyah and Tell Damieh have been processed and some preliminary results will be presented with this poster.

Ralph HEMPELMANN (*Johann Wolfgang Goethe - Universität Frankfurt am Main*)

Kharab Sayyar: The foundation of the Early Bronze settlement

Kharab Sayyar is located in the Syrian Jezira between the rivers Balikh and Habur, 15 km to the Southeast of the more famous Tell Chuera. Scientific excavations in Kharab Sayyar began in 1997 as a joint venture between the Department of Antiquities of Syria and the Johann Wolfgang Goethe-University in Frankfurt. Until now seven seasons of research have been carried out at the Early Bronze Age - tell, where within one trench 24 construction phases have been

unveiled. They date from the end to the very beginning of the third millennium. Kharab Sayyar is therefore, one of the very few Syrian settlements with a complete sequence from the Early Bronze Age. This paper deals with the oldest phases that have been reached so far and focus on the following questions: When was Kharab Sayyar founded, who founded Kharab Sayyar and why was it founded?

Morteza HESSARI

Preliminary report of stratigraphy of Idier

Saman HEYDARI, Elham GHASIDIAN and Nicholas J. CONARD (*Universität Tübingen*)

Paleolithic Geoarchaeology of Travertine and Tufa Formations in Iran

While the Iranian Paleolithic sites from the caves and rockshelters of the Zagros region are widely known. Current research of the Tübingen-Iranian Stone Age Research Project (TISARP) have documented many new, open-air Paleolithic localities. Recent survey has focused on regions containing travertine and tufa deposits, and our initial results point to these formations as attractive places for Paleolithic research. These geomorphological features are formed around the outlets of hot spring in areas of Quaternary volcanic activity. Volcanic systems exist in a long and wide belt in the Central Plateau of Iran from the Bazman Mountains in the southeast to the Sahand Mountains in the northwest of the country. Hunter and gatherer societies used these geological features for stone knapping, hunting and living sites. Some of the sites in travertine and tufa deposits have yielded large assemblages of lithic artifacts. Here we discuss the relationship between the travertine and tufa deposits and Paleolithic settlement in these regions. Among many travertine and tufa deposits in Iran, to date very few of them have been surveyed for Paleolithic sites. Where we have looked, the results have been encouraging. Many of these mineral-rich, geothermal springs have formed carbonate deposits which provide good settings for the preservation of cultural materials. The TISARP surveys demonstrate the essential importance of systematic geoarchaeological research for gaining a better understanding of the Paleolithic prehistory of Iran.

D. HOMÈS-FREDERICQ (*Univertisé Libre Bruxelles*)

The Belgian excavations at al-Lahun (biblical Moab region). Past and Future

Al-Lahun is located 82 km South of Amman, in the ancient kingdom of Moab, often mentioned in the Mesopotamian, Egyptian, Biblical, Moabite and Ammonite texts. It has a strategic position, overlooking the Wadi Mujib, (biblical Amon), not far from the so-called "King's Highway", the main N-S road axis between Syria and Arabia. This will contribute to its prosperity as the place controlled the ancient commercial and political road. The excellent climatologic conditions explain also why nomads and settlers have alternatively visited the region in Antiquity. The Belgian excavations, under the direction of Prof. D. Homès-Fredericq, give an overview of the history of Jordan in general: the most important remains are the Palaeolithic flints, the settlements of the Early Bronze I-III, the fortified village of the Late Bronze/Iron I, the cliff hanging fortress of the Iron II, the Nabataean temple, the Mamluk Mosque and the Ottoman houses. In the future, the site of al-Lahun, the dighouse and an Ottoman house will be transformed into a Geoarchaeological Park, an Archaeological Museum and a Folklore Museum as a contribution from the European Union.

Heide HORNIG and Florian JANOSCHA KREPPNER (*Institute for Near Eastern Archaeology, Freie Universität Berlin*)

A Neo-Assyrian Chamber Tomb in Dur-Katlimmu

Excavations of the Middle - and Neo-Assyrian town Dur-Katlimmu/Magdalû are conducted in Tall Sheikh Hamad (North-Eastern Syria) by Prof. Dr. H. Kühne, Freie Universität Berlin since 26 years. An extensive research programme was attended to the Neo-Assyrian lower town but so far Neo-Assyrian graves had not been found. During the 2003 campaign the excavations concentrated on the Operation "Neo-Assyrian Residences". Under "Building 1" the oldest occupation phase of the "Lower Town II" dating to the late ninth century BC was studied. The work brought to light a Neo-Assyrian tomb which belonged to this period. It was composed by a chamber (2,50 x 1,80 m) and a stepped dromos. Ancient robbers destroyed the vaulted chamber and the burial. But they left human and animal bones and some objects. The human bones were not assembled in their anatomical order due to the tomb raiders. They were dispersed all over the chamber but were part of only one individual. The bones including the skull were found in a fragmented condition. All the skeletal elements permit the diagnosis that the bones belonged to a very gracile female person who died at the age of 20 to 22.

H. HORNIG (*Freie Universität Berlin, Institute of Human Biology and Anthropology*), **C. NIEMITZ** and **M. SCHULTZ**

Anthropological aspects of the Parthian-Roman cemetery of Tall Sheikh .amad: Paleodemography and isotope analyses of human remains.

Since 1978, 657 skeletons of the antique settlement of Magdala in Tall Sheikh .amad, Northeastern Syria, have been excavated by the Institute of Near Eastern Archaeology (H. Kühne, Freie Universität Berlin, Germany). From about 200 BC until 250 AD the cemetery was used by the Parthian population as well as by the Romans. The age distribution of the Parthian-Roman population shows a rather low mortality of children (nearly 26%) which is rare for ancient times. The highest mortality (28.5%) was found in the mature age class (40-60 years). The mortality rate of the female individuals of the adult age class (20-40 years) is much higher than that of the male individuals of the same age class, possibly due to pregnancy and childbirth stresses. Due to the low mortality during childhood and adolescence the life expectancy at time of birth is around 33 years. The dietary customs and the environmental conditions of the Parthian-Roman population will be reconstructed by means of stable isotopes (Nitrogen, Carbon, Oxygen) analysis. The isotopes were extracted from human bone collagen and bone carbonate. Oxygen isotopes, for example, can indicate the geographical pristine region as well as migration patterns.

Akemi KANEDA and Lidewijde de JONG (*Stanford University*)

Excavations at Tell Sheikh Hasan in the Balikh Valley, Syria

Previous investigations have shown that Tell Sheikh Hasan was occupied from the Hellenistic (323-64 BCE) into the Early Islamic period (661-1099). However, it is unknown how the ancient settlement developed and transformed through the centuries. The chronological relations between visible remains at the tell have not yet been defined. In the last season (2005), test-trenches were dug along side a monumental square building, the city wall and several rooms in the commercial district in order to determine the building date and construction. It could be concluded that the stone architecture under investigation dates to the Early Islamic period (661-1099) on the basis of pottery sherds from the foundation trenches. These results shed a new light on the Early Islamic building activity and settlement development in the Balikh valley. This poster presents the primary results of the 2005 excavations at Sheikh Hasan.

Piotr KURZAWSKI (*Institute of Prehistory, Faculty of History, Adam Mickiewicz University in Poznan, Poland*)

Assyrian Outpost at Tell Sabi Abyad: Architecture, Organization of Space and Social Structure of the Late Bronze Age Settlement

The PhD project was initiated in 2005 as a cooperation between Prof. Peter Akkermans, M.A. Piotr Kurzawski and Prof. Rafał Kolinski. A main task of the research is a spatial-functional analysis of the Middle Assyrian settlement at Tell Sabi Abyad in Syria. The analysis includes three stages: 1. architecture, 2. organization of space and 3. social structure. The first, beside the description of architectural remains excavated at Sabi Abyad, will concentrate on the artefacts with their context that were found inside or in the direct proximity of buildings. The second stage, will be focus on areas situated next to the buildings and in the neighbourhood of the settlement. It will also consider such problems as an access to the buildings and to the settlement, together with courtyards, corridors, passageways etc. The stage social structure, will concern a reconstruction of social and economic relations inside the settlement. Primarily, it will base on cuneiform tablets that were found at Sabi Abyad. The main purpose of the research, by means of modern archaeological theories, is to understand how the inhabitants of Sabi Abyad perceived their own settlement. Furthermore, the comparison of Sabi Abyad settlement to the other outposts in the Near East dated to the Late Bronze Age.

Romina LAURITO, Cristina LEMORINI and Emanuela CRISTIANI (*Dip. di Scienze Storiche, Archeologiche e Antropologiche dell'Antichità, Università di Roma "La Sapienza"*)

Seal Impressions on Cretulae at Arslantepe: Improving of the Methodological and Interpretative References

In the palace at Arslantepe (Malatya - Eastern Turkey) of the end of the 4th millennium B.C. (Period VI A) thousands of cretulae were discovered. On these cretulae about 180 seals have been identified but no one seal has been found during excavations. A preliminary research -presented at ICAANE 2004- has allowed to set up the methodological basis for the interpretation of seals in terms of raw material and manufacturing techniques by means of naked eyes and microscopical observation on cretulae. The implementation of the reference collection and the observation of actual seals (from Arslantepe VII and VI B and later periods) have enriched and reinforced the parameters for interpreting raw materials chosen by craftsmen for the production of seals. Up to now the results obtained for cretulae from Arslantepe underline the interpretative potentialities of the adopted methodology.

C. LAZZARINI – C. FRANK (*ArchéOrient, Maison de l'Orient et de la Méditerranée, Lyon*)

Complexes funéraires de prestige au III^e millénaire en Syro-Mésopotamie.

De nombreuses fouilles ont mis en évidence, tant en Mésopotamie méridionale que dans la Diyala ou dans le Moyen-Euphrate syrien, l'existence de regroupements (sous forme de nécropole ou non) de sépultures particulières, dont les caractéristiques communes sont la monumentalité, leur intégration dans le tissu urbain ou leur proximité immédiate de la ville. D'après les interprétations des différents fouilleurs, ces « complexes » étaient des zones sépulcrales destinées et réservées aux élites, et, pour cette raison, volontairement visibles. Les études, site par site, de ces monuments se sont concentrées sur les raisons idéologiques de l'implantation des tombes. A partir d'un essai de synthèse de la documentation disponible, ce poster tentera de dresser une typologie des complexes et des unités les constituant, suivie par une analyse comparative de la répartition topographique de ces regroupements. L'analyse de la dynamique générale de leur formation permettra de mieux comprendre la logique et les fondements idéologiques de ce type de pratique funéraire, sans doute correspondant à la volonté de rendre manifeste le prestige et le pouvoir d'une catégorie sociale spécifique.

Cristina LEMORINI (*Università "La Sapienza" di Roma*), **C. ALVARO**, **Giulio PALUMBI** and **Paola PICCIONE**

From the analysis of the archaeological context to the life of a community. "Ethnographical" observations on the Arslantepe VIB2 village

The aim of this work is to underline the significance of a multidisciplinary and complementary approach pointing out the daily life of an early third millennium community. Two categories of materials, lithics and ceramics, have been chosen to bring to light the cultural dynamics at work in this village. Data from the production and the function of lithic tools by means of traces analysis have allowed to identify the range of activities related to stone objects in this settlement. Moreover, a morphological and functional approach to ceramics has enriched the picture given by lithic tools. The repositioning of the scattered sherds has brought to the reconstruction of post-depositional dynamics and to a better definition of the internal spaces and activity areas. Finally, the identification of the qualitative and spatial relations between the ware groups (wheel-made, Red-Black, kitchen pottery) has allowed a general understanding of functional meanings within the local cultural system. The analyses of materials have been related to their archaeological context and to the place in which they were found. This perspective has emphasized the organisation of space inside each structure, the presence of specialised working areas and the functional relationships between the village structures.

P. LOMBARD (*Archéorient - UMR 5133 Maison de l'Orient et de la Méditerranée*), **R. BADALYAN** (*Institute of Archaeology and Ethnography Armenia*), **P. AVETISYAN** (*Institute of Archaeology and Ethnography Armenia*) and **C. CHATAIGNER** (*Archéorient - UMR 5133 Maison de l'Orient et de la Méditerranée*)

Aratashen, a 6th millenium BC settlement in the southern Caucasus: Where does this culture come from?

The Southern Caucasus remains poorly known for the prehistoric period. The excavation campaigns recently conducted by a French-Armenian mission at Aratashen in the Ararat plain have considerably advanced our knowledge of late prehistory in this region. The earliest layers of Aratashen (5900-5700 cal. BC) give evidence of an already well developed culture with a dense network of circular constructions, a remarkable development of the obsidian and bone industries, a near absence of pottery... Even if the mastery of cereal cultivation and preponderance of herding suggest links with the Fertile Crescent, the other cultural features differ profoundly from the 7th/6th mill. neighbouring Mesopotamian cultures (Proto-Hassuna and Hassuna), which are characterised by a rectilinear architecture, a pottery with varied decoration... This appears to exclude for the Aratashen culture an origin directly related to the northern Near East. Much more similar to Aratashen is the contemporary culture of Shulaveri-Shomutepe in the Kura basin, with the same circular buildings, the same rich obsidian and bone industries... It is then possible to postulate, at this stage of research, that Aratashen (plain of Ararat) and Shulaveri-Shomu (valley of the Kura) could be two variants of one culture, the exact origin of which remains to be defined.

Ofer MARDER, **Ianir MILEVSKI**, **Rivka RABINOVICH**, **Oren AKERMANN** and **Ruthy SHAHAK-GROSS** (*Israel Antiquities Authority, Hebrew University of Jerusalem, Bar Ilan University, Weitzmann Institute*)

The Lower Paleolithic site of Revadim Quarry, Israel

This poster will focus on the recent excavations at the Lower Paleolithic site of Revadim Quarry, Israel. The site is located on the southern coastal plain (40 km southeast of Tel Aviv). Some 250 m² were excavated in several areas, where at least three superimposed layers of occupation were revealed. The flint industry is very rich, including

numerous core tools (e.g. handaxes, choppers) and retouched elements, assigned to the Late Acheulian. In addition, the site has one of the largest assemblages of straight tusk elephant (*Palaeoloxodon antiquus*) from the southern Levant. Numerous bones were found including tusks, teeth, scapula, pelvis, vertebrae, ribs and long bone shafts. We will present a synopsis of the nature of the flint industry together with the taphonomical observation of the formation processes at the site, and spatial distribution patterns as well.

El sitio Paleolítico inferior de la cantera de Revadim, Israel

Este poster resumirá las recientes excavaciones en la cantera de Revadim (Israel), un sitio datado en el Paleolítico Inferior. El yacimiento está ubicado en la planicie costero sureña, 40 km al sudeste de Tel Aviv. Han sido excavado unos 250 m² en diferentes áreas, revelándose por lo menos tres niveles de ocupación superpuestos. La producción de instrumentos de sílex es muy rica, incluyendo utensillos realizados sobre núcleos (e.g. bifaces, chopping tools) y piezas con retoque, asignados al Achelense Tardío. Además, el sitio posee uno de las más grandes colecciones de elefantes de colmillos rectos (*Palaeoloxodon antiquus*) del sud del Levante. Se ha hallado un gran número de huesos que incluyen colmillos, dientes, escápulas, pelvis, vertebras, costillas y extremidades. Se presentará una sinopsis de la naturaleza de la producción de los instrumentos de sílex conjuntamente con una observación tafnómica de los procesos de formación del yacimiento y patrones de distribución espacial.

Juliette MAS (*Université Lumière-Lyon II, Maison de l'Orient et de la Méditerranée Jean Pouilloux Archéorient UMR 5133*)

Third Millenium Pottery from Tell Ashara-Terqa: Preliminary Results

Third Millenium Pottery from Tell Ashara-Terqa (Middle Euphrates, Syria), found during recent excavations and still unpublished, provide us with interesting new data. The study of this material allows us to replace the site of Terqa in the general archaeological landscape of the region, better showing its role in the economic and political dynamics of the period: Terqa is in a key position between Northern and Southern Mesopotamia. The ceramic material from the IIIrd millennium levels of the site give evidence of the different links Terqa kept up with several areas in Syria and in Mesopotamia, however its study also shows the force and the continuity of the local culture; witnessed also later, during the second millennium, by different typologies of the material culture, as well as by the cuneiform traditions. This poster will present the main elements of the IIIrd millennium ceramic typology from Terqa, and their relations with the productions of other Syrian and Mesopotamian regions, together with the first conclusions we can get from this evidence.

Abe MASASHI (*School of Archaeology, Classics and Egyptology, Univ. of Liverpool*)

Tabular scraper production in the Jafr Basin, Southern Jordan

The Chalcolithic and Early Bronze Age in the Southern Levant witnessed major social and economic changes. These changes led to appearance of urban fortified centres by the Early Bronze Age II. Developments of craft specialization are major innovation among these changes. A variety of Chalcolithic and Early Bronze Age objects were produced only by limited members or groups in societies. It is generally assumed that some stone tools such as Canaanite blades and tabular scrapers were also knapped by craft specialists. Tabular scrapers are typical tools in the Chalcolithic and Early Bronze Age. However most of sites have no traces of production. Therefore it is generally accepted that most of sites probably imported tabular scrapers from the outside. Recent surveys in the Jafr Basin, Southern Jordan by a Japanese team located a number of tabular scraper production sites. The surveys found about 60 sites in total. Amazingly nearly a half of recorded sites are tabular scraper production sites. Several tabular scraper production sites have been excavated from 1997 and stone tool assemblages are being analyzed by the author. This poster will present results of surveys and excavations at tabular scraper production sites in the Jafr Basin, Southern Jordan.

Nebal MHISEN (*Université de Lyon II*)

The king and his image in Syria during the Middle Bronze Age through glyptical and textual sources.

The aim of this ongoing Ph.D. research is the study of the representation of the Syrian kingship during the Amorite period (ca. 2000-1600 B.C), essentially through glyptic evidence, supplemented by sculpture, wall paintings, and written sources from the same period. The main zone covered is the valley of the Middle-Euphrates in Syria. Comparisons will also be made, however between other Syrian, Anatolian, Levantine and southern Mesopotamian sites. Our main interest here concerns those objects which derive from clear, stratified archaeological as well as cultural contexts. Our methodology consists in defining a precise iconographic corpus, which will allow the revision of past conclusions and the proposal of new identifications and interpretations regarding the king's role in its artistic as well as written expression. We may distinguish different models of "royal image" in each Syrian region of ancient Syria. Texts of different types (religious, political, and administrative) highlight various aspects of the ruler's activity as a priest and warrior. The contribution offered by our study is based on the confrontation of the glyptic evidence on one hand and

the textual data on the other, in order to characterize aspects of political and religious power in the society of ancient Syria.

Christophe NICOLLE, (*CNRS-Paris*), **Virginia VERARDI**, **Hélène CRIAUD**, (*Université de Paris I*) and **Nicolas ENGEL** (*Musée Nationaux-Paris*)

Tell Mohammed Diyab au III^e millénaire

Après plusieurs saisons consacrées à la fouille des niveaux de la première moitié du II^e millénaire, un nouveau programme a été mis en œuvre depuis l'automne 2005 pour étudier les différents niveaux du III^e millénaire de Tell Mohammed Diyab (Djézireh Syrienne). La première fondation importante du site semble remonter à la fin de la période Ninivite V avec un aménagement du tell en terrasses à degrés. Rapidement, la superficie d'occupation du site dépasse 45 ha. Des occupations de la période akkadienne et de l'extrême fin du III^e millénaire sont aussi attestées. Le poster résume les premiers éléments disponibles (architecture, céramique, métal) qui permettent de tracer un premier portrait de cette importante agglomération du Nord de la Mésopotamie.

Tell Mohammed Diyab during the IIIrd millennium

After several seasons dedicated to the study of the 1st half of the IInd millennium levels, a new excavation program started in autumn 2005. The aim of this new program was to study the different levels of the IIIrd millennium of Tell Mohammed Diyab (Syrian Jezirah). The first settlement of importance of the site seems to begin at the end of the Ninivite 5 period, with the building of several terrace levels on the tell. Soon the area of occupation of the site covered more than 45 ha. Occupation levels from the Akkad and end of the IIIrd millennium are also detectable. This poster summarizes the first discoveries (architecture, ceramic, metal finds) that enable us to draw the first picture of this important Northern Mesopotamian city.

Bart OOGHE (*Ghent University, Dept. of Languages & Cultures of the A.N.E.*)

Creating Truth: the Chari Sa'deh canal(s)

The Chari Sa'deh, a (series of) large, dry canal bed(s) located west and south of the Euphrates in present-day Iraq, first appeared in European texts in 1765, when it was described by Danish explorer Carsten Niebuhr. It was almost immediately assimilated into purely academic literature, where from the start a mingling occurred between theorization and observation as the canal becomes identified with the Neo-Babylonian Pallukkatu or the Sassanian Khandaq Shapur. By deconstructing the academic discourses which adopted, distorted or wholly ignored first-hand observations of the canal, this poster will lay bare a process in which literary-academic traditions are created and re-created on the basis of limited material evidence, strengthened through repetition and finally able to displace the original feature altogether, which is all but forgotten by the middle of the 20th century. This provides insight into mechanisms which over time give rise to a variety of academic 'truths'. Noting that the same mechanisms are at present still distorting academic views on the matter, the study pleads towards a more methodical and critical approach to this material than has so far been attested in Mesopotamian landscape research. After reviewing the 'evidence', it also proposes a new partial reconstruction of the forgotten landscape feature.

Iris N. OTTE

Human Burial Record and Mortuary Practice at Tell Sabi Abyad

Over the last 2 decades, the continuous excavations at Tell Sabi Abyad have revealed a reasonable sample of well-preserved human burials. The ones so far investigated include individuals that could be attributed to roughly two periods: the Late Neolithic (mid 7th -6th millennium BC) and the Late Bronze Age (late 13th and 12th century BC). The archaeological record was enriched by osteological information, resulting in a better understanding of the mortuary practice at the site for both archaeological periods and reinforcing the importance of interdisciplinary research. For the Late Neolithic and before the 2005 field season, no true burial ground has been discovered. The burials dating to this period are all dispersed within the settlements and, with the exception two peculiar adult graves, only include non-adult individuals. The Middle Assyrian burial record shows an entirely different population sample, with both adult and non-adult individuals being equally represented. The richness of the mortuary data is evidenced by the considerable variability, among other things, of burial types, grave inventory, and spatial location of the graves.

Mihriban ÖZBASARAN (*Istanbul University*)

A SPECIAL ACTIVITY SITE of 8th MILL (CalBC) in CENTRAL ANATOLIA, TURKEY.

The poster aims to present the preliminary results and the interpretation of the data of seven seasons of excavations at the 8th mill CalBC site of Musular in Central Anatolia/Turkey. Musular is located very close (ca. 400 m) to the Pre-pottery Neolithic settlement of Aşıklı Höyük - the early sedentary village whose economy was dependent on hunting

and gathering and agriculture as well. The argument is Musular was established by the people of Aşıklı Höyük during its late phase. It is a special activity site. The exposed remains, the finds imply that the activities had to do with hunting, specifically wild cattle where site was used as a working and processing area of the hunted. Moreover, the public character of the area, the need of communal and organised activity for cattle hunting, the importance of cattle in neolithic times when considered altogether suggest that the site might have had a special significance for Aşıklı people beyond practical needs.

Friedhelm PEDDE (*Assur Projekt, Vorderasiatisches Museum, Berlin*)

The Assur Project

Ashur, the first capital of Assyria, was excavated between 1903 and 1914 by the German Oriental Society under direction of Walter Andrae. The finds were divided between Germany and the Ottoman Empire and were brought to the Vorderasiatisches Museum in Berlin and the Eski Sark Museum in Istanbul. Because the excavators were architects, the building complexes were published, but most of the 44.000 archaeological finds were not examined and remained unpublished. After the reunification of East and West Germany a cooperation between the German Oriental Society, the Vorderasiatisches Museum and the Free University of Berlin was initiated. The work of the “Assur Project” began in 1997. Thirty archaeologists and assyriologists are examining the documentation of the excavation and the archaeological objects. These finds are made of clay, stone, metal, and other materials. Among them are objects of art and daily life, like manifold written documents, building materials and ornaments, seals and sealings, implements, weapons, jewelry, sculptures, vessels and much more. With the new data bank of the project these objects are to be documented and analysed.

Paola PICCIONE (*Dipartimento di Scienze storiche, archeologiche ed antropologiche dell'antichità, Università di Roma “La Sapienza”*)

Walking on the Malatya Plain

Changes in the settlement pattern through the first half of the 3rd millennium BC (EBA I-II): some preliminary remarks on the results of the 2003-2005 Archaeological Survey Project. As the results of the recent survey project undertaken by the University of Rome “La Sapienza” show, major changes in the occupation of the Malatya plain (Eastern Anatolia) seem to take place between the end of the 4th and the beginning of the 3rd millennium BC, and then, again, after the first quarter of the 3rd millennium BC. Aim of this poster is to illustrate the results of the new researches – integrated with the ones from previous surveys and excavations - in order to present a general overview of the sites of the EBA I and II. Through the analysis of the ceramic finds, attention will be paid to a definition of the chronology of the sites. Moreover, we will focus on the crucial passage between the two periods, trying to relate the changes in the settlement pattern with the events at the major site of Arslantepe, in the hearth of the plain.

Béatrice ROBERT (*Université Lumière Lyon 2, Laboratoire Archéorient*) **A. LASSALLE** (*CRPAA - UMR 5060*) **and R. CHAPOULIE** (*CRPAA - UMR 5060*)

New data about Prehistoric Pottery Technology using the Cathodoluminescence Method

Ceramic classification and pottery technology have always been and are still under discussion. In this field of interest, sherds from Tell Shimshara (Iraq) and Tell Sabi Abyad (Syria) have been investigated to know more about the paste (fabric, plant or mineral temper, firing atmosphere and temperature...). The general framework is an archaeological research of a PhD about the origin of the Halafian culture. Here we are focusing on data brought by analytical methods used in physics and chemistry. The main objective is to reconsider prehistoric ceramic assemblages coming from many excavation sites and more particularly to investigate the material by analysing the luminescence phenomenon under electron bombardment. Thus, are presented new outcomes obtained with cathodoluminescence on Hassunan-Samaritan and pre-Halafian sherds coming from two different geographical and cultural regions. They allow two sets of information: i) a new way for the classification of these ceramic sherds, ii) the knowledge of firing features which can be revealed through the cathodoluminescence approach. Then archaeological and typological data can be completed and some technological features can be identified and understood.

Béatrice ROBERT (*Université Lyon 2*) **and Hubert MAHOT** (*University of Versailles-Saint-Quentin-en Yvelines*)

Dating Halaf Ceramics from Tell Masaikh

The ongoing excavations on the site of Tell Masaikh, Syria, have led to the discovery of various Halaf remains and of an important repertoire of ceramics. This poster focuses on the problem of dating this body of material. Its intent is to underline the characteristics allowing an accurate attribution of the prehistoric occupation of Tell Masaikh to the

chronological subdivisions in the Halaf sequence. Considering this issue, we will examine the most distinctive features of this assemblage, which are:

- Surviving shapes and patterns from anterior Halaf phases (Early and Middle),
- Polychrome painted motifs (with special attention given to animal motifs), a characteristic of the Recent Halaf phase,
- Monochrome painted pottery,
- Red-slipped pottery,
- Hybrid sherds (displaying some traits referring to the Halaf ceramics and other traits to the Ubaid ceramics), and
- Surface-manipulated pottery (inspired by the so-called "Dalma Impressed Ware"), those last four features are typical of the next phase, transitional between Halaf and Ubaid periods.

This overview of ceramic data leads to conclude that the prehistoric occupation of Tell Masaikh was at least partly contemporary with the two latest subdivisions of Halaf period: Recent Halaf phase and Halaf-Ubaid Transitional phase.

Marco ROSSI (*Università degli Studi "La Sapienza" di Roma*), **Valeria BRUNORI**, **Fausto GABRIELLI** and **Elisabetta PRUNAS**

Tell Deinit- Syria MEDA Project n. 15 (2002-2004) Restoration Training Programs

The University of Pisa Mission activities are recently enriched with the important Tell Deinit MEDA Project. This Cooperation Project between Europe and Syria started in 2002 and consisted in the complete treatment of the materials found during the long Syrian excavation on the site; an Italian team directed by M. Rossi is constituted by Italian archaeologists and technicians from the Universities of Pisa, Bologna and Rome. During the project several restoration training programs has been conducted by V. Brunori, F. Gabrielli and E. Prunas, as archaeological photography and the restoration of different kind of materials (stone, metal, pottery).

Elyas SAFFARAN (*Département d'archéologie et art Université de Shahrekord*)

Fondation du département archéologie par Dr. SAFFARAN à l'Université de Shahrekord. Un démarche envers l'enseignement de l'archéologie dans les régions en développement d'Iran

L'université de Shahrekord (Shahrekord) est située à l'ouest de la province de Chaharmahal Bakhtiari. Dans l'année 1948, cet université a commencé ses travaux comme branche d'université d'Ispahan. Puis, selon les améliorations du complexe dans la province, avec l'aide du ministère de la Science, recherche et technologie, et l'acte ont passé par le ministère en 1992, le complexe changé en Université de Shahrekord. En ce qui concerne la conception, censée pour être accompli en 20 ans, 106000 mètres carrés ont été consacrés aux secteurs éducatifs, pour assurer le bien-être de chaque et de même sens actuellement l'université a 6 corps enseignant comme: Faculté d'agriculture, Faculté de la Science, Faculté de vétérinaire, Faculté de la littérature et des sciences humaines et Faculté de d'art. Mais entre tous les départements qu' existe à cet université, le'un des plus important est la fondation du département archéologie par les efforts de Dr. SAFFARAN et ses collègues en 2002 qu'on a fait un démarche envers l'enseignement de l'archéologie et aussi conservation, restauration et sauvetage des sites archéologiques et des biens culturelles dans les régions en développement ou pauvres d'Iran. Donc dans cet présentation de poster on a bien expliqué l'importance et l'influence de ce sujet et ses programmes scientifiques de l'enseignement et de la recherche sur les différents points ou situation des héritages: archéologique, culturelle, historique, touristique, naturelle etc de cette province.

Gisela STIEHLER-ALEGRÍA

Kassitische Siegel aus stratifizierten Grabungen: Statistische Untersuchungen des Fundmaterials

Of the published middle Babylonian-kassite cylinder seals, less than 20% were discovered during stratified excavations, the majority being acquired mainly in the 19th century. Most of the regular pieces come from sites outside of the Babylonian heartland. A large treasure was found in Thebes, Greece. The only legend of those regular seals which bears a royal inscription, belongs to a seal from Thebes and refers to Burna-Buriáš. The most important contribution for dating kassite glyptic stems from the archives of clay tablets. Our largest source is Nippur, the origin of approximately 70% of the material. A small number of kassite seal designs were identified within the impressions of the Nuzi archives and some middle Assyrian spots. The illustrated examples originate from controlled expeditions and give a representative cross-section of the kassite seal designs.

Weniger als 20% der bekannten mittelbabylonisch-kassitischen Siegelzylinder wurden bei stratifizierten Grabungen geborgen, während die Mehrzahl aus dem Handel stammt. Die meisten der regulären Stücke stellte man in archäologischen Fundplätzen außerhalb des babylonischen Kerngebietes sicher, wobei besonders der Hortfund aus Theben, Griechenland, hervorzuheben ist. Von allen Siegeln mit stratifiziertem Hintergrund trug nur der Zylinder aus Theben eine Legende mit Königsinschrift, nämlich die des Burna-Buriáš. Den wichtigsten Beitrag zur Datierung der kassitischen Glyptik liefern die Tontafelarchive. Den größten Anteil mit ca. 70% des Materials liefert Nippur, weitere Belege kommen aus den Tell Zubeidi. Eine erheblicher Anzahl kassitischer Siegelabdrücke wurde in den Archiven von

Nuzi, Assur und anderen Plätzen identifiziert. Die vorgestellten Glyptikbeispiele stammen aus kontrollierten Grabungen und geben einen repräsentativen Querschnitt der kassitischen Siegelthemen wieder.

Yukiko TONOIKE (*Yale University*)

Beyond Style: Petrographic analysis of Dalma ceramics in two regions of Iran

Dalma ceramics, dating to the fifth millennium BC, have been identified in two widely separated regions in Iran, northwestern and central Zagros. Stylistic characteristics show strong similarities between the two regions and archaeologists have speculated, based on geography, climate, and ethnography, that Dalma ceramics originated in the northwestern Zagros and were carried into the central Zagros as a stylistic element intrusive into a local tradition through such measures such as trade, seasonal transhumance by nomadic groups, or migration of whole villages. However, the possible mechanisms for its distributions cannot be substantiated through traditional stylistic analyses alone. Studies utilizing various archaeometric techniques have proven effective for such purposes elsewhere in the world. For this study, I have used petrographic analysis to provide insight into the technological style of Dalma ceramics and the nature of possible interactions between the two widely separated regions of Iran. By examining the technology of Dalma ceramics in comparison with local ceramic traditions in the two regions, I address questions of local versus foreign manufacture, and imitation versus importation. This analysis is the first step in a larger archaeometric study of Dalma ceramics.

Klaas VANSTEENHUYSE (*Katholieke Universiteit, Leuven*), **Michel AL-MAQDISSI** (*Directorat Général des Antiquités et Musées, Syria*), **Patrick DEGRYSE**, (*Katholieke Universiteit Leuven*) and **Karel VAN LERBERGHE** (*Katholieke Universiteit Leuven*)

The distribution of Mycenaean ceramics in the Kingdom of Ugarit

While the majority of Late Helladic ceramics in the Levant has been found within the city limits of Ugarit, little is known about the distribution pattern and related mechanisms of those ceramics in the hinterland of the kingdom. An interesting corpus of Late Helladic sherds has been excavated by a Syro-Belgian archaeological mission at Tell Tweini (Jebbeh), ancient Gibala, which formed the southern border of the Late Bronze Age Kingdom of Ugarit. The excavation procedure allows one to discuss the local consumption and discarding pattern, as well as the possible appreciation of those ceramics as objects of art within this second-order urban settlement. This data also aids in understanding the trade connections between Tell Tweini and the larger Mediterranean but in particular those with the nearby city of Ugarit. Stylistic study suggests a close relationship with Ugarit. The growing corpus of regionally manufactured Late Helladic ceramics further complements the data for such network. Ugarit may have served, however, as the only port of trade in its entire kingdom regulating the import of Late Helladic ceramics from Cyprus. The results of chemical analysis of Late Helladic ceramics from Tell Tweini may further illustrate this connection.

Valentina VEZZOLI (Collab. E. Rova) (*Università Ca' Foscari di Venezia*)

The Islamic Period Settlement in the Tell Leilan Region (Northern Jazīra): The Material Evidence from the 1995 Survey

This poster presents the results of the study of the Islamic pottery collected in the 1995 Tell Leilan survey directed by H. Weiss (Yale University). It provides a description of ceramic groups and diagnostics which allow a reliable dating for the occupation of the surveyed sites. Special attention was devoted to Glazed Pottery, whose chronological developments are better understood thanks to the stratified evidence from sites excavated in Syria, but Unglazed Pottery, which shows distinctive local features, was also taken into account. Six phases (Early Islamic, 'Abbāsid, Ayyūbid, Mamluk, Late Islamic, Ottoman) could be distinguished. The chronological limits for the Islamic occupation have thus been fixed between the 9th century and the Late Ottoman Period (early 20th cent.). No evidence for settled occupation was found for the first Islamic period (7th–8th cent.); after this, the number of occupied sites increases, reaching its peak during the 12th–14th cent., while a drastic decrease occurs from the 15th century. This pattern of settlement development is discussed in the wider context of archaeological investigation of the Islamic period in Northern Mesopotamia and Syria, and compared with data from textual sources. The study of pottery was made under the supervision of E. Rova (Venice University).

Bernhard WENINGER (*Universität zu Köln*), **Eva ALRAM-STERN**, **Eva BAUER**, **Lee CLARE**, **Uwe DANZEGLOCKE**, **Olaf JÖRIS**, **Claudia KUBATZKI**, **Gary ROLLEFSON** and **Henrieta TODOROVA**

Climate Forcing due to the 8200 calBP event observed at Early Neolithic sites in the Eastern Mediterranean

Nurcan YALMAN (*Istanbul University. Archaeology Dept.*)

An Alternative Interpretation on the Relationship Between the Settlement Layout and Social Organization in Çatalhöyük Neolithic Site: An ethnoarchaeological research in Central Anatolia.

The relationship between settlement layout and social organization has been one of the major problem in Catalhoyuk Neolithic site as the other prehistoric sites. In this research we aimed to provide an alternative approach to help the interpretation of the data for Catalhoyuk. The study has been carried out in three Central Anatolian contemporary/modern villages that have different settlement layouts. But general characteristics such as locating in a large region (Central Anatolia), origin and religion of communities are kept same. Therefore, we could perceive the reasons of the visual difference in terms of the settlement layout. Change and variation are taken as major problems in archaeology. Thus, temporal and spatial scales have become the major structural frame in our ethnoarchaeological research. Consequently, it is understood that, there are other dynamics which are really effective on shaping a settlement layout beside economy and environmental characteristics. These are regional history, history and social identity of the community itself. This result has helped us to interpret some of the internal dynamics and processes in Catalhöyük site and community.