In addition, the talk will focus on the archaeological work in the Oman Peninsula which has played an active role in the trade with Mesopotamia and the Indus Valley. Third millennium sites along the coast include Ras Al-Jinz/Ras Al-Had, Kalba, Tell Abraq, Um An-Nar. Similar development can also be demonstrated at third millennium sites which are widely distributed in the interior of Oman e.g. Bat, Hili, 'Amlah, and Wadi Bahla.

4) Ryan Byrne, Johns Hopkins University

Arabs in Neo-Assyrian Provinces

This paper seeks to synthesize the recently edited Suhu cuneiform texts from the middle Euphrates with contemporary epistolary records from provincial Assyrian governors, both of which treat the movement of Arabs through eighth century BCE Syria. While the Suhu texts have aroused the interest of the biblicists, principally due to their insights on Aramaeans in eastern Syria, they are particularly germane for dating early Arab commercial penetration of eastern Syria. A survey of Assyrian records suggests that the fall of Damascus represented a watershed event for the spread of Arab commerce and culture to eastern Syria and the Assyrian homeland. The paper will argue that Arabs were likely well established north of Gilead prior to 732 BCE, but were restrained from trading further east until Tiglath-Pileser III removed the Damascene stranglehold.

5) Uzi Avner, Arava Institute for Environmental Studies

Prehistoric Cult Sites in the Negev and Sinai Deserts, in Relation to the Arabian Peninsula

Great similarities are found between archaeological remains, sixth–third millennia BC, in the Negev and Sinai deserts, and the Arabian Peninsula (as well as the Sahara desert). In this presentation I will focus on the similarities of cult sites from both areas: standing stones, open sanctuaries, “crenelations,” stone alignments and several types of tombs. From the distribution of cult sites and their studies, several conclusions are suggested:

A. The large numbers and variety of cult sites in the desert give the impression that the desert population was highly active and creative in the spiritual, religious domain. The concentration of cult sites along ancient roads testify to a vast movement of people, goods and ideas throughout the desert, during the late prehistory. The similarity of cult sites in different areas, as well as other types of sites, hint at a cultural and religious koine shared by desert populations, with some local variations.

B. The cult sites reflect a well established religion since the sixth millennium BC, and indicate an early emergence of some religious concepts in the desert, prior to their occurrence in the fertile countries. One of the principle ideas was the abstract, uniconic representation of deities. This theology was later shared by the Jewish religion, the Nabatean religion and Islam; all with obvious desert roots. Hence, we find that the desert populations, although inferior in material culture, had the power to influence the population of the sown in the fields of religion and philosophy.
A3, New Discoveries from Materials Science in the Archaeology of the Near East
Elizabeth S. Friedman, University of Chicago, Presiding

6) Nahum Applbaum, Hebrew University and Ya'akov H. Applbaum

The Study of Ancient Ceramic Technology with the Aid of Medical Computed Tomography

The study of ancient ceramic technology has long been a field of interest for many archaeologists. Long ago, radiological techniques such as x-radiography and xeroradiography have proven to be contributive in obtaining information on the internal structures and composition of clay and ceramic artifacts—vital information in the study of ancient technology. At the 1998 ASOR annual meeting we presented the first fruits of our research in which we have developed methods to make use of standard medical computed tomography (CT) in order to study clay and ceramic archaeological artifacts. We now wish to offer an update of our research in which we will present a series of studies we have conducted on a wide range of clay and ceramic archaeological artifacts such as ceramic vessels, burial masks, and figurines. We will demonstrate how the use of our method has helped in the understanding of a wide range of technological questions in the manufactory of these artifacts. In each case we will emphasize the contribution and advantages of computed tomography over previously used radiological techniques.

7) Elizabeth S. Friedman, University of Chicago

New Technology, Old Clay—Old Technology, New Clay: Ceramic Analysis of Early Bronze Age Anatolian Metallic Ware

Third millennium BC Anatolia experienced a surge of technological activity documented, in part, by the appearance of tin-bronze and Anatolian metallic ware. The incorporation of “metallic” ware into the Early Bronze Age ceramic repertoire, and the use of ceramic crucibles in tin smelting, underscores the relationship between the metal and ceramic industries. Although the thin, hard, dense metallic ware has many metal-associated attributes, back-scattered electron images show that the fabric is not vitrified. Energy dispersive spectrometry demonstrates that the Anatolian metallic ware was manufactured from a magnesium-silicate rather than an aluminum-silicate clay. This paper employs a materials science approach to show that the new ceramics were manufactured, not from new technology and old clay, but from old technology and new clay. The exploitation of this alternative clay source is just one of many technological choices that the ancient potters had to make.

8) Yuval Goren, Israel Finkelstein, and Nadav Na’aman, Tel Aviv University

Egyptian Administration in Canaan—Evidence from the Petrographic Study of the Tell el-Amarna Cuneiform Tablets

The Amarna archive consists of ca. 380 clay tablets, writ-ten in Akkadian in cuneiform script, which constituted part of the diplomatic correspondence of Pharaohs of the fourteenth century BCE. At this time Canaan was an Egyptian province, governed by Egyptian administrators who were stationed in a few major centers. These included Gaza, Jaffa and Sumur on the coast, and Kumidi and Beth-Shean inland. The Canaanite correspondence includes tablets sent from city rulers under direct Egyptian domination. Our research is aimed at locating the provenance of about 300 tablets through mineralogical and chemical analyses.

Letters of safely identified cities in Canaan, such as Byblos, Tyre, Hazor, Megiddo, Shechem, Jerusalem, and Ashkelon, have mineralogical and lithological composition that is in agreement with their geological environment. However, some of the letters of the Canaanite city-states were made of raw materials which do not fit their location. These tablets make two groups, made at Gaza and Beth-Shean. These letters were sent by city rulers, under special circumstances, from these Egyptian administrative centers. The circumstances in which letters were dispatched from the Egyptian centers are under investigation.

9) Sophia Stos-Gale, University of Oxford, Miriam S. Balmuth, Tufts University and Christine M. Thompson, University of California, Los Angeles

Lead Isotope Analysis to Determine Provenience of Ore in Hacksilber

“Hacksilber” hoards of broken and cut pieces of silver are found in Near Eastern sites of the second and first millennia BCE. Identification of sources of this metal provides insight into the contemporary trail of silver as it was produced and traded. So far the most successful method for the study of silver mining and its relationship to trade in antiquity is lead isotope analysis. Lead isotopic compositions of ore deposits from different geographical regions vary according to their geological history. This isotopic “fingerprint” passes unchanged into the metal produced from the ores.

The Isotrace Laboratory of Oxford has been collecting samples from all known European and Levantine ore deposits to determine diagnostic fingerprints for data base comparisons with ancient artifacts. The Hacksilber Research Project, supported by INSTAP, the Kress Foundation, and Tufts University, includes analyses of over 100 pieces of silver; the results are recorded in a new database containing contextual information about the hoards. Preliminary results indicate that some silver artifacts from Near Eastern sites were made from Aegean ore and some from Iranian. Production of this metal increased in the mid-second millennium BCE. Since testimonials confirm that silver was regularly used as means of payment in the Bronze Age, increased production might have facilitated the emergence of coinages a millennium later. So far, the earliest silver found on Near Eastern sites originates from present-day Iran. Silver from Spain and Sardinia is also represented in first millennium Hacksilber.
A4, Posters and Applied Technologies (Displayed throughout meeting)
Judith Cochran, Madaba Plains Project and J.M. Cochran Enterprises, Inc., Presiding

10) Rhonda Root, Andrews University

*Artist’s Report on MPP 2000 Season in Jordan*

The presentation will focus on what the dig artist produced during the summer 2000 dig season. A visual presentation will be made showing illustrations that were created and other projects that the artist was involved with during the two month dig season.

11) Eileen Vote, Brown University

*ARCHAVE: A Three Dimensional GIS for A CAVE Environment (As Applied to Petra’s Great Temple Project)*

The S.H.A.P.E. (Shape, Archaeology, Photogrammetry, Entropy) Lab was recently formed with a three year, one and a quarter million dollar grant from the United States National Science Foundation by Brown University Departments of Center for Old World Archaeology and Art and the Department of Anthropology, Engineering, Applied Mathematics and Computer Science. It is a significant interdisciplinary effort to develop technical applications for Archaeological methodology and analysis and research in conjunction with Computer Science and Mathematical Vision.

An immediate contribution of the project will be the refinement of the first Virtual Reality 3D GIS application for Archaeology research using a range of data from the Brown University excavations at the Great Temple site in Petra, Jordan. The 3D GIS system, called “ARCHAVE,” allows users to view and interact with different types of artifacts and architectural finds, in situ, in the context of a virtual room called a CAVE (Cave Automatic Virtual Environment). Within this virtual environment, the user has access to a life-size representation of the Great Temple site, its architecture, excavation trenches, trench loci and fifteen different types of artifacts represented in their find locations. The site is approximately the size of a football field, therefore, the user will have a large area to explore but will have full mobility inside the environment.

This paper will review the ARCHAVE project and show a video of the system from within the Virtual CAVE environment.

12) Friedrick Schipper, University of Vienna

*Iraq in the Year 2000: An Assessment of the Status Quo*

The Department of Biblical Archaeology at the University of Vienna (Austria) was invited to participate in a special excursion to Iraq in the spring of 2000. The most important aim of this expedition was to document the current status of preservation and the accessibility of the major archaeological sites of Mesopotamia. Particular attention was devoted to the state of the Iraqi Museum in Baghdad whose collections were evacuated nearly a decade ago and are still inaccessible. Austrian affiliation with the Museum has always been close since Wilhelm Koenig acted as its director between 1934–1939 (e.g., the Austrian Organisation “Save the Iraqi Museum” which cooperates with UNESCO to preserve the cultural heritage kept in the Museum). For this reason special permits could be obtained by authorities in order to produce extensive visual documentation. A professional Austrian photographer was put in charge of the technical aspects. The poster suggested by this abstract will devote special attention to the more severely damaged sites, and visualize the extent of destruction in order to entice scholarly attention to develop efficient strategies to counteract further decay.

13) Robert Johnson, Rochester Institute of Technology

*Digital Image Restoration of Ancient Writings*

Recent advances in the capability and costs of the Imaging Chain have made possible a new scholarly interaction between the scientific and scholarly communities. This interaction can provide much needed assistance to the revealing of degraded texts. Much history is written on parchment, clay shards and clay tablets. Many of these artifacts have degraded with time and although a large number of them clearly have writing, they cannot be read by scholars. It is critical that we reclaim this information before it is lost to us forever. This presentation will demonstrate the research and work of a team that has developed techniques to assist in revealing the meaning of degraded ancient writing.

14) Michele Daviau, Wilfrid Laurier University

*Gate & Moabite Temple at Khirbat al-Mudayna*

The discovery at Khirbat al-Mudayna on the Wadi ath-Thamad of a small temple within a walled town in central Jordan is a first for ancient Moab. This building, identified as a sanctuary on the basis of its plastered benches and limestone altars, was not a national temple with direct access entry. Rather, it was a local sanctuary with indirect access from an alleyway that ran parallel to the innermost room of the six-chambered gate. This paper includes a report on Building 149, excavated during the 1999 season. Of greatest interest are the three stone altars. Two were painted, and one of these was also inscribed. These altars, each of a different type, suggest the range of cultic activities practiced in such a temple. Due to its position adjacent to the gate and to its construction history, the sanctuary probably dates to the early eighth century BC.

15) Richard Dorsett

*MUSIC OF THE MADABA PLAINS, JORDAN*

Music from the Madaba Plains, Jordan. During 1999 and 2000, field recordings were made in the Madaba Plains region to examine how the food systems perspective used for the archaeology of the MPP is manifest in Jordanian folk music. This poster session will offer a chance to listen to examples of the music recorded and to compare some of the musical differences encountered between Jordanian folk music of the countryside and the desert.
The Universities of Michigan and Minnesota continue excavations at Tel Kedesh, in Israel’s Upper Galilee. Literary sources identify the inhabitants as Phoenician. In 1997, we excavated a house with intact pots, weights, mortars, and other domestic objects on the floor. The house appears to have been hastily abandoned and preliminary dating suggests that this occurred at the time of a battle between Jonathan, the Hasmonean, and Demetrius II, the Seleucid king, in 145 BCE. Magnetometric survey in 1998 revealed the outlines of a single enormous building at the far southern end. Excavation in 1999 confirmed this as a single construction that served as an administrative supply depot and international archive. We found a storeroom with fourteen large jars and confocal microscopy shows they contained wheat. In the room next to this we found about twenty oil flasks and about 1600 stamped clay bullae. The bullae carry images of Seleucid kings, Greek deities and mythological figures, and Phoenician officials. The entire complex was damaged and abandoned in the middle of the second century BCE, confirming the preliminary dating suggested by the abandonment of the house. In the 2000 season we hope to find the large building’s entrance, as well as complete the excavation of the bulla room. We also plan to expand excavation of the house complex, where we found a large courtyard with several cooking installations in 1999.

Douglas R. Edwards, University of Puget Sound

*Life in a Small Town: Three Seasons of Excavations at Khirbet Cana, Israel*

Khirbet Cana, located strategically in the heart of lower Galilee, is a small, previously unexcavated town. In 1997 an initial survey of the site indicated abundant architectural remains and human activity over the 75,000 sq. m site. Our third season of work has revealed a remarkable picture of changing life in a small Galilean town. Artifactual remains include a Neolithic arrowhead imported from Turkey indicating human presence as early as 6000 BCE. Iron-Age pottery and a remarkable cylinder seal suggest that it was an important strategic location in the Iron Age I and II periods. But the town began to grow significantly in the Hellenistic period. Silver coins from fourth century BCE from Tyre indicate an important northern connection from the city—a connection that shifts south during the Hasmonean period, as indicated by the many Maccabean coins found at the site. A Jewish town appears in the Roman period as evidenced by miqvaot and several stone jar vessels. In the fifth century an apparent monastery is superimposed over the former Jewish town, dominating the Acropolis. Excavations of a cave on the south side suggest that Christian pilgrims from the sixth century into the twelfth century believed this to be the place where Jesus turned water to wine. Current technologies, notably GIS and GPS, have been used to locate and display all key features of the site. The site illustrates both the changing economic, social, and cultural role of the small town and the interaction between a small town and larger urban centers, such as nearby cities of Sepphoris or Tiberias.

Kenneth G. Holom, University of Maryland and Clayton Lehmann, University of South Dakota

**The 2000 Season of the Combined Caesarea Expeditions**

In summer 2000 the Combined Cesarea Expeditions will continue its work on land and sea in its twelfth consecutive season.

The divers will continue the stratigraphic probes in the main harbor basin that since 1997 have been furnishing information about the towers at the harbor’s entrance and the foundations for the promenade that Josephus mentions. On land we will excavate again in Area TP, the Temple Platform, to uncover more of King Herod’s temple and the Early Christian church above it, and to explore the transition from paganism to Christianity at Caesarea.

Finally we shall continue excavation in Area LL in the northwestern part of the Old City. This area has already generated important evidence about the economy of Caesarea in the wake of the Muslim conquest of 640/41. Here we hope gradually to expose portions of the earliest city of Caesarea, what we call the “City of Sts. Peter and Paul.” We are trying to learn more about Jewish and Gentile inhabitants of Caesarea in the period when Christianity first took root here.

Martha Sharp Joukowsky, Brown University

**Petra 2000: Brown University Excavations of the Great Temple**

The work of the Brown University Petra Great Temple excavations began in 1993 to rediscover this site. In 1997, the excavations introduced the spectacular discovery of a theater-like structure located inside the Great Temple. Clear evidence, from the stratigraphy and the artifacts indicates that this structure was constructed in the third phase of temple building, which is dated to the first century BCE. One of the main objectives is to reconstruct and interpret the changes in the temple architecture before and after the theater in the temple emerged. The Great Temple’s use and operation as a center of urban activity are reconstructed as to how they might have been used during the Nabataean and Nabataean-Roman periods.

Our multidisciplinary studies of the finds, the frescoes, our consolidation program, the use of ground penetrating radar, as well as our digital archive project illustrate the ongoing researches made during the 2000 campaign at Petra, combining a close examination of the site itself with new computer techniques. In evaluating the importance of these techniques, this paper will incorporate not only new results from the 2000 field campaign, but also new initiatives we have undertaken with our data which may be of interest to other archaeologists involved in investigations both in Jordan and elsewhere.
Early Bronze IV Village Life at Tell Abu en-Ni‘aj, Jordan

Tell Abu en-Ni‘aj in the northern Jordan Valley provides a rare example of a sedentary Early Bronze IV farming village amid the urban collapse and non-sedentary pastoralism normally ascribed to this period. N‘aj (2.5 ha) was tested in 1985, then excavated more fully by Arizona State University in 1996/97 and 2000. Six strata of architecture reveal mud-brick and rammed earth houses, courtyards, open spaces, sherd-paved streets, extramural storage and food processing areas, and a large, multi-basin press on the tell’s eastern slope. A few Early Bronze III sherds in the basal stratum indicate the village was founded at the beginning of Early Bronze IV. Occupation continued without a substantial hiatus, until abandonment near the end of the period, generating 3.5 meters of archaeological deposition. Comparably long and detailed Early Bronze IV material records are found at very few other sites, most notably Khirbet Iskander. Accordingly, traditional interpretations of the period have emphasized better-known cemeteries and seasonal encampments. Lithic evidence features locally produced expedient flake tools and imported Canaanean blades. Faunal remains come overwhelmingly from domesticated species: sheep/goat, cattle, and an abundance of pigs. Plant macrofossils include a variety of domesticated and wild taxa, with an apparent emphasis on grape cultivation. Tell Abu en-Ni‘aj permits analysis of the economic and social ways in which villagers coped, and may even have thrived, during the collapse of Bronze Age urbanism.

THURSDAY MORNING, 10:45–12:45
A6, Arabia II
Session Theme: North Arabian Epigraphy
Ryan Byrne, Johns Hopkins University, Presiding

21) George Mendenhall, University of Michigan

Arabia and the Bible: An Update

Since the publication of James A. Montgomery’s masterful Arabia and the Bible in 1934, the academic scene has changed drastically. Though virtually all of his evidence remains valid, the context and content badly need updating. Five aspects of the work especially can now be updated: 1) The relative neglect of Arabian studies for the biblical disciplines is far worse now than it was when Montgomery explored the situation: “These imposing fields of archaeological research and results (i.e. Mesopotamia, Egypt and Anatolia) have tended to obscure another land, nearer indeed to Palestine, but one the study of which has not yet shown itself very articulate, except among a small group of investigators.” (p.4). 2) The association of the Arabic culture complexes with desert nomadism now needs a thorough reexamination, for it now clear that the Arabian desert was not the source of Arabic language and culture, but rather the region where age-old patterns of thought and speech were preserved. 3) The evidence from the accumulation of tens of thousands of pre-Islamic inscriptions since his day has barely reached the attention of biblical scholars. Some examples will show the sometimes astonishing relevance to the biblical traditions. 4) The history and development of the Arabic alphabet complex is now quite different from that described by Montgomery; in fact in some respects almost the reverse of what was known in his lifetime. 5) Last is the evidence from modern Arabic language and culture, especially from the villages that Montgomery seems to have been entirely unaware of.

22) paper withdrawn

23) David Graf, University of Miami

Herodian Reflections in Old Arabic Texts

In 23 BC, the emperor Augustus granted Herod the Great the territories of Trachonitis, Batanaea and Auranitis in southern Syria. After his death, these regions continued to be ruled by his son Philip. In 37AD, Caligula gave the entire tetrarchy of Philip to Agrippa I. Reflections of the activities of the Herodian dynasts are preserved in old North Arabian texts scattered across the lava steppe in southern Syria and north-east Jordan, to the east of the territories the Herodian dynasty administered. These texts were first discovered in 1857 near the eastern edge of the Safa region southeast of Damascus, and have continued to be called “Safaitic.” More than 20,000 have been collected by now. Allusions in these texts to the Jews and Ituraeans were known earlier, but recent finds in the last decade contain references also to the Herodian dynasts themselves: Herod the Great, Philip the Tetrarch, and King Agrippa. These texts provide valuable insight into the interaction between the Herodian dynasts and the local indigenous population, and contribute to a more precise dating of the vexed texts, dated earlier only conventionally between first century BC and fourth century AD. The scarcity of any specific reference in them to events after the annexation of Arabia in 106 AD, suggests the texts reached their zenith in the first century of the early Roman imperial era.
southeastern corner of the site. The additional research required for this statistical study involved the classification of all non-restorable diagnostic sherds in the Area B storeroom corpus. With this 100 we were able to conduct the same probability study as completed on the Area C assemblage. The link-up between these two areas is the focus of this new assessment.

2) The second part of this paper reports on an attempt to correlate the Bab edh-Dhra EB IV town site pottery with the statistically-based typology discussed above. The collaborative nature of this study is an important first step toward piecing together the various regional cultures in the EB IV period and, we hope, illuminating the still perplexing issue of chronology in the EB IV period as a whole.

25) R. Thomas Schaub (Independent Researcher)

The Ceramic Corpus of the EB IV village of Bab edh-Dhra' with suggested correlations to the EB IV pottery of Khirbet Iskander

The proposed paper is a work in progress. Initial comparisons of the EB IV tomb pottery from Bab edh-Dhra' to the Khirbet Iskander ceramics resulted in a correlation of the Bab edh-Dhra' groups to Phase A of Khirbet Iskander. The next stage, pursued in this paper (and in a separate presentation by Richard and Holdorf), is an extensive comparison of the stratified ceramics from the two sites. Stratigraphical analysis of three fields from Bab edh-Dhra' has distinguished three EB IV phases. The pottery from the priority loci of these phases includes approximately 1200 sherds. Analysis of this corpus will include ware studies, and classifications of basic forms and specific types. A summary of the results will be presented in the paper. Exchanges with the Iskander staff will allow for a comparison of the pottery from the two sites.

Both of these sites have played a prominent role in various hypotheses about the key place of Transjordan in the development of EBIV culture. The comparative study of their stratified ceramic types will offer important data for a better understanding of the relationship of these sites and thus contribute to the ongoing discussions on the direction and development of EB IV culture in Transjordan.

26) Rudolph H. Dornemann (ASOR)

The Early Bronze IV Ceramic Sequence at Tell Qarqur and its North Syrian Context

The Early Bronze occupation at Tell Qarqur has been well documented in recent seasons. Though the exposures are limited and incomplete, this paper provides a status report on the ceramic materials. Early Bronze IVA levels have been reached in several locations with an indication of the characteristic ceramic features. Considerable Early Bronze IVB pottery is now available and a basic collection can be linked to a well stratified architectural sequence. A major concern for Tell Qarqur and north Syria is the material from the final phase of the Early Bronze Age IV and whether the latest Early Bronze Age materials from Tell Qarqur warrants an Early Bronze IV C designation. The diagnostic features of this final phase will be presented to the limited extent that it is available so far. The outline to be illustrated here is provisional until it can be expanded in future seasons of excavation.

A8, Symposium on Recent Research in the Madaba Plains Region of Jordan I

Session Theme: Reports on Field and Related Research

Timothy P. Harrison, University of Toronto, Presiding

27) Carlos Cordova, Oklahoma State University

Alluvial Fills and Upland Soils in Northern Moab

The preliminary results of a geoarchaeological study of soils and alluvial sediments in the Wadi ath-Thamad and Wadi al Wala systems and soils on the Madaba and Dhiban plateau suggest significant trends in landscape change in prehistoric and historic times. This geomorphological research is coordinated with four archaeological surveys, which permits a direct association between geomorphological events and cultural occupations. The main criteria for the study of environmental change are based on the study of changes in sedimentation styles, soil development, distribution of soils and eroded surfaces, and to a lesser degree pollen research. The dating and correlation of events in the wadi systems suggest that the streams responded to different climatic fluctuations recorded elsewhere in the southern Levant, especially in the Jordan Valley, the Dead Sea, Wadi al-Hasa, and the Azraq Basin. The results of this investigation that are relevant to the cultural development of the region are twofold:

1) Intense soil erosion and changes in the streams were primarily caused by climatic fluctuations that occurred during the transition from the Pleistocene to the Holocene, and secondarily by the rapid intensification of human activities during the Early and Middle Holocene.

2) The incision of the floodplains towards the end of the third millennium BC and the subsequent reduction of agricultural productivity may have contributed to the decline of the Early Bronze Age settlement.

28) Larry Herr, Canadian Union College

Tell al-‘Umayri 2000 Season

Excavations took place at four locations on Tall al-‘Umayri during the summer of 2000. The floor and founding levels of the two-room Late Bronze building in Field B were uncovered and digging began to discover the upper levels of more rooms to the north as well as the fortifications along the northern lip of the site. To the south, in Field A, the southern parts of an early Iron I house, which contained a small shrine in the northern portion, were fully uncovered. More information on the early Iron I perimeter wall was also found. At the southwestern corner of the site, Field H, probes revealed the early Iron II and Iron I layers beneath the late Iron II administrative structure and defined more of the early Iron I perimeter wall. Finally, on the southern lip of the site, Field L, the relation of domestic buildings to large wall lines found on the surface was established.
The discovery at Khirbat al-Mudayna on the Wadi ath-Thamad of a small temple within a walled town in central Jordan is a first for ancient Moab. This building, identified as a sanctuary on the basis of its plastered benches and limestone altars, was not a national temple with direct access entry. Rather, it was a local sanctuary with indirect access from an alleyway that ran parallel to the innermost room of the six-chambered gate. This paper includes a report on Building 149, excavated during the 1999 season. Of greatest interest are the three stone altars; two were painted, and one of these was also inscribed. These altars, each of a different type, suggest the range of cultic activities practiced in such a temple. Due to its position adjacent to the gate and to its construction history, the sanctuary probably dates to the early eighth century BC.

This paper represents a synthesis of survey work in the Wadi ath-Thamad Regional Survey pertaining to settlement patterns and land use in the survey area. Village locations, farming sites, observation points and agricultural installations will be discussed, together with burial sites and quarries. Notable are several road fragments which point to the existence of a communication network. The delineation of the latter holds the promise of clarifying land use and settlement patterns in the Wadi Thamad region during the Nabataean-Roman period.

This paper reviews the data recovered to date by the Wadi ath-Thamad Regional Survey pertaining to settlement patterns and land use in the survey area. Village locations, farming sites, observation points and agricultural installations will be discussed, together with burial sites and quarries. Notable are several road fragments which point to the existence of a communication network. The delineation of the latter holds the promise of clarifying land use and settlement patterns in the Wadi Thamad region during the Nabataean-Roman period.

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It was determined that an application of a modified Harris Matrix system of analysis was appropriate to stratify the numerous phases in Area H, which comprises twenty-two 5 x 5 meter squares. In order to reconstruct the sequence of layers and features in Area H, field diaries and daily notes were used to create matrices representing the superposition of pottery baskets and their relationship to corresponding loci and architectural features, square by square. Primary readings of the date range for each pottery basket was then applied the matrices. Pottery baskets and related features could then be phased according to their latest readings, and comparisons made between similar phases in different squares. Thus we have concluded there were seven major phases from the MB IIA through late Hellenistic period, with a major gap in the LBA, and have provided a framework for studying the pottery sequence and other material culture of the excavation area.

35) Ann Killebrew and Michal Artzy, University of Haifa

Excavations at Tel Akko—1999 Season

A short season of excavations was conducted at Tel Akko during August 1999. The goals of the renewed excavations included a re-examine the stratigraphic sequence in Area G, which is now in the process of final publication. This area had been excavated during the 1977 season, under the direction of Prof. Moshe Dothan and supervised by Prof. Michal Artzy. The second goal was to conduct a study dig for the University of Haifa archaeology students.

Three sub-areas were opened in Area G. One concentrated on the deep sounding excavated in 1977 where remains spanning the Hellenistic through Late Bronze Ages were previously excavated. During the cleaning and recutting of the sections, the stratigraphic sequence was clarified and several significant discoveries were made, including three Phoenician inscriptions dating to the Persian period.

Two new sub-areas were opened adjacent to the original trench. These areas uncovered at least three phases of extensive Hellenistic remains, adding much to our understanding of Akko during the Hellenistic period.

36) Yossi Salmon, University of Haifa

A New Approach to Retrievable Data from Unpublished Excavations: Tel Akko as a Case Study

Dealing with unpublished excavations can pose a series of questions concerning the quantity and the quality of the information that can be retrieved from the original documentation (field diaries, hand notes, photos etc.), and its limitation when being presented in a comprehensive report by different specialists. An extensive excavation like Akko offers diverse information that appeals to many scholars and students who have specific areas of interest. In many cases, the information needed is very basic, and concerns the location of specific items and additional relevant data that can be retrieved from the original documentation.

We propose a new strategy for dealing with the immense raw data from Tel Akko that will enable scholars and students to become familiar with its assemblages and afford them easy access. A server with the appropriate database and instruction would be set up alongside a simple application designed for basic management of archaeological information which could be downloaded by the interested public. Akko, with all the problems typical of an old unpublished excavation, can be a test case for future projects.

37) Jennie Ebeling, University of Arizona

The Ground Stone Artifacts from Tel Akko

A large number of ground stone artifacts were uncovered during extensive excavations at Tel Akko. These artifacts range from simple expedient tools made of local materials for use in everyday activities to imported prestige objects in foreign style. The identification of imported stone objects and ballast lends further evidence for Akko's extensive trade connections during much of its history, and use-wear analysis performed on a number of artifacts reveals some of the diverse activities in which these tools played a part. In addition, the longevity of settlement at the site allows for the creation of a rough chronological sequence of ground stone artifacts, which may permit a more precise dating of certain types.

This presentation focuses on the ground stone objects from all excavated areas at Tel Akko, and presents a typology of the stone tools used at the site from the Early Bronze I through post-Hellenistic settlement. It will demonstrate the wealth of information ground stone tools from a large, complex site with a long settlement history can provide, and will hopefully encourage others to save, analyze, and publish these pervasive yet often overlooked artifacts in the future.

THURSDAY AFTERNOON, 12:30–2:00

A10, Outreach Education: Communicating Archaeology to the Public: A Roundtable Series, Session 1 of 3 (open to all)

38) Peter Young, Archaeology magazine

The Art of Story Telling: On Sharing Your Research with the Public

There is a great deal of talk today about the need for archaeologists to communicate with the general public. “If we could pay for our own work and if it were only important to archaeologists we could be as obtuse as we like, but we do not have that luxury,” Fred Hocker, former president of the Institute of Nautical Archaeology, wrote in a letter to “Archaeology” Magazine. “Like it or not ... the public’s understanding of the mission of archaeology is essential if the discipline is to survive.”

That being the case, why do so many archaeologists persist in being distant and dispassionate in their dealing with the press? Many simply distrust the press. Others are discouraged from popularizing their work, having been warned during graduate school and beyond that such efforts only inhibit academic advancement. A good number plainly don’t know how to popularize their work, never having been taught how to do so. Happily, there is mounting pressure on anthropology departments to offer courses in writing and public speaking. At a 1998 workshop on “Teaching Archaeology in the 21st Century,” a Society for American Archaeol-
ogy task Force concluded, among other things, that “Today’s students are ill-prepared to communicate with the general public and that educational reform would have to address the need for clear writing and clear speaking.” This presentation will address issues involved in writing for the public, using examples particularly from the popular archaeology magazine.

THURSDAY AFTERNOON, 2:00–4:00

A11, Ancient Foods and Foodways
Albert Leonard, Jr., University of Arizona, Presiding

39) Sarah Whitcher, Harvard University and Thomas E. Levy, University of California, San Diego

*Animal Production and Animal Consumption in the Early Bronze IA and IB: Zooarchaeology at Nahal Tillah, Israel*

The faunal assemblage from Nahal Tillah, Israel, comprise animal bones from the Chalcolithic through the Early Bronze IB (ca. 4500–3000 BCE). This paper presents results from the Early Bronze IA and IB (ca. 3600-3000BCE) strata on the Halif Terrace, one area of the Nahal Tillah Regional Project. The Early Bronze I animal bone assemblages are of particular importance in light of the paucity of zooarchaeological data from clearly distinguished sub-phases of the Early Bronze Age. The Halif Terrace assemblage comprises over 7500 identified bones. This is one of the largest assemblages from the Early Bronze Age in Israel, providing a reliable zooarchaeological source with which to investigate ancient economic practices. Standard zooarchaeological methods were employed to facilitate intra-site comparisons (between strata and areas). Resulting data were used to investigate differences between the Early Bronze IA and IB in the following areas: defining environmental limitations and constraints that might affect human decisions regarding the subsistence economy; assessing human consumption of primary animal products, specifically meat; defining the use of secondary products of animals, such as milk, wool/hair, and labor; and, finally, evaluating patterns of discard of animal remains across the settlement.

40) Kevin Kaiser, University of California, Berkeley

*Milk, Wine or Beer? Contents Analysis of the Egypto/Syro-Palestinian Bes Vessels*

Ceramic vessels from Egypt and the Levant bearing the image of the Egyptian god Bes have been the focus of numerous articles over the past several decades. Many of these have suggested that the vessels functioned as milk, wine or beer containers and served in religious, funerary and/or domestic contexts. Such conclusions, however, were based strictly on historical considerations without the aid of technical studies to support individual hypotheses.

Ongoing research by the author has addressed the problem of the Bes-Vessel through the scientific analysis of the protein and DNA residues deposited within some of the vessels. Utilizing new, nondestructive techniques pioneered by researchers at the University of Calgary (Canada), these tests are designed to detect the presence of animal products such as milk from goat, camel or bovine. Additional interdisciplinary studies are being conducted that utilize gas chromatography/mass spectrometry (CG/MS) in order to detect the possible presence of wine, beer and other substances. This paper presents the combined results of these tests with the purpose of identifying the contents of the vessels as well as the efficiency and value for future application of the various scientific techniques. Appeal will also be made to historical, archaeological and other comparative data in order to support the scientific findings, thus helping to solve the mystery concerning the contents, function and overall significance of this unique class of figure-vessels.

41) Oded Borowski, Emory University

*Eat, Drink and Be Merry: the Ancient Mediterranean Diet*

Even before the Centers for Disease Control and Prevention (CDC) announced that Americans are overweight, the so-called “Mediterranean Diet” was considered the healthiest and best for weight control. The question is: does anyone know what is the Mediterranean Diet? With the help of textual, artistic, and archaeological evidence, this paper will attempt to take a look at this question and resurrect the menu. Other topics to be dealt with are methods of food preparation and occasions for food consumption.

A12, Landscape Archaeology I
Gunnar Lehmann, Ben Gurion University of the Negev, Presiding

42) Jutta Häser, Deutsches Archäologisches Institut, Orient Abteilung, Germany

*Landscape Archaeology in Central Oman*

Human land-use in Central Oman is dependent on oasis irrigation. Dry-farming is impossible in an area with less than 100 mm annual rain-fall. The oldest settlements in Central Oman date back to the early third millennium BC. Irrigated agriculture was practiced already during this period. After reduced settlement activity during the second millennium, there is again increasing human occupation and land-use in the area during the Iron Age. This occupation continued into the Medieval period.

The paper concentrates on the relationship between settlement and land-use under the ecological conditions of Central Oman and on the strategies developed to make use of the available resources. The paper further examines the long-term effects human land-use had on the formation of the present landscape.

43) Rafael Frankel, University of Haifa

*Archaeological Survey and Mapping Regional Diversity*

If History and Archaeology are concerned with “time and space” then excavations contribute primarily to our un-
derstanding of time, i.e. stratigraphy and chronology, while surveys and landscape archaeology provide data about space.

In spatial analysis it is usual to divide the area studied into regions on the basis of geographical and historical criteria and then to compare the distribution of the finds e.g. sites of various periods or different types of artifacts as found in these preconceived regions.

Archaeological surveys however enable the drawing of independent maps based only on the distribution of the artifacts found. These archaeological maps in themselves demonstrate various aspects of ancient cultures. They can also be compared on one hand to maps based on geography (morphology, geology, climate) and on the other to those based on ancient written documents referring to borders, roads etc. The comparison of the three types of maps can help to elucidate the various factors influencing the development of material culture.

Detailed recording and typology of agricultural installations enables drawing such maps. In our survey of Upper Galilee we recorded evidence that suggest a coincidence of the distribution of material culture with political and ethnic boundaries. Two examples:

1) The distribution of slotted piers, a device in which the beam of some lever presses is anchored, coincides with the southern border of Phoenicia.

2) The distribution pattern of Kefar Hananya Cooking Pot type 4A as against the Phoenician Jar of the Roman Period may be explained by Jewish Upper Galilee to the east and pagan Phoenicia to the west.

44) J. Ur, C. Hritz, and T. J. Wilkinson, The Oriental Institute, University of Chicago

*Plough and Pasture: Reconstructing the agricultural landscape of the Bronze Age Khabur Basin*

Using intensive survey data from the Tell Beydar area (Syria), the North Jazira Project (Iraq), and more generalized surveys of the eastern Khabur Basin, we are able to estimate the pattern of settlement in the Khabur basin for the Early Bronze Age. Combining geoarchaeological data with GIS analysis we can then estimate first the areas of valley floor pasture land, and then the cultivated area that surrounded Early Bronze Age settlements. From the latter we can infer by default the areas of upland and steppe pasture. In turn, we see not only that the Khabur basin was densely settled in the third millennium BC, but also that there were marked corridors that led north south through the region. These provided routes for mobile (as well as less mobile) pastoralists, but also would have supplied the locus for later enlarged pastoral lands that developed during a period of possible environmental stress during the second millennium BC. Finally, the significance of such developments to the cultural history of the region will be briefly reviewed.

45) Moti Haiman, Israel Antiquities Authority

*The Landscape of Desert Farming in Southern Palestine in the sixth-eighth Centuries CE: New Data and Retrospect*

During the last decade the increasing number of archaeological surveys and excavations in the Beer Sheva area, North-ern Negev (Israel), revealed the extensive dimensions of rural settlement in the sixth-eighth centuries CE. There is now plenty of evidence in the area for a type of farming which until recently was thought to occur only in the central Negev heights, an extreme desert environment. The spatial lay-out of the farms in the Beer Sheva area are very similar to their counterparts in the desert. Thus, recent landscape archaeological research provided evidence that this type of farming is not restricted to a desert environment and appears also in arid and even in non-arid areas. Apparently socio-political factors were as important for the establishment of such farms as were the ecological conditions.

A13, Hebrew Bible, History and Archaeology
Dale W. Manor, Harding University, Presiding

46) Anson F. Rainey, Tel Aviv University

*Stones for Bread: Archaeology vs. History*

The semantics of archaeological and historical interpretation will be discussed in the light of the current controversy about the tenth century BCE.

47) Victor Matthews, Southwest Missouri State University

*Ancient Viticulture and the Critique of the Monarchy in Isaiah’s “Song of the Vineyard”*

This presentation will discuss the evidence from the ancient Near Eastern texts and archaeological data of ancient viticulture and relate this material to its social context and its metaphorical use in Isaiah’s “Song of the Vineyard” (Isa 5:1-7). The large number of instances in which the Hebrew prophets mention the vineyard or use it as a metaphor for the Israelites emphasize the high value that viticulture had in the ancient Near East (see Jer 2:21; Ezek 17:5–6; Hos 10:1). Its economic importance made it a natural metaphor for stability and prosperity (2 kgs 4:25; Isa 36:16). And, the loss of the vineyard easily served to demonstrate the height of religious and economic disorder (Jer 8:13; Joel 1:11–12). The use of the vineyard metaphor also serves as another example of the prophets’ attempt to couche their messages in terms familiar and telling to their audiences. This study will examine the development of viticulture as an important facet in the local and national economy of ancient Palestine. The aspects of cultivation will be detailed and then examples will be discussed that hinge on viticulture as the basis for Isaiah’s metaphor. The conclusion is drawn that the failed expectations of the “owner” of the vineyard serve as an effective indictment of Judah’s monarchy.

48) Keith Eades, California Baptist University

*Illicit Cultic Practice and the Emergence of Biblical Monotheism*

This paper proposes that material cultural evidence must be considered alongside textual evidence in the discussion of the process of the emergence of biblical monotheism. We will review archaeological evidence for cultic practices judged illicit by those who shaped the biblical canon, such as the late eighth-century house shrine discovered at Tell Halif, as
well as material from other sites. Such finds illustrate practices of the sorts condemned in prophetic texts such as Jeremiah 7:16–20 and 44:1–30. Recent discussions of the emergence of monotheism will also be considered.

Monotheistic faith has been consistently impressed upon the shape of the books of the Tanak. It has not, however, erased textual evidence for its own historical development. Both the textual evidence and the archaeological evidence indicate that the monotheistic faith proclaimed by prophetic leaders was confronted by the strongly held, polytheistic faith of their audience.

49) John Monson, Wheaton College

Gate and Temple: Common Design, Similar Function?

The city gate and temple in ancient Israel bear a striking resemblance in layout and design. Beginning in the Middle Bronze Age, the correspondence between gates and temples at sites such as Shechem and Megiddo cannot be accidental and requires explanation. The same is true of Iron Age gates and temples in the Levant, many of which share a similar floor plan, size, and façade. Through an examination of archaeological material and biblical texts we hope to show that the civic and religious architecture mirror each other in design and function.

A14, Symposium of Recent Research in the Madaba Plains Region of Jordan II
Session Theme: Roundtable Discussion on Controlled Comparison with the Use of Compatible Databases
Larry Herr, Canadian Union College, Presiding

THURSDAY AFTERNOON, 4:15–6:15

A15, Anthropological Archaeology in the Levant
Session Theme: The Use of Anthropology in Research Design
Robert Miller, Mount St. Mary’s Seminary, Presiding

50) Tristan Barako, Harvard University

Migration as an Explanation of Cultural Change in the Ancient Near East: the View from Anthropological Theory with the Philistine Settlement as Case Study

For most of this century ancient Near Eastern archaeologists have invoked migration as an ad hoc explanation for cultural change. This culture-historical approach emerged largely unscathed from the processual and post-processual upheavals, which seriously undermined migration hypotheses employed in other parts of the world, e.g., prehistoric Europe and the pre-Columbian Americas. Migrationism has endured in the ancient Near East partly because of the central role played by the Hebrew Bible in archaeological interpretation: the pervasive motif of migrating peoples, e.g., the Philistines (see Amos 9:7 and Jeremiah 47:4), was readily—and often uncritically—transferred to the archaeological data.

In recent decades migration has been somewhat rehabilitated within the field of anthropological theory. It is argued that given sufficient data and by adopting a rigorous methodology, migration may be defined as a process and identified in the archaeological record. The ample evidence generated by extensive excavations at three Philistine Pentapolis sites, Ashdod, Ashkelon and Tel Miqne-Ekron, satisfies the first criterion. The application of a thorough and systematic inquiry—based on principles of migration formulated by anthropologists, sociologists, linguists, and demographers—to the archaeological data shows that the migration hypothesis is valid in the case of the Philistines. Finally, the methodology used here is recommended for other ancient Near Eastern migrations, e.g., Israelite and Amorite, which have been reconstructed—rightly or wrongly—through a combination of textual and archaeological evidence.

51) Jerome C. Rose, University of Arkansas and Yarmouk Univ., Bryan Renfro, University of Arkansas and Mahmoud El-Najjr, Yarmouk University

Biological Anthropology and Excavation Design for Byzantine Tombs in North Jordan

Jane Buikstra published a model in 1977 for using biological data from human skeletons to design a regional research strategy for burial mound excavations along the lower Illinois River valley. This model was used and modified during almost 20 years of research in the Lower Mississippi Valley region of the USA before being transferred as the guiding strategy for the excavation of Byzantine mortuary sites in north Jordan. The most commonly used strategy for mortuary site archaeology in Jordan is to excavate a few of the large rich tombs to obtain in the hopes of and make passing comments on the many robbed tombs at the site (Krug 1998). We argue that the use of bioarchaeological models to determine excavation strategy provides a more reliable picture of the people and cultures of ancient times and should raise mortuary excavation above the level of searching for museum display quality artifacts. Ongoing skeletal analysis provides information on age, sex, genetic relationships, diet, paleopathology and these data can then be used to select the locations and tombs to be excavated to ensure that a representative data from all the ancient inhabitants of a site are obtained.

Funding for this research has been provided by the King Fahd Middle East Studies Program at the University of Arkansas.

52) Benjamin Porter, University of Pennsylvania

Rethinking Ninth and Early Twentieth Century Palestinian Villages in Archaeological Analogies: The Case for the Hamula Social Organization and the Mash’a Land Tenure System

This paper explores the 1ninth and early twentieth century context of the Palestinian peasant village, its hamula social organization, and the mash’a land tenure system. Combined, they formed an effective social institution that resisted
the Ottoman and, later, the British Empires, who saw the masha’a system to be an inefficient use of land and sought to eliminate it. Several early ethnologists and archaeologists encountered the Palestinian village and the hamula/masha’a systems, often failing to grasp the internal complexity and relative efficiency of village kinship alliances and land tenure systems. Using Ottoman and Mandate economic records, social historians have corrected these misunderstandings concerning the Palestinian peasant. However, Middle Eastern archaeologists, who look to the recent past for archaeological analogies to help them explain ancient land tenure and village social organization, have often taken these earlier misconceptions as truths. Archaeologists’ resulting analogies, although not necessarily “wrong,” are possibly more complex than originally considered. This paper, then, explores how a complete understanding of the hamula and masha’a systems can greatly increase the explanatory power of archaeological analogy in the Middle East.

A16, Archaeology of the Roman and Byzantine Periods  
Jodi Magness, Tufts University, Presiding

53) Yara Doleh, Katholieke Universiteit-Leuven

Byzantine Churches Built Over Roman Pagan Temples in Jordan

In Jordan, a great deal of construction took place during the Byzantine period. As Christianity gradually became the accepted religion of the area in the fourth century, churches and chapels began to sprout up across Jordan. Many of these were clustered together on the remains of ancient Roman settlements.

The aim of the research is to test whether Byzantine churches were built over pagan temples in the area of Palaestina/Arabia, mainly concentrating on sites in northern Jordan. In addition, the investigation will try to determine whether it is plausible to say that remains of pagan temples have been found under Byzantine churches as an example of a church succeeding a temple. Does the well-known theory stating that most religious sites are built on older religious sites (as if the ground itself is regarded as sacred) apply, or is it only a coincidence to find remains of Roman temples lying beneath Byzantine churches, noting the fact that these pagan temples were considered impure?

54) Jonathan Lawrence, University of Notre Dame

By Their Baths You Shall Know Them: Miqva’ot and Baptismal Fonts as Indicators of Religious Identity

Miqva’ot, Jewish ritual baths, have often been cited as a standard indicator of Jewish cultural identity in the Second Temple and later periods. However, the similarities between miqva’ot and Christian baptismal fonts may pose problems for this identification. For instance, we must consider whether miqva’ot can always be distinguished from baptismal fonts and whether the absence of one or the other at a particular site always implies that the related community was not present at that place and time.

Some recent works have discussed the archaeological evidence for the development of miqva’ot and baptismal fonts. However, these structures have been treated independently, with little consideration for their relationship and influence upon each other.

This study will examine structures that have been identified as miqva’ot and baptismal fonts to see what factors have led to that identification. Issues such as form, date, and location in areas identified as either Jewish or Christian will be considered. In addition, I will look at passages from the Mishnah, Didache, and other early Jewish and Christian texts to illustrate early understandings of these practices and structures. I will seek to determine the usefulness of miqva’ot and baptismal fonts as signs of Jewish and Christian identity and to consider how the two practices may have influenced each other over time.

55) Sandra Fortner, Ludwig Maximilians-Universität München

Bethsaida-Julias and the Sea of Galilee Area in the Roman Period in Light of Their Finds

Though politically divided into different tetrarchys and part of the Decapolis, the Sea of Galilee basin provides a topographical unit connected with the Mediterranean Sea by trade routes leading from the Phoenician coast to northern Syria. Starting with the find situation from Bethsaida-Julias/El-Tell on the northern shore of the Sea of Galilee, the grade of Romanization for the Sea of Galilee basin will be examined. Are there differences in the material of sites like Tiberias, Magdala,Capernaum or Bethsaida-Julias compared to the find situation in the Gaulanitis or other Galilean sites in the Roman period? Bethsaida-Julias has provided abundant finds from the Hellenistic period until the second and third centuries AD with a significant gap in the first half of the first century AD. Could political and commercial Roman power include the mostly rural communities in this area?

56) Debra Foran, University of Toronto

Late Byzantine Madaba: The Results of the Tell Madaba Archaeological Project Excavations

The Tell Madaba Archaeological Project (TMAP) began excavation of a series of Byzantine shops during the summer of 1998. This particular area of the site had been explored in 1980 by Fr. Michele Piccirillo. At that time two Byzantine mosaics were uncovered, removed and transferred to the Madaba Archaeological Museum. This discovery led to the identification of these associated structures as a row of shops. The material recovered during the TMAP excavations, which included a large corpus of sixth/seventh century ceramics, fragments of a painted inscription, and additional mosaic pavements, would appear to support the initial assessment of Fr. Piccirillo. The 2000 season will be devoted to the completion of excavations of the row of shops in the northern portion of the site, as well as the conservation and restoration of the architecture in this area. This paper will present the results of the 1999 and 2000 excavations, and a further examination of the nature and function of this section of the Byzantine city.
57) Joe Zias, Jerusalem, Israel

Masada, the Northern Palace, and the Question of the Human Skeletal Remains

For several years now scholars have questioned the veracity of the account by Josephus regarding the fall of Masada. The skeletal remains found in the cave (2001) outside the casemate wall have been questioned by the author and are believed to be those of Romans, whereas the skeletal material found in the Northern Palace, which Yadin regarded as "proof" of the historicity of the account have never been questioned. New evidence from the Northern Palace has now come to light which suggests that the mass suicide which Josephus reported is again misinterpreted and that the three individuals contained therein are not the remains of the Jewish zealots which until now has been believed.

58) Kimberly Williams, University of Arkansas

Dental Anthropology at Sa‘ad, Jordan

The rural agricultural site of Sa‘ad is located 30 km from the ancient Roman city Jerash in present-day north Jordan. Joint excavations by the University of Arkansas and Yarmouk University have yielded eighty-eight tombs in four necropoli. Human remains were recovered from fifty-six of these tombs. The main period of occupation is Late Roman/Byzantine based on artifacts and tomb architecture. Due to the fragmentary and commingled nature of the human remains recovered, we are left with dental remains providing the best line of evidence for exploring the health and related nutritional issues of the ancient inhabitants of this site on the outskirts of a major Roman city.

This paper presents the results of the analysis of the teeth excavated at Sa‘ad. Data include information on minimum number of individuals, caries rates, hypoplasias, and the implications on general health and disease of this population. It specifically addresses the treatment of commingled dental remains and their place in the reconstruction of past life. Funding for excavation was provided by the King Fahd Middle East Studies Program, University of Arkansas, Fayetteville and Yarmouk University, Deanship of Graduate Studies and Institute of Archaeology and Anthropology.

59) Carol Meyer, University of Chicago

Gold Mining Techniques at Bir Umm Fawakhir, Egypt

Five seasons of archaeological survey and excavation at the fifth–sixth century Byzantine/Coptic site of Bir Umm Fawakhir in the central Eastern Desert of Egypt yielded a complete plan of the ancient mining town and a great deal of new information about the miners, their possessions, and their social standing. It is the only well-studied ancient gold mining town in Egypt, and one of the only ones in the Byzantine empire of the time. The paper, however, focuses on aspects of ancient gold mining and ore reduction. As the ore occurs in quartz veins in Precambrian granite, the work was hard rock mining, not panning from alluvial placers. Hard rock mining required a large labor force, planning and management, and major support in terms of grain, food, and pay, probably organized by the Byzantine government. (There is no evidence that the workers were criminals or captives, much less slaves, but much that they were career miners.) The project investigated the ancient mines themselves and carried out ore crushing experiments. Given that the ores are difficult to smelt sulfides, only the first stages of reduction to a fine, dark, metal-rich concentrate may have been completed in the desert. The final reduction, a complicated two or three stage operation with lead processing (cupellation), may have been carried out in the Nile Valley. Finally, older workings about 5 km away date to the late New Kingdom, perhaps pushing the evidence for cupellation back to the twentieth Dynasty, ca 1186–1069 BC.

60) Alysia Fischer, University of Arizona

Glass and Trade in the Byzantine Galilee

This paper examines the trade of glass in the Galilee region of Israel during the Early Byzantine period (363–451 CE). Trade is considered on two levels: long-distance and local. The long-distance trade involved the raw materials for glassmaking, while the raw glass and glass objects appear to have been traded locally. What glass artifacts can tell us about the interactions between various sites such as Sephphor, Cana, and Nabretain will be examined.

A17, Individual Submissions I

Session Theme: Bronze/Iron Age Archaeology and History

David Merling, Andrews University, Presiding

61) Joanna Smith, Bryn Mawr College

Iron Age Eastern Mediterranean Ceramics from Production to Consumption

The classification, analysis, and interpretation of ceramic remains depends not only on the way in which vessels were used and distributed, but also on the manner of their production. Domestic and non-domestic locations produced wares for different users and activities. When investigating the classification and distribution of Iron Age Eastern Mediterranean ceramic remains then, the types, frequencies, and significance of ceramic remains very much depend on the full range of their use-lives from production through final discard.

Considering the use-life history of Iron Age ceramics, in this paper I discuss Iron Age Cypriot ceramics from Cyprus and elsewhere in the Eastern Mediterranean from the perspective of their production in household and workshop contexts, patterns of local, regional, and international distribution, and the ways in which ceramics were used in domestic, ritual, and funerary contexts. From this approach it becomes clear that Cypriot Iron Age ceramics, as well as closely related Phoenician ceramics, are more complex than suggested by their current typologies. Using new finds from places such as Polis-Peristeries and Politiko-Ayios Mnasos I suggest ways in which current typologies may be revised in order to account for the full range of variation in Cypriot Iron Age ceramics.
62)  John F. Wilson, Pepperdine University

The Augusteum of Herod at Caesarea Philippi

The continuing excavations at Banias (Caesarea Philippi) are revealing the plan and nature of this New Testament city (Mark 8:27–30; Matt. 16:13–16). Of special interest and significance are the location, plan, and purpose of the Temple to Augustus built there by Herod I (Josephus, Antiquities XV.10.3 [336]). Herod built Augusteum at Caesarea Maritima, Samaria Sebaste, and Caesarea Philippi. All three structures were visible expressions of his dependence upon and support for the principate of Augustus. The locations selected elucidate Rome’s expectations of Herod, and the strategy by which he established his rule. The location and plan of the temple at Caesarea Philippi, the only one for which contemporary depictions exist (on the coins of Herod Philip), remain problematic. The temples at Caesarea Maritima and Sebaste have been excavated and furnish information by analogy. Likewise, contemporary Augusteum in provincial centers and client kingdoms (e.g. at Pompeii, Vienne, Ankara, and Pola in Croatia) all throw light on the tetrastyle temple and imperial cultus at Banias. Recent excavations at the Pan Sanctuary and the Banias city center provide additional clues, as does a reexamination of the numismatic data. The cumulative evidence suggests that the Augusteum of Caesarea Philippi probably stood above the Sanctuary of Pan (at the site excavated by Ehud Netzer in 1977) and that this small but dramatic temple complex became the nucleus for a royal capital from which Herodian Dynasty ruled a small but strategically important kingdom for more than a century.

63)  Nili S. Fox, Hebrew Union College and Angela R. Roskop, Hebrew Union College

Of Rattles and Rituals: An Anthropomorphic Rattle from the Nelson Glueck Collection at the Cincinnati Art Museum

Ceramic rattles are not unusual finds in Iron Age Syro-Palestinian deposits. However, the anthropomorphic rattle acquired by Nelson Glueck in southern Syria, housed at the Cincinnati Art Museum appears to be a unique piece which deserves public attention. Although this female figurine has features commonly found in Near Eastern fertility figurines, such as prominent breasts and genitalia, it is unique in the fact that it is a rattle.

The aim of this paper is twofold: to explore potential parallels to this piece and to discuss its possible use(s) in a ritual context. The discussion will include a comprehensive review of the corpus of Iron Age rattles from the Levant, hitherto a neglected subject. In addition, textual references to musical instruments will be considered in an attempt to achieve a broad understanding of the contexts in which rattles may have functioned.

64)  Michael G. Hasel, Southern Adventist University

The Archaeology of Destruction: Methodological Desiderata

Destruction is one of the key elements in the formation of the archaeological record. Major correlations continue to be made between archaeologically attested destructions and known historical events whether the invasion of the “Sea Peoples,” the Egyptian campaign of Seti I, historically attested earthquakes, or the volcanic demise of Pompei and Herculaneum. Causative agents of destruction/discontinuity may be defined as: (1) deliberate acts (warfare, alterations in construction, and razing or burning areas for disease control); (2) natural disasters (fires, earthquakes, floods, tidal waves, and volcanoes); (3) accidents (collapse due to poor construction or fire); and (4) gradual, long-term degradation (abandonment, robbing, erosion, exposure; cf. Dever 1992). The hypothesis of this paper is that many of these types of formation processes leave distinctive archaeological correlates (Schiffer 1987) which may aid in the identification of the types of destruction. Although major advances in theoretical and methodological approaches in Syro-Palestinian archaeology have taken place in recent years, the methods for assessing destruction horizons has been largely neglected (but see Karcz and Kafri 1978; Dever 1992). Despite the general lack of methodological development associations continue to be made that are decisive in determining the sociopolitical history of the site, the chronological framework of the site which then affects the historical reconstruction of the entire southern Levant. This paper suggests key questions regarding (1) issues of identification, history, and chronology; (2) destruction correlates; and (3) elements of continuity/discontinuity. The research design encompasses archaeological, ethnarchaeological, textual, and iconographic data for an integrative approach (see Renfrew 1980; Yoffee 1982; Trigg 1984; Levy and Holl 1995; Zettler 1996).

65)  Kimberly Mayyama, Katholieke Universiteit-Leuven

Information Systems, Spatial Analysis and Landscape Archaeology: Case-study application of system methodology on Middle Cypriot Cyprus

This paper has two main objectives. 1) to test the design, development and application of spatial analysis and a custom designed Information System to aid archaeological research, and; 2) to determine whether or not the artifacts within any archaeological assemblage can, by their own virtue or value, spatially represent otherwise unnoticeable patterns of transmission when contrasted against their landscape. Worldwide, all are aware of the numerous advances and developments in the computer world. The speed at which computer users and computer technology advance is staggering. Archaeology in general has been slow to integrate computer technology into its accepted methodology and has likewise found itself unable to keep pace with the quickly evolving technologies. What applications archaeologists have managed to make have been piece-meal and have thereby been robbed of the true analytical and organizational power that a fully integrated Information System can provide. This paper will demonstrate the design, development and implementation of a custom data acquisition methodology and Information System that will document archaeological sites and the presence or non-presence of specific artifacts that fall under the material culture of Middle Cypriot Cyprus.
The coastline of the Levant has changed throughout the ages, primarily due to natural causes. Yet in the case of the southern part of the Akko / Haifa Bay (sedimentary plain), human activity has accelerated the retreat of the sea, but not prevented recurrent flooding inland. A current Israeli-Hispano-French multidisciplinary study casts new light on the interaction between Man and his natural environment: the construction and maintenance of a coastal island had irreversible regional consequences.

An islet lying in the lee of Mt. Carmel—equidistant between Cyprus and the Nile Delta—was properly perceived as a transit platform for maritime exchange during the Egyptian New Kingdom (safe building and drainage techniques). This period of unprecedented prosperity was followed, at the end of the Bronze Age, by the progressive decline of the former great powers and characterised by migrations. The inhabitants of Tell Abu Hawam had to face environmental changes: apparent rises of marine and brackish water levels, possibly reflecting tectonic subsidences in the Kishon lower valley (graben). However, from the early Iron Age onwards, their uninspired responses to these events led to the asphyxia of the three harbor facilities, to the development of swamps (entailing malaria) and, finally, to the abandonment of that area for centuries.

Considering the complex network of evidence involved during one whole cycle is illuminating for future research by landscape archaeologists.

66) Jacqueline Balensi, C.N.R.S. (Institut Fernand Courby) and Carolina Aznar (Harvard University)

A Late Bronze Age Artificial Island in a Eustatic v. Tectonic, Sensitive Area: Tell Abu Hawam (Ancient Harbour of Haifa, Israel)

The surveys around Ghassul focused on locating both hamlets and pastoral camps associated with Ghassul. They utilized stratified random sampling to an extent, and also culturally meaningful criteria, to locate both hamlets and pastoral camps associated with Ghassul. Provenienced excavated data from Ghassul were used before the survey to define statistically the number and type of artifacts that would be sufficient to constitute a “site” and, after the survey, to compare to the survey data. This required a number of quantitative analyses of artifacts, most of which were excavated over fifty years ago. Through this approach, the survey and studies of the available material culture are used to complement one another.

THURSDAY EVENING, 8:00–10:00

A19, Public Program Opening Session

History and the Hebrew Bible: Reconstructing Ancient Israelite History

68) Peter Machinist, Harvard University

Manasseh of Judah in the Seventh Century BCE

Manasseh is one of the real bad boys of ancient Israelite history. The intensity with which the Deuteronomist Historian sought to vilify his reign has, not surprisingly, proved a spur to modern historians to see whether the Deuteronomist was right, and, just as important, why he sought such vilification. The modern quest has, in turn, been able to draw on an increasingly wider net of evidence to evaluate the Deuteronomist and other Biblical sources, coming from archaeological and textual finds in Israel, the broader Levant, and the Assyrian heartland. But this wider net has not made the task of historical reconstruction any easier. Indeed, it has yielded a number of approaches and solutions which only partially overlap and agree. This paper will try not so much to add yet another “right answer” as to understand what has already been offered and the nature of the ancient evidence that is available. Manasseh, it will show, is significant not only as a major figure in the ancient history and historical memory of Israel, but as an illuminating type case of how modern historians of Israelite antiquity do and should go about their work.

69) Nadav Na’aman

Biblical Stories and Ninth Century BCE Royal Inscriptions

abstract not available

70) Moshe Kochavi

The Late Bronze Age to Iron Age Transition in Northern Canaan

abstract not available

71) Anson F. Rainey, Tel Aviv University, Respondent

A20, Sepphoris Regional Project Workshop

Eric Meyers, Duke University, Presiding

Life in the Big House: Tell ‘Ein Zippori in the Iron Age I

The social, economic and political organization of the rural hinterland in Late Bronze and Iron Age Israel are poorly...
understood and based primarily on urban, not rural, data. It is an assumption never adequately tested. Additionally, for Iron I, single-period villages in the Central Highlands have become the definitive example of the “rural village.” This too is misleading; missing from the LB/Iron settlement spectrum are multi-period villages which fill the conceptual void between highly stable, long enduring urban settlements and volatile, relatively ephemeral one-period sites. Based on the excavation of Tell ‘Ein Zippori, in Lower Galilee, multi-period villages offer compelling evidence of a deeply rooted rural population with independent social, political and economic structures. Tell ‘Ein Zippori displays an unforeseen sense of rural complexity and internal social stratification suggesting the presence of rural elites, which are alluded to in the Hebrew Bible and Ugaritic texts, and present in the ethnographic record. Due to the limited excavation of villages, however, their archaeological traces have been elusive. This paper discusses what types of material culture correlates are associated with rural elites, and focuses on vernacular architectural traditions that express social, political and economic hierarchies.

73) Jonathan L. Reed, University of La Verne

*The 2000 Season of the Sephoris Acropolis Excavations*

The Sephoris Acropolis Excavations focused on two areas on the northwestern slope of the acropolis in the 2000 season. The excavations, sponsored by the University of La Verne, Converse College, Duke University, Huntingdon College, and the University of Connecticut, seek to address two primary issues raised by the previous excavations at Sephoris: 1) to stratigraphically pin-point the initial large-scale construction in the area, sometime in the Late Hellenistic or the Early Roman Periods; and 2) to trace possible changes in ethnic indicators within domestic space, especially between the Roman and Byzantine Periods, and the Byzantine and Early Arab Periods. To date, the domestic units found in the area from the Roman Period consistently contain chalk or so-called stone vessels, faunal remains without pork, and stepped pools (often presumed to be *miqva’ot*).

74) Katarina Galor, Brown University

*The Stepped Water Installations of the Sephoris Acropolis* 

A large number of stepped pools have been exposed on the western summit of the Sephoris acropolis. These were built and used as an integral part of late Hellenistic/early Roman residential buildings. Like most stepped water installations, mostly from Second Temple period contexts, the Sephorean pools were immediately interpreted as *miqva’ot* (ritual baths). The earliest rabbinic texts describing these installations, however, date the end of the second and the beginning of the third centuries CE. Based on these written sources, R. Reich has identified most Second Temple period stepped pools as *miqva’ot*, a typology and interpretation adopted by most archaeologists. The identification of the Sephorean pools as *miqva’ot* has provoked a heated debate among scholars. The source for this debate is twofold: 1) Before the discovery of the Sephorean pools it was believed that the number of *miqva’ot*, particularly in domestic contexts declined sharply after the destruction of the Temple. 2) Only two other sites in Israel have revealed large concentrations of pools interpreted as *miqva’ot* used in domestic contexts. The diversity of the contexts in which high concentrations of stepped pools are found, their typological variety, and finally the lack of sufficient comparative material, make it impossible to furnish definitive proof of their identification.

75) Stuart S. Miller, University of Connecticut, Respondent


Schlomo Bunimovitz and Zvi Lederman, Tel Aviv University, Presiding

76) Schlomo Bunimovitz, Tel Aviv University

*Building Ethnic Identity at the Israel/Philistine Border: Beth-Shemesh in Iron Age I*

abstract not available

77) Steven Weitzman, Indiana University

*Crossing the Border with Samson: Story Telling and Border Formation*

There is more than an etymological connection between Beth Shemesh and Samson. Beth Shemesh was located in the Shephelah, a frontier region cohabited in the early Iron Age by Philistines, Canaanites and “proto-Israelites.” The Samson story seems to reflect a similar cultural horizon, its Danite hero crossing easily into Philistine territory and engaging in various sorts of exchanges with its inhabitants. Noting this correlation, Stager has described the Samson narrative as a “border epic” that attests to the same ethnic ambiguities reflected in the material culture of places like Beth Shemesh and Tel-Batash/Timnah. Seeking to inject recent anthropological and literary theory into the discussion, my paper will both elaborate upon and complicate this correspondence between the world as represented in the Samson story and the “real” world of the Shephelah as recovered by archaeology. The segregation required to maintain a border as impermeable, to impede cross-border interaction, depends on symbolic and discursive practices not likely to show up in an archaeological record. With the help of the Samson narrative, we will explore how one of these practices, storytelling, may have contributed to the process of border formation in the Shephelah. I will suggest in particular that the story of Samson’s riddle, and other episodes that follow in its wake, were composed to counteract regional pressures for hybridization endemic to the Shephelah that, if unchecked, would have made it difficult for a remote capital like Jerusalem to sustain an impermeable border there. My larger point is that in considering the borders of ancient Judah, archaeologists should not insist on too rigid a boundary between material reality and fictional representation because borders involve both.
Larry Stager, Harvard University, Respondent

The role of the state at the border town of Beth-Shemesh is evident in newly discovered facilities for a controlled, redistributive economy. Border politics also dictated the demise and final destruction of Beth-Shemesh. Previously unknown evidence related to its settlement history sheds new light on the Assyrian political economy at the Shephelah after Sennacherib’s campaign in 701 BCE. The impact of that policy is exemplified by the drastic changes in the border landscape between Judah and Philistia.

Zvi Lederman, Tel Aviv University

The State at Beth-Shemesh: The Rise and Fall of an Iron Age II Border Town at the Philistine Frontier of Judah

The State at Beth-Shemesh: The Rise and Fall of an Iron Age II Border Town at the Philistine Frontier of Judah viewing the emergence of the state of Judah from its border with Philistia provides new and important insights about this hotly debated issue. Fortifications, public buildings and an underground water reservoir uncovered in the new excavations at Tel Beth-Shemesh indicate that already at the second half of the tenth century BCE state organization was involved in the daily life of this site’s inhabitants. In reshaping the Iron Age I village into a planned border town, the young state may have tried to overcome problems of liminal ethnic identity, loyalty and affiliation at its most fragile frontier with Philistia. The role of the state at the border town of Beth-Shemesh is also evident in newly discovered facilities for a controlled, redistributive economy. Border politics also dictated the demise and final destruction of Beth-Shemesh. Previously unknown evidence related to its settlement history sheds new light on the Assyrian political economy at the Shephelah after Sennacherib’s campaign in 701 BCE. The impact of that policy is exemplified by the drastic changes in the border landscape between Judah and Philistia.

Brian Hesse and Emmitt Brown, University of Alabama at Birmingham

From Village to State: Changes in the Economy at Beth-Shemesh

Recent theorizing built on the ethnography of the Middle East suggests that the trajectory of evolution for animal production from household-based systems to state-situated market forms of organization in the southern Levant involved a complex of changes (see for instance the work of M. Zeder in Feeding Cities, Smithsonian, 1991, and Ø. La Bianca in the Hesban volumes). These included reconfiguration of the proportions of different species managed, alteration of the culling strategies applied to various types of stock, and the emergence of intermediary agencies in the social space between pastoralist and consumer. Further, more complex systems involve interactions across large territories and thus are subject to influence by larger political forces acting on the historical stage. Tel Beth-Shemesh, situated as it is in a region marked by rise and fall of significant economic and cultural boundaries during the historic periods, provides a useful case study of these processes. Through comparison to the changes seen at nearby contemporary sites the beginnings of a regional picture of the history of animal uses begins to emerge.

Zvi Lederman, Tel Aviv University

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Nicola Schreiber, Oxford University

Black-on-Red Pottery: A New Look at Cypro-Levantine Relations

The origin and date of “Cypro-Phoenician” Black-on-Red pottery have been the subject of debate for decades. The earliest appearance of this distinctive pottery type has generally placed in the mainland Levant—in the late tenth century BC—yet increasing evidence points to an origin in Cyprus where it is currently dated almost a century later, from the mid ninth century. This paper will show that the pottery appears in a distinct ceramic horizon on the mainland, which can be dated to the end of the tenth century. I will show that the Cypriot chronology of this pottery, devised by Einar Gjerstad in 1948, is fundamentally flawed, that the dates of Black-on-Red in Cyprus should be raised and that Gjerstad’s dating of the Cypro-Geometric periods in Cyprus should be reassessed. This revision of the Cypriot chronology enables the origin of Black-on-Red to be placed in Cyprus, from where it was exported to the mainland Levant. Resolution of the problem of Black-on-Red has important implications for the Iron Age chronologies of Cyprus and the Levant. The paper will discuss trade relations between Cyprus and the mainland in the light of these conclusions, and the role of the Phoenicians in revitalizing trade with Cyprus from the eleventh century onwards.
The necropolis of Ayios Georgios Mnimatia is one of the numerous cemetery sites excavated in the 1970s by the Cypriot Department of Antiquities. These concentrations of tombs were associated with the well-researched city of Kition on the southeastern shore of the island. The study of these funerary remains helps to provide a fuller image of the lives—and deaths—of the inhabitants of that town during the Cypro-Geometric, Cypro-Archaic and Cypro-Classical periods. This paper presents an analysis of the ceramic corpus from the tombs at Ayios Georgios and reveals the presence of Aegean and Levantine products as well as those of local origin. The chronology of Kition has been divided into two periods: one, a Phoenician to Persian phase (ninth to sixth centuries), and a second, Classical period lasting until the arrival of the Ptolemies in the third century BC. These two influences (east and west) are highly evident in the ceramics of the city, but not so clear in the tombs that are the focus of this study which do not have the strong Greek element that is displayed in the settlement debris. Instead, the funerary pottery at Ayios Georgios reflects closer connections with the material culture of the eastern Mediterranean both in imported wares and in local interpretations of eastern forms.

**A23, Egypt and Canaan I**

K. Lawson Younger, Jr., Trinity International University—Divinity School, Presiding

**Iron Age Pottery at the Necropolis of Aghios Georgios at Kition (Cyprus): West to East**

A long-standing question among archaeologists and Egyptologists has been the nature and extent of Egypt’s relationship with the Levant and Sinai during the Proto-Dynastic to Old Kingdom. This paper will examine Egypt’s early interregional relationships from the perspective of empire. The notion of an Old Kingdom Egyptian empire has caused a great deal of debate between scholars, due both to a dearth of sufficiently excavated material cultural evidence, and to differing interpretations of the historical record. It is necessary to incorporate the debate over the meaning of “empire” with the available archaeological and historical evidence. By reassessing theories concerning imperialism by historians such as Hobbsawm, Mommsen and Hobson one can introduce a more consistent definition of “empire.” This approach offers a comparative framework bridging imperialist theories and the reality of Old Kingdom international relations.

Basic models for empire suggest that under specific circumstances, various polities have developed a dependence upon non-indigenous natural resources and the populations inhabiting such source regions. Such polities would initially co-opt the native population, and, given sufficient economic and political strength, would impose military force to control these regions. Early Egypt’s evolution into an empire can be observed over time in relation to a growing demand for natural resources. Egypt’s contact with Arad and other Levantine sites provides sufficient evidence for the proposed model regarding developmental “empire evolution.”
that Jacob was pointing, among other things, to the nature of the geographical places which were the place of residence of his sons, and from where they were gathering to see their father alive for the last time. This view can be presented by looking at the ancient names of the nomes of Egypt.

A24. Prehistoric Archaeology
Gary Rollefson, Whitman College, Presiding

88) John J. Shea, SUNY-Stony Brook

Ubeidiya: Early Hominid Behavior in the “Garden of Eden”

Ubeidiya (Jordan Valley, Israel) is one of a few archaeological sites outside of Africa dating to more than a million years ago. Understanding the nature of Early Pleistocene hominid activities at Ubeidiya can contribute to better models of early hominid adaptive radiation. One of the important results of recent (1997-1999) research at Ubeidiya is a more critical view of the “living floors” reported by earlier excavations. Many of these juxtaposed concentrations of stone tools, bones and large basalt cobbles are plausibly explicable as the result of natural geological processes, such as wave action and winnowing. Studies of artifacts and bones in the low-energy sedimentary deposits exposed by new excavations suggest early hominids visited the lake edge briefly, probably to scavenge meat and fat from carnivore kills. The stone tools found in these deposits result from a rational choice to abandon stone tools with limited potential for resharping or further tool production in order to transport other (presumably food) resources away from the lake edge. The lithic assemblages remaining in perilimnic zones are dominated by simple, time-efficient, pebble-core technology that contrasts with on-site handaxe production seen at some Middle Pleistocene sites. Although it is tempting to see the Ubeidiya evidence as residues of a successful ecological strategy, an immense span of time (0.5-0.7 Myr) separates Early Pleistocene sites like Ubeidiya from other Middle Pleistocene archaeological sites. This may reflect the tenuous foothold early humans possessed in the face of intense competition with the indigenous carnivore guild of Western Eurasia.

89) John J. Shea and Patricia L. Crawford, SUNY-Stony Brook

Ar Rasfa (Wadi Yabis) and Middle Paleolithic Settlement in Northwest Jordan.

The distribution of Middle Paleolithic sites in the Levant is closely correlated with the Mediterranean oak-terebinth woodland. This woodland forms under relatively humid conditions and it supports a greater concentration of plant and small animal food sources than any other phytoclimatic zone in the Levant. Today the Mediterranean woodland is most densely concentrated in the Northwest (Ajlun and Irbid Districts), reflecting that regions cooler temperatures and higher rainfall. It seems reasonable to expect NW Jordan to contain a rich Middle Paleolithic record like that found in adjacent parts of northern Israel. Survey and excavation in 1997–1999 located Ar Rasfa, a large, open-air, Middle Paleolithic site in the lower reaches of Wadi Yabis. Test excavations reveal more than two meters of stratified Middle Paleolithic deposits. The site is located near the articulation of flint rich gravels and Lisan marls. Analysis of the lithic assemblages suggests an “early” variant of the Levantine Mousterian with an emphasis on primary lithic reduction. Measurements of lithic production efficiency reveal technological variability within the Ar Rasfa assemblage. Ar Rasfa overlooks the basin in which Wadi Yabis and its tributary Wadi Zagh would have flowed into Pleistocene Lake Lisan, charging this saline lake with fresh water. Comparable modern environments feature numerous edible plants, small animals, seasonal concentrations of migrating birds as well as larger game. We suggest that such resources were the main attraction for human settlement in the Jordan Valley and that tool production at Ar Rasfa supplied stone tools for forays into the flint-poor lake-edge environment.

90) Steven Kangas, Dartmouth College, and Nigel Goring-Morris, Hebrew University

Burial, Art and Ritual in the Neolithic of the Levant

The recent excavation of Pre-Pottery Neolithic sites in the southern Levant and Anatolia has revealed a great range of variability. There are large sites, mostly located east of the Rift Valley, covering almost 12 hectares; but here are also many smaller sites with a rich and complex history to be revealed. This presentation focuses on one such smaller site, the Pre-Pottery Neolithic B site of Kfar HaHoresh near Nazareth, Israel (ca. 9000–8500 BP), whose investigation is yielding significant new information regarding the production of early art forms in the context of burial and ritual. In contrast to expectations, excavation has revealed that the site is non-domestic. Plastered surfaces, once thought to be living floors, now seem to be associated with the burial process. Dozens of human burials, their variability, and associated artifacts suggest that the site served the region as a mortuary center. It seems that at certain times of the year family groups and/or communities would come together at Kfar HaHoresh, a sort of neutral territory removed from living settlements, where burials and rituals would be conducted. This paper attempts to assess the meaning of figurines, monolithic stone slabs, and the animal imagery of the site in the general context of the Levantine Neolithic. It argues that the finds at Kfar HaHoresh are manifestations of ritual behavior and that ritual and ceremony was important at that time as a mechanism for order, a way to transcend individual identity and to mediate between groups of people.

91) paper withdrawn

92) Gary Rollefson (Whitman College), Leslie Quintero and Philip Wilke (University of California, Riverside)

Early Neolithic Hunting and Herding in the Azraq Wetlands, Jordan

Early models for the emergence of pastoral nomadism in the Levant stressed the importance of a “secondary products revolution” to make the efforts economically viable. In this view, the development probably did not occur until the Chalcolithic period. There is a growing consensus, on the other hand, that mobile, long-distance herding of sheep and goats appeared by the beginning of the sixth millennium, and there is now evidence for probable pastoral nomadism on at
least a “part-time” basis by the end of the seventh millen-
nium. Our presentation will briefly review early and current
hypotheses concerning the reasons and mechanisms for the
emergence of pastoral nomadism based on recent excavations
and surveys in the steppe and desert regions in the Azraq
basin, especially in the Azraq Wetlands Reserve in the Azraq
Shishan oasis area.

A25, Reports on Current Excavations—
ASOR-Affiliated, Section II
Eric H. Cline, George Washington
University, Presiding

93) S. Thomas Parker, North Carolina State
University

The Roman Aqaba Project: The 2000 Campaign

The project aims to reconstruct the economy of the Ro-
man port of Aila, now within the modern Jordanian city of
Aqaba on the Red Sea. The research design consists of a re-
gional archaeological and environmental survey of the envi-
rorns of Aila and excavation of the ancient city to recover its
history and artifacts relevant to its economy. The regional
survey (completed in 1998) revealed no evidence of an agri-
cultural hinterland, suggesting Aila was supported logisti-
cally from more distant sources. Excavations over scattered
areas have yielded a complete stratigraphic profile extend-
ing from the first century BCE to the seventh century CE.
Various literary sources document Aila’s role in the traffic of
luxury goods. But the project’s excavations have greatly ex-
panded our knowledge of Aila’s trade to include many other
types of commodities, such as fine ware pottery, glass, wine,
and oil. The excavations have also revealed that Aila was a
center of several industries, including production of ceram-
ics, metal, shell, and possibly garum (fish sauce). Excavation
in 2000 will continue in several existing areas, including the
Byzantine fortifications, several domestic and industrial com-
plexes, and a monumental mud-brick structure that may be
the oldest purpose-built church known in the world, erected
to 500.

94) Andrew M. Smith II, University of Maryland

Summary of Evidence from the Southeast Araba
Archaeological Survey

The Southeast Araba Archaeology Survey completed its
third and final season in the summer of 1998 as a componen-
t of the Roman Aqaba Project. The research objectives of
the survey aimed primarily to discover and document remains
contemporary with the occupation of Roman Aila in order to
place the settlement history of this ancient city in a wider
regional context. One principal method of survey during the
final two seasons involved on-ground verification of archi-
tectural features previously identified by the survey staff in
aerial photographs of the region. This resulted in a signifi-
cantly large number of sites documented of the Chalcolithic/
Early Bronze Age, which included several village sites in
addition to more peripheral sites with impressive architec-
tural remains, and of the Nabataean and Roman periods. My
purpose here is twofold. First, I intend to summarize the
methods of survey employed and to highlight the salient re-

sults these yielded with relation to the project’s overall re-
search objectives. Second, I intend to summarize the evidence
of the Chalcolithic/Early Bronze Age from the southeast Wadi
Araba. Extensive Chalcolithic occupation has been docu-
mented in the past at Aqaba in the south, the Wadi Fidan in
the north, and the Timna area to the west. Evidence from the
SAAS serves now to bridge our knowledge of the occupa-
tional histories of these sites, and to illuminate a more com-
prehensive, regional history of settlement in the Araba dur-
ing the Chalcolithic period.

95) Burton MacDonald, St. Francis Xavier
University

The Tafila-Busayra Archaeological Survey—Phase
II (2000)

The Tafila-Busayra Archaeological Survey, Jordan was
in the field for Phase II of its work during May–June 2000.
The report will, thus, focus on the results of the season’s work,
especially in topographical zones two and three, that is, a
segment of the Trans-Jordanian plateau and the desert re-
gion around Jurf ad-Darawish respectively. In addition, it
will add to the previous season’s report on Pleistocene lake
Wadi Juheira in the southeastern segment of the survey terri-
tory. Conclusions will be drawn relative to the findings of
Phases I and II of the work. Moreover, a comparison of the
results of the findings from the GIS database chosen random
squares and purposive survey methodology will be pre-

96) Jesse Long, Jr., Lubbock Christian University
and Suzanne Richard, Gannon University

Expedition 2000 to Khirbet Iskander, Jordan

The eighth campaign to Khirbet Iskander and vicinity
was sponsored by Gannon University, Lubbock Christian
University, and McMurry University. Expedition 2000 re-
newed excavations in Area B at the northwest corner of the
mound, the location of the EB IV public building and the EB
II/III massive tower with accompanying fortifications.
One major objective of this season was to illuminate the
sociopolitical and economic processes of change and contin-
unity between EB III and EB IV. This was accomplished by
exposing structures containing transitional ceramic materi-
als first encountered in 1997. Secondly, we continued the
evacuation of the possible EB II/III gate structure and new
tower in Area B west. This phase was exposed in an exten-
sive horizontal pattern in order to arrive at a broadly extended
plan of complete architectural units of pre-EB IV occupation.
Thirdly, the geological survey of the vicinity of Khirbet
Iskander was continued. Finally, we updated and completed
the site plan, tying in the contiguous cemeteries and map-
ing the entire wall circuit.

Preliminary results of our excavations further underscore
the significance of Khirbet Iskander as an Early Bronze Age
laboratory that will help us clarify processes of urbanization
and deurbanization operating through the course of the third
millennium BCE.
97) James Pace, Elon College

Karak Resources Project: The 1999 Season

In June and July of 1999, the multidisciplinary Karak Resources Project returned to Jordan for its third season of research. As in the 1997 season, the project operated on three fronts: (1) a regional archaeological survey; (2) regional scientific studies; and (3) systematic excavation at al-Mudaybic, an Iron Age fortress on the desert’s east fringe. KRP’s primary purpose is to document ways in which inhabitants of the 875 km² section of tableland have exploited its natural resources. Noteworthy results of the 1999 season’s work were a study of the interaction between villagers and the plateau’s migratory Bedouin; an ethnoarchitectural study of the town of Smakieh; the discovery of 81 prehistoric sites; and the investigation of the previously unexplored Kh. Al-cAskar, a complex of buildings yielding pottery from Roman through Islamic times. A new field (C) opened at Muddyabic produced a well-preserved stone-lined pit or silo and substantial amounts of pottery. Excavation in Field A exposed a room along the north fortress wall and possible lime slaking activity. Further work in Field B revealed enough of the Iron II multi-chambered gate to confirm its dimensions. Bedrock was reached in three squares of the site, helping to establish its occupational history. This is a report and slide presentation on the 1999 season and the subsequent post-seasonal study.

FRIDAY MORNING, 10:45–12:45

A26, The Archaeology of Cyprus I
Session Theme: Roman through Modern: Current Research
Nancy Serwint, Arizona State University, Presiding

98) Robert L. Hohlfelder, Univ. of Colorado at Boulder, John R. Leonard, SUNY Buffalo, and Richard K. Dunn, Macalester College

The Roman Harbor of Paphos: New Insights from Geoarchaeological Evidence

Geoarchaeological investigations were conducted in the inner reaches of the ancient harbor basin of Paphos in June 1966. Using a drilling rig and technical staff provided by the Cyprus Geological Survey Department, a series of cores were obtained that provided data relating to the paleogeography and the history of use of the ancient harbor. This new evidence offers more insights into the life and times of the harbor complex of Roman Paphos. The natural embayment of this port city, protected by two artificial breakwaters built first in Hellenistic times, appears always to have had a sandy beach around its inner perimeter even when fortification walls defined the harbor. This wide beach provided a natural buffer against storm seas striking the city’s coastal installations, a landing area for boats and small ships, and a perfect location for shipbuilding and repair activities. A bedrock ridge naturally divided the harbor into two anchorages. The eastern one appears to have been less satisfactory, owing to the influx of a small stream that constantly discharged its alluvium into the harbor. The western roadway had deeper water and would have been the primary anchorage within the confines of the protected basin. Purported repair efforts by Roman builders in 15 BC to address the problem of siltation within the harbor were less than permanently successful. The cores revealed a shoreline that prograded over the history of the harbor due to silt accumulation. Sedimentological evidence also suggested that the inner harbor did not fall from service because of a significant up-lift during one of the many tectonic events that struck Paphos during its ancient and medieval life. Rather, at some point, perhaps in the late fourth century, siltation and other natural factors, combined with a loss of a communal will and ability to maintain the harbor facility, ended Paphos’ role as an international emporium in the eastern Mediterranean.

99) Michael K. Toumazou, Davidson College, Derek B. Counts, Tufts University, and P. Nick Kardulias, The College of Wooster

Athienou Archaeological Project, 1990-2000: A Retrospective

The Athienou Archaeological Project, sponsored by Davidson College and supported through grants from NSF-REU, Dumbarton Oaks, and Davidson College has conducted multidisciplinary investigations near Athienou since 1990. This paper will present the most salient results of the investigations at the site of Athienou-Malloura (excavations) and the surrounding valley (survey) as well as offer prospects for publication and future work.

100) Georgia Bonny Bazemore, University of Indianapolis

New Evidence for a Brief History of the Paphian Region

Survey and excavation of the Rantidi Forest, the area immediately east of PalaioPaphos, has revealed many new settlements and necropoleis from the Roman period. Due to the combined survey efforts of several groups, including our own, the Roman road system throughout the Paphian kingdom can now be reconstructed in detail. This paper will discuss the evidence for the road system and the settlement and burial patterns of Paphos during the Roman period, placing particular emphasis on the area east of PalaioPaphos leading to the city of Kourion. Physical and historical evidence, as well as survey results, are used to reconstruct possible harbors and landing sites along the coast east of PalaioPaphos. Evidence for the introduction of large-scale olive oil production in the Paphian region includes an industrial complex only recently discovered.

Literacy sources for this history of the Paphian kingdom under Roman rule will also be discussed. Roman rule brought an end to the political power of the Paphian region when the capital was moved from Nea Paphos. However, the cult of the Goddess, for which this city is famous, suffered no loss of prestige and power. The overthrow of the late Ptolemaic king of Cyprus and the assumption of the control of Cyprus by the Romans will be discussed. Roman attitudes towards and actions concerning the temple of the Goddess, as well as physical evidence for the temple itself during this time pe-
period will be presented. Archaeological and archival evidence for the Roman administration of the Paphian region will round out this brief reconstruction of the history of the region of eastern Paphos during the Roman period.

101) John R. Leonard, SUNY Buffalo

**New Strategies for Roman Archaeology in Cyprus**

Roman (with its derivative Early Byzantine) hegemony lasted longer in Cyprus than that of any other single power during the island’s history. Cultural traces of Roman- Early Byzantine Cyprus are encountered more ubiquitously across the landscape than other archaeological remains. Yet during past decades, as prehistoric—especially Bronze Age—studies have largely dominated the Cypriot archaeological scene, the rich potential of Roman period evidence has only occasionally been tapped, while Roman Cypriot archaeology has just begun to approach methodological and interpretative advances achieved in other areas of the Roman Empire.

Archaeologists have long explored public, religious, funerary, and artistic aspects of Roman Cypriot life but have paid little attention to common domestic circumstances, settlement size, distinctions and relations between town and country, and broader patterns of rural exploitation. Since the mid 1980s, however, scholars have begun to reveal a more detailed picture of ordinary life in the Roman province, to investigate simultaneously urban and extra-urban areas, and to examine on an intensive regional basis the Roman Cypriot landscape.

This paper discusses recent archaeological studies in Cyprus, including the author’s Cyprus Coastal Survey, that have begun to cast new light on the island’s local culture and regional role during Roman-Early Byzantine times. The strategies exemplified by these projects incorporate historical, archaeological, and anthropological methodologies, rely—in some cases—upon diverse diachronic data, and represent the type of analyses that may at last allow us to move beyond previous limitations to provide a fuller, more balanced view of Roman Cyprus.

**A27, Archaeology of Jordan**

Bruce Routledge, University of Pennsylvania, Presiding

102) Mark Blackham, Simon Fraser University

**A Reconsideration of Neolithic, Chalcolithic and Early Bronze I Chronology in the Jordan Valley**

The long-term goal of this study is to improve our understanding of the sequence of events occurring throughout the Chalcolithic period and into the Early Bronze Age of the Levant. The present investigation attempts to improve the chronological resolution of the Chalcolithic sequence in the Jordan Valley by using both advanced relative dating techniques and radiocarbon dates. First, a regional, relative-sequence model is constructed using artifact classes and stratigraphic sequences from fourteen Jordan Valley sites. Radiocarbon dates are then integrated into this regional model order to assign date ranges to subphases and to test the probability of the problematic Late Neolithic/Early Chalcolithic horizon and allow us to refine the Late Chalcolithic sequence.

103) Thomas E. Levy, University of California, San Diego

**The Phase One Investigations in the Jabal Hamrat Fidan, Jordan: Early Ore Processing, Metallurgy and Social Evolution from the Neolithic through Early Bronze Age**

From 1997 through 2000, the Phase I investigations of the Jabal Hamrat Fidan (JHF) regional archaeology project focused on exploring the role of early ore procurement and metallurgy on social evolution in the Faynan copper ore district of southern Jordan. JHF represents the western “gateway” into one of the southern Levant’s largest copper resource zones. This paper uses craft specialization in ore use and metallurgy as a lens to examine changes in social organization from sites representing the PPNB (WFD 001), Late Neolithic/Early Chalcolithic (WFD 51), Early Bronze I (WFD 4), and Early Bronze II–IV (WFD 120) period. Broad horizontal exposures were made at most of these sites providing a unique opportunity to explore the social role of metallurgy on cultural evolution in a range of societies spanning the emergence of settled village life to the rise and collapse of the first walled towns in Palestine. In 2000, excavations were completed at Khirbet Hamra Ifdan where an extensive EB III metal factory was discovered. This was a joint University of California, San Diego–University of Bristol–Department of Antiquities of Jordan project.

104) Carolyn Routledge, Richard Stockton College of New Jersey

**“The Balu” Stele Revisited**

This paper presents the results of a visual and photographic re-examination of the Balu stele, conducted in July 2000. Most directly, it will evaluate Ward and Martin’s (1964) conclusions regarding the stele’s scene and inscription.

Since its discovery, the Balu’ stele has excited a wide range of scholarly speculation, due to the enigmatic scene and largely illegible inscription carved on its face. The Egyptianizing investiture scene is familiar in New Kingdom art, however its execution on the Balu’ stele is distinctly non-canonical. The inscription is even more problematic, and has alternatively been considered a variant of the Cypro-Minoan linear tradition, pseudo-hieroglyphic Byblite, Egyptian hieratic, and graffito Egyptian hieroglyphic.

Not surprisingly, uncertainty regarding the content of the stele has engendered widely differing views on its historical and social significance. Most scholars connect the stele in some way with the Shasu of New Kingdom Egyptian texts and art. However, it is not clear whether this stele reflects the direct cultural impact of Egypt on its eastern periphery; or is an early example of the expropriation of the iconographic “language” of Egypt—as occurs in elite art of the Iron Age Levant. Current scholarly consensus on the Balu’ stele is weak, but generally follows Ward and Martin (1964). However, the presence of graffito Egyptian hieroglyphs in south-central Jordan is extremely unusual and archaeological evidence from Balu’ itself would seem to favor a post-Empire date for the stele. Hence, there is a pressing need to re-evaluate Ward and Martin’s findings.
Tribal Kingdoms, Trade and Towns: A New Model for the Late Iron Age in Southern Jordan and the Negev

Recent research on the Transjordan Iron Age kingdoms stresses their tribal nature, involvement in the Arabian trade, regional variation, and the mixture of pottery traditions at certain sites. To determine how this system functioned in southern Jordan (Edom) and the Negev, ethnographic data from the same area is used to derive a model of how different tribal groups interacted.

1. Territory: Several tribal groupings with different core areas move, overlap, have contact with each other, share resources, and have arrangements for crossing each other's territories.

2. Trade: Some of these tribes control the trade between Edom and the Mediterranean, and sometimes raid these routes.

3. Interaction with a gateway town: Tribes have close links with a town, which is a gathering place and a gateway to the outside world.

4. Central government: While nominally under the control of a "central" government, in practice these tribes are independent. Their affiliation is to kin-groups, not to the state.

Edom was composed of largely independent tribal groupings connected by bonds of cooperation and allegiance. These groups continued to move and interact with similarly independent groups from Arabia, the Negev, and the west. These tribal groups controlled and sometimes raided the trade between Arabia, Edom, the Beersheba Valley and Gaza. There were points of contact between them and the "civilized" world, for example Beersheba in the eighth century BC, while in the seventh century BC several sites in the Negev and perhaps Tell el-Khalifa can be interpreted as gathering places for such groups.

E28, Egypt and Canaan II
K. Lawson Younger, Jr., Trinity International University–Divinity School, Presiding

Israelite, Amorite and Hyksos Law

Recent archaeological discoveries in the Nile Delta suggest dating two of the laws of Exodus to the Second Intermediate Period/Middle Bronze Age. The provisions for donkey sacrifice (Ex. 12:13, 34:20) and earthen altars (Ex. 20:21) reflect ritual practices of this period, and are inconsistent with those of Iron Age Israel. In addition, there are many long recognized similarities between the "Covenant Code" (Ex. 21:1-22:15) and the Middle Bronze Age Code of Hamurappi.

Taken together, these observations suggest that the extended "Covenant Code" (Ex. 13:11-15, 20:19-23:19) and "Ritual Decalog" (Ex. 34:17-26) embody snippets of royal law promulgated among the Northwest Semites of the Delta towards the end of the Second Intermediate Period. This, in turn, is fully consistent with Manetho's old hypothesis placing the Israelite sojourn during this period and identifying the Exodus with the "Expulsion of the Hyksos." A possible mechanism of transmission is provided by Deuteronomistic reports concerning old law codes inscribed on temple walls (Josh. 8:32) or preserved in temple libraries (II Kings 22:8-13). Unfortunately, the lack of contemporary written materials bearing directly on "Hyksos" law makes this hypothesis impossible to test adequately.

Egypt, Hebrews and Israel in Ancient Times

According to Redford, the two stories of west semites from the land of Canaan sojourning to the Delta with a leader named Jacob, with a tradition of 400 years in the land, and a memory of leaving the land are related in some manner. REDFord sees the Hyksos legacy in the Canaanite world becoming part of the Israelite biblical tradition.

This paper will seek to propose a Hyksos-Egypt chronology from the time of the appearance of the former to the time of the tenth century BCE political intrigue among Israel-Judah and Egypt. It seems unlikely that this west Semitic people of significant achievement and accomplishment who were remembered at least the time of Ramses II and Merneptah were forgotten by the Canaanites and disappeared from history during the Late Bronze Age.

The initial perception that the Hyksos were Indo-Europeans and that the habiru of the Amarna Letters were the Hebrews has placed biblical scholarship in an unfortunate rut for the past century. Imagine how different biblical scholarship would have been if it had been known right from the start that the Hyksos were the ones who better matched the biblical traditions than the habiru? In this light, the proposed actions of Solomon and Jeroboam don't seem so farfetched given the longstanding interrelationship between the Canaanite warrior elite and the Egyptian crown.

The Genesis Dream Interpretation in Pharaonic Egypt

This paper explores the role of dream interpretation in Ancient Egypt to the Late Period and its later reception in the Ancient Near East. That dream interpretation was a feature of Hellenistic Egypt is undisputed, with examples such as the archive of Hor of Sebennytos providing us with a large corpus of dreams and their meanings dating from the second century BC. At that time, Egypt had acquired a reputation for quality dream interpreters, and this distinction has been projected back, by modern scholars, to earlier time periods. An examination of the primary sources, however, reveals that the earliest evidence of Egypt's prominence in the area of dream interpretation highly problematic and rests largely upon three non-Egyptian references. By tracing the internal evidence for the origins of dream interpretation and the possible candidates for dream specialists, a different picture emerges—one that suggests that the origin of oneiromancy in Egypt needs to be reevaluated. In light of this investigation, it appears that the status of pre-Hellenistic Egyptian oneiromancy was less significant than its later reputation might imply.
A29, Theoretical Approaches to Near Eastern Archaeology I
Session Theme: Ideology and Identity at the Dawn of the Iron Age
Lynn Swartz Dodd, USC/UCLA, Presiding

109) Mariam Ayad, Brown University

*The Persian Occupation of Egypt and the Demise of the Office of God’s Wife of Amun*

From its inception, the office of the God’s Wife of Amun served as a political vehicle utilized by reigning and/or aspiring kings to establish and consolidate their authority over the Theban Area. Ankhesneferibre, daughter of Psammetichus II, was the last in a long tradition of women who controlled the influential office of God’s wife of Amun. She was arguably the most powerful holder of the office, having formally assumed also the titles and duties of the High priest of Amun. However, shortly after the Persian invasion of Egypt 525 BCE, Ankhesneferibre died and with her death, the office of God’s Wife of Amun disappeared, never to re-emerge. It is the aim of this paper to demonstrate that such an abrupt demise of the office of God’s Wife of Amun was a direct consequence of the Persian occupation of Egypt. Because of their superior military capability, the Persians did not need to use this office to maintain their authority over Thebes, or any other part of Egypt. Moreover, although the Persian rulers of Egypt dedicated temples to Egyptian gods, they never thought of themselves as “only . . . Egyptian kings.” They were first and foremost Persian” (Snell 1997:99). Accordingly, their royal women continued to wield power using strictly Persian means (cf. Brosius 1996). They did not need, nor were they required to hold an Egyptian office to assume more political influence.

110) Robert D. Miller II, Mount St. Mary’s Seminary

*The Israelites are Philistine: The Trope of Ethnicity in the Archaeological Record*

Syro-Palestinian archaeologists have been wrestling for several years with the thorny problem of the earliest Israel. One of the biggest issues in this discussion relates to identifying Israel in the archaeological record, which is in turn based on defining Israel as an ethnicity in the Iron I period. This begs the question, however, of just what ethnicity is in the first place. Syro-Palestinian archaeologists have largely ignored theoretical literature on ethnicity that has been written in the last fifteen years, relying largely on older, outdated approaches. Post-processual discussions of ethnicity will be surveyed in this paper, highlighting recent discussion among theoreticians that ethnicity may not exist at all. Yet another current theoretical trend can be explored that ties ethnicity to style, that part of the formal variability in material culture that can be related to the participation of artifacts in the process of information exchange. Looking at it this way, exchange systems and isobars seen in the archaeological record have social importance. The performance exchange can be thought of as a form of ethnic meta-communication, and style B, which is both medium and the message B can be read semiotically. This paper will attempt such a semiotic analysis of style in the archaeological record of the Iron I highlands of Palestine, and apply it to ideas about the structuration of ethnicity. It will be shown that, looking at such an “emic” definition of ethnicity, it is possible to identify Israelites in Iron I and speak to the issue of defining their Israel.

111) Lynn Swartz Dodd, USC/UCLA

*Legitimacy, Identity, and History in the Early Iron Age*

The conceptual and built environments of the Iron Age reflect pressures on cultural identity, and its definition and maintenance. The Neo (or Late) Hittite rulers of the Early Iron Age consciously styled themselves as descendants of Late Bronze Age Hittite forebears using overt claims of familial descent. Then, after several centuries, new modes of royal self-presentation appear alongside the more traditional assertions of legitimacy. The newer features included the production of king lists in monumental form, new languages chosen for display inscriptions, non-traditional representation styles for rulers, and the portrayal of particular scenes, gods, and royalty in sculpted reliefs. These conveyed a discernible modification, if not outright critique, of the former Hittite strategies of establishing legitimacy and occurred after a period when documentation of a past for the ancient present had not been overtly curated either in Neo Hittite territory or in many areas of the eastern Mediterranean. The creation of new texts and monuments signifies a renewed engagement with an increasingly diverse and mobile internal audience that was fast becoming an imperative for Iron Age rulers, and points to a discourse concerning the politics of the past within the past.

112) Sarah Kielt Costello, Binghampton University

*Coercion and Resistance: The Untold Story of the Assyrian Empire*

Archaeological evidence often provides only the perspective of the powerful, of those who controlled what was written, or what was depicted. The interests of subaltern groups are often neglected in archaeological interpretations, since these groups leave fewer written records or monuments. In this paper, I hope to demonstrate a “back door” approach to the views of those subaltern groups, using the type of power wielded by the dominant groups as an entry point. Louis Althusser (1971) proposed that there are two types of power exerted by a dominant group, ideological persuasion and repressive force.

I will suggest that the type of power, ideological or repressive, wielded by the dominant group reflect the level of resistance that the group faces. Revealing that level of resistance will give voice to the subaltern groups, otherwise largely silent in archaeological evidence. I will use the Neo-Assyrian Empire as a case study. The records left by the Assyrians are vast and various, including archives, palaces, and narrative bas-reliefs. These function both to record battle campaigns, and to portray those campaigns in an ideological show of force. I will explore how depictions of force, versus the actual use of force, by the Assyrians reflect the varying levels of resistance to the Empire.
FRIDAY AFTERNOON, 12:30–2:00

A30, Outreach Education: Communicating Archaeology to the Public: A Roundtable Series Session 2 of 3 (open to all)

113) Gilliam Wakely, University of Pennsylvania

Archaeological Programming for the Public: Institutional and Scholarly Collaboration

Working with the lay public is a totally different concept in approach from the normal scholarly interaction familiar to archaeologists. This is a vital component of the work of institutions and scholars, however, as we are in many cases dealing with the scholars of the future and potential supporters. This presentation will address the ways in which institutions and scholars can collaborate to produce accessible programs for school children and the lay public. Included will be discussion of issues involved such as funding and coordination with school districts.

A31, Outreach Education: Communicating Archaeology to the Public: A Roundtable Series Session 3 of 3 (open to all)

114) Douglas R. Edwards and Jack D. Olive, University of Puget Sound

“Real Time” Publication of Archaeological Fieldwork for Students and Colleagues: Practice and Possibility for the Excavations at Khirbet Cana

The internet and other new technologies have opened new doors to break the log jam of publication by making archaeological data available to colleagues as soon as possible, and involving students at every level in the daily life of fieldwork through virtual participation. With the same tools, field archaeologists can reach a wide public audience while still in the field.

For the past two seasons, the University of Puget Sound Excavations at Khirbet Cana has experimented successfully with “real time” delivery of information to three audiences via an interactive web site:

1. the General Public—descriptions of the project and site, daily journal entries with digital photos, weekly reports from each square and photo galleries.

2. Professional colleagues—preliminary versions of scientific reports, synopses of final field reports and preliminary data bases in a standard commercial format.

3. Middle school students—a daily curriculum to introduce students to archaeology and to meet a different staff member each night via video link to their classrooms using readily available commercial technology. Students were also linked to a model of Tel Kana via a 3D internet site and, using 3D avatars, explored the virtual hill, Byzantine museum, and met in a virtual classroom for discussion.

In this round table we will demonstrate and discuss our internet publication and education programs. We also seek conversation about the establishment of an internet template for publication and education with a common platform that will enhance educational opportunities, public access and professional cooperation. The interactive 3D world creates a forum in which colleagues may discuss the implications of fieldwork while viewing scale models from every angle and moving around the field.

FRIDAY AFTERNOON, 2:00–4:00

A32, Art of the Ancient Near East and Eastern Mediterranean

Eleanor Guralnick, Independent Researcher, Chicago, IL, Presiding

115) Julia Assante, Columbia University

Leaden Captives: The Imperial Use of Lead Decorative Arts in the Reign of Tukulti-Ninurta I

During the reign of Tukulti-Ninurta I (1243-1207 BCE), lead production rose along with other decorative arts such as glasswork and glazing as outward signs of royal power, wealth and conquest. These prestige technologies, developed in regions that eventually came under Assyrian control, were imported into Assyria’s metropolitan center, as were thousands of human captives. The lavish display of dazzling ornamentation on everything from the king’s bucket to his palace walls, announced Tukulti-Ninurta’s superiority as warrior and king. Lead objects occur primarily in two forms: disks commonly bearing non-figural designs and the sensational, smaller group of erotic reliefs in mold-made openwork. The reliefs depict women alone in various seductive postures or sexually engaged in unorthodox positions with one or two men. The inclusion of sexual props, musical instruments and dancers’ garbs cite the milieu of professional entertainment. The most telltale details are the males’ soft-pointed caps that securely label the participants as people from the west. The minuscule reliefs, which afford the first known depictions of foreigners in Assyrian art, are pornographic fantasies carrying political messages about dominance, possession and alterity. The purpose of lead disks has so far remained an enigma and the reliefs have been wrongly used as visual proof of temple prostitution. Both groups, however, are united in function and belong to a wider system of decorative arts, particularly those for the adornment of royal furniture.

116) Shmuel Givon, Ramat Gan, Israel

Six Late Bronze Age Figurines from Tel Harasim

During the excavations at Tel Harasim, in the Shephela region of Israel, six figurines of named females have been uncovered in Stratum V. The figurines, all made of clay, are in the form of a flat plaque. However, the images of the naked females are in relief, thus protruding from the flat surface which serves as a background. Stratum V, dated to the late Bronze Age II (the fourteenth and the first half of the fifth centuries BCE), consists of the remains of a Canaanite settlement. In spite of certain shared characteristics which appear on each of the figurines from Tel Harasim, it is possible to distinguish their uniqueness. Their dimensions are small and on each of them appears the image of a naked woman, face front, sometimes accompanied by iconographic motifs such as plants and animals.
It is possible to divide these figurines into a number of groups. The first group depicts the image of a naked woman face forward. The second group is characterized by a naked woman standing upon an animal, usually a lion. The third group consists of the image of a naked woman who is either lion-faced, or wears a mask depicting a lion, the lion lady. The last group portrays a naked woman carrying twins. The division of the Late Bronze Age naked female figurines into groups allows us a better perspective on Canaanite iconography and although the identities of the figurines are not always clear, they shed new light on Canaanite art, cult and religion, as well as its influences on the Israelite culture.

117) Pauline Albenda, Independent Researcher, New York City

The Royal Portrait: Reflections of Kingship in the Assyrian Empire

The production of Assyrian art works on a grand scale coincides with the growth of Assyrian power in the first millennium, BC, from the tenth to the seventh centuries. Images of the Assyrian kings provide us with their official portraits and also display their royal status and the power of Assyrian rulership, either actually or symbolically, as a critical study demonstrates.

By the start of the ninth century the official portrait was standardized. This type of image was carved upon large stone monuments described as stelae. The symbols of deities aligned in the upper space reinforce the divine sanction of rulership given to individual kings. Secular activities and military events from the respective kings’ reigns were arranged in episodic and narrative compositions on the stone reliefs that lined the walls of the royal palaces. All action shown in those scenes conveys to the viewer the immense power of the Assyrian king who does not always appear as the central figure. In the seventh century the royal portrait in the context of the narrative scene was modified significantly. We see in the royal portrayals monarchs who command a military organization that is without equal and whose powers are, ultimately, absolute.

In sum the portrayals of Assyrian kings in historical contexts were modified in the course of some three centuries. Assyrian kings early on were careful to acknowledge that their successes derived from divine sanction and protection. Later Assyrian rulers acknowledged that their great powers derived mainly from personal achievement.

118) Eleanor Guralnick, Independent Researcher, Chicago, IL

Near Eastern Bronze Friezes from Olympia

A number of fragmented Near Eastern bronze friezes were excavated at Olympia in 1960. Their cleaning and reconstruction to determine their function in Greece before their burial in a spring at about 475 BC was a long and challenging task undertaken by two German scholars, Brigitte Borell and Dessa Rittig, and published in Olympische Forschungen 26, in 1998. Some fourteen different motifs may be distinguished. Many seem to reflect Syrian motifs and style, however, some reflect Phoenician, and some Assyrian models. A few are singular variations on well known motifs, or original designs not known from other sources. The friezes were combined with rivets and curved for their original use. A large quantity of Greek worked bronze from the same find spot was apparently used in combination with the Near Eastern bronze to create three sphylaton statues. The curved shape of the friezes suggests that they might have originally been made to cover door posts, or to decorate columns or standards, such as those excavated at Khorsabad. The style of the workmanship suggests they may have originally decorated buildings used by Assyrians, but located at some outpost of empire, possibly somewhere in Syria, where stone sculpture has been found embodying Assyrian motifs executed in Syrian style. The unusual character of this group of bronze friezes and the worked Greek bronze which was found together with it, which analysis suggests were both smelted by the same bronze smelter, provides new and persuasive evidence that Near Eastern scrap metal was both reused and reworked in early Greece.

119) Samuel Paley, SUNY Buffalo

Sculptures of Tiglath Pileser III and the Antiquities Trade

Austin Henry Layard discovered the so-called Central Palace of King Tiglath-Pileser III of Assyria (744–727 BCE), or what was left of it, during his excavations at Nimrud/ Kalhu, Iraq between 1845 and 1850. When Layard discovered the Central Palace, he unearthed a few walls of its royal apartments, distinguishable by their bas-relief decoration, many showing the marks of the “miners” of the site: gouges in the stone from coarse cutting tools or saw marks where a piece of slab had been cut away. Other bas-relief slabs lay about in the debris similarly defaced. When the Polish Center of Archaeology returned to Nimrud in 1974 they found the same situation that was described by Layard: a poorly preserved building already in the process of being dismantled in antiquity. They also re-discovered several bas-reliefs from this palace that had been seen by Layard and left behind. During the Gulf War, probably in 1991, the site museum at Nimrud was the scene of one or more major robberies. The storeroom where the Polish Excavation deposited its finds was looted. Several stolen bas-reliefs have now reached the antiquities market. More of them are shown to unsuspecting collectors every year.

The author of this paper is working with Richard Sobolewski, architect of the Polish excavation project, on the Polish Center’s final publication work at Nimrud. The publication will not only make the results of the project known but will also make the public aware of the totality of the finds so that the robbers cannot easily dispose of their loot. This paper will introduce several documented examples from the stolen corpus and explain why they are important for the study of Tiglath-Pileser’s sculpture and why what is happening to them in the hands of the illegal antiquities trade is destroying basic evidence needed by scholars for their study and interpretation.
The Rantidi Forest, located immediately east of Palaiopaphos, is a well-defined geographical unit consisting of elevated plains divided by a central mountainous outcrop; it has long been viewed by scholars as a marginal area. Recent survey and excavation shows that the Rantidi Forest was the home of a number of important sites, from the Chalcolithic period to its abandonment in the mid-twentieth century. The major road leading into the Paphian kingdom ran through this forest, and is well documented from the Roman period to its modern use. In the later Byzantine and early Frankish eras, the Rantidi Forest formed the core area of the Sinai monastery, a religious community linked to the Sinai monastery in the Judean desert; the site of Rantidi-Lakkos tou Frangkou, as its name implies, was a Frankish estate, controlling large parts of the forest use and revenue.

Survey and excavation are combined with archival and historical evidence to reconstruct the roles played by the Rantidi Forest as a site for human activity, habitation, interaction and exploitation during the Roman period to the Middle Ages. This paper will discuss the theoretical approaches and methodologies used to reconstruct the diachronic history of a large geographical unit, and an attempt will be made to provide a context for specific archaeological sites. Evidence for agricultural, technological and social developments and the resulting impact on the landscape, as well as the people who helped to form it, will be discussed. The intention is to construct an holistic landscape account of social, economic and political action in the environment.

Under the Eye of the Archaeologist: Archaeology and Poetry in George Seferis’s “Engomi”

In 1959, the American poet Charles Olson advised a fellow writer that a poet must “dig one thing or place until you...
know more about that than is possible to any man.” The image of the “digging” poet hardly gives pause now that we have grown accustomed to the idea of the poet as archaeologist. For example, Olson himself went on to call his 1970 collection of poems The Archaeologist of Morning. Archaeologists themselves, however, have remained largely ignorant of their discipline’s impact on poetry. Poets could not consider that their function was to “dig one thing or place” thoroughly before the establishment of archaeology.

The idea of the “poet as archaeologist” was especially important for George Seferis, Greece’s first Nobel Prize winning author. In his best-known poem, “The King of Asine,” Seferis wanders the site of Asine looking for traces of a king mentioned in one line of Homer as if he were a modern Schliemann trying to prove the Homeric text real. But, I would argue, Seferis employs the archaeological paradigm most clearly in his book Logbook III, a group of poems about his encounter with Cyprus. In this volume, the poet “excavates” the island and offers a stratigraphy in which the ancient sites of Kouklia and Engomi can be placed in a vertical grid with the palace of Buffavento and more recent locations. The poem “Engomi” becomes a crucial piece in the construction of this grid, as well as with promulgation of the idea of the poet as archaeologist generally. For in “Engomi,” Seferis walks around the site while the archaeologists are digging in the trench and offers thoughts on the division of labor between the “archaeologists of morning” and the “archaeologists of evening,” those whose work begins when dusk has fallen on the city or village being excavated. My discussion of “Engomi” will not focus on where Seferis thought the people in the trenches came up short, but rather how archaeology made Seferis see his role as poet in a different light. Poets will always think they have more insight than archaeologists, but we need to examine how archaeology has changed what it means to be a poet. This presentation will further that examination.

A34, Egypt and Canaan III
Victor Matthews, Southwest Missouri State University, Presiding

125) Marian Feldman, University of California, Berkeley
Who Wants to Marry an Egyptian Princess? Status and Identity in Late Bronze Age Diplomatic Marriages

An alabaster vase found in the royal palace at Ugarit (present-day Ras Shamra on the coast of Syria) bears an incised representation of a man and a lady. The man is clearly identified as Syrian both in an inscription stating he is Nqmaddu, ruler of Ugarit, and in his physical rendering. The identity of the lady, dressed in Egyptian style, remains ambiguous. The scene is often interpreted as depicting the marriage between Nqmaddu and an Egyptian court lady. If the lady is Egyptian, she might have been given by an Egyptian king through the diplomatic gift exchange documented in international letters such as those found at Amarna. Yet this has generally been questioned on the basis of correspondence in which an Egyptian king claims that no Egyptian princess has ever been sent to a foreign court (EA 4). In the very same letter, however, the corresponding king suggests that a suitable substitute be sent, for who will question whether she is truly the daughter of the king. This passage highlights the concept of mutable identity in which meaning is ascribed to individuals or objects rather than intrinsic to them. When significance depends on agreed opinions, ambiguous meaning introduces the possibility for manipulation. I propose that the scene on the alabaster vase played a role in the aspirations of the Ugaritic king. The lady may or may not be Egyptian, but her appearance suggests that she is and thereby confers status on the Syrian ruler.

126) James Hoffmeier, Trinity International University–Divinity School
Tell el-Borg: A New LBA/New Kingdom Site in Northern Sinai

In 1998, members of the Egyptian Antiquities department discovered a heretofore undocumnented site east of Qantara. The site’s coordinates are N 30 degrees, 55.516’ E 32 degrees, 24.621’. I was informed of the site in May 1998, and was able to visit it in May 1999. Based upon the Egyptian and imported potsherds found on the surface, it was determined that Tell el-Borg was occupied in the LBA and the New Kingdom. In January 2000, I returned with a small team to survey the site in anticipation of Excavations in March 2000. While reconnoitering around 500 meters south of the site along a recently dug canal that is a part of the As-Salam irrigation project in Sinai, I came across some 20 limestone blocks that had been uncovered by the canal’s excavators. An examination of the blocks resulted in finding four inscribed blocks, one with a partial cartouche of Thut(mose)s, likely that of Thutmoses III.

Between March 11 and April 27, 2000, excavations were undertaken at Tell el-Borg. This presentation will include a report of the materials discovered in January 2000 and those from the excavations in this past spring.

127) Richard Hess, Denver Theological Seminary
A Cultural Map of Bronze Age Palestine

This study will argue that the known linguistic affiliations of town leaders and others associated with various population centers in Bronze Age Palestine, on the basis of recently published cuneiform evidence, confirms a similar distribution of cultural geography as previously defined by material cultural evidence and by that of a similar analysis of personal names from the Amarna correspondence. Publication of cuneiform texts associated with Palestine over the past two decades will be reviewed with the goal of identifying personal names and their own association with population centers in the region. Each of these names will be analyzed to determine its etymology and language family. Specifically, the names will be identified with one of three groups: Egyptian, West Semitic, and the cluster of Hurrian, Hittite, Indo-Aryan, and other Anatolian linguistic elements representing influence from regions north of Palestine. This will be compared with the results of previous analyses of groups of names, particularly as found in the Amarna texts, in order to determine patterns of agreement and variation (UF 21 (1989): 209-16; Lev 29 (1997):153-56). The result will provide additional evidence for influences from the north in various regions of Palestine as reflected in personal names from the Bronze Age.
128) Jonathan Tubb, British Museum

*What Is a Canaanite? The Cultural Construct*

Abstract not available

A35, Reports on Current Excavations—Non-ASOR Affiliated—Session I
Ann E. Killebrew, University of Haifa, Presiding

129) Yosef Garfinkel, Hebrew University of Jerusalem

*Monumental Architecture and Art at Neolithic Sha’ar Hagolan*

The large horizontal exposure of over 2000 sq.meters at the Pottery Neolithic village of Sha’ar Hagolan revealed a well-planned village. Three massive courtyard buildings were excavated, each occupying a few hundred square meters. The appearance of massive architecture in the Pottery Neolithic period is unique, as hardly any architectural remains have been discovered from this period at this region in previous excavations. Formalized passageways, a wide street and a narrow alley separate the structures. Unlike the houses, which were built and repaired by the individual families, the resurfacing of the street shows maintenance effort made on the community level. This indicates sophisticated village planning and social organization.

Building II, not yet completely uncovered, is at least 40 by 20 m. In it a rich assemblage of anthropomorphic figurines were found, including 42 seated cowry figures, 4 pillar figurines, 2 limestone pebble figurines and one bent figurine. No other building in the Neolithic Near East produced so many art objects. A selection of these is on exhibit for five years in the Metropolitan Museum of Art in New York City.

130) Peter M. Fischer, Göteborg University, Sweden

*Tell el-‘Ajjul: Excavations 1999–2000*

A joint Palestinian-Swedish field project at Tell el-‘Ajjul started in 1999. Five thousand square meters immediately east of Petrie’s Palace Area were fenced off in order to protect this part of the tell which is endangered by farming and building activities. The aims of the renewed excavations include: the general study of the Middle and Late Bronze Age cosmopolitan societies of Tell el-‘Ajjul; the search for evidence of the identity of Tell el-‘Ajjul as, for example, the Hyksos city of Sharuhen; the study of the chronological distribution and synchronization of different imported groups of pottery, such as Chocolate-on-White ware, and Cyriphoe and Egyptian imported wares (part of the SCIEM2000 project, or Synchronization of Civilizations in the Eastern Mediterranean in the second Millennium BC); and the reinterpretation of the results of Petrie’s excavations in 1930-34 and 1938. Three or four architectural phases were found after the 1999 season. Most of the architecture is well-preserved sun-dried mudbrick without stone foundations. The repertoire of pottery and small finds demonstrates the cosmopolitan nature of the rich societies of Tell el-‘Ajjul. The majority of the imported pottery comes from Cyprus but it derives also from Egypt, Greece, the Jordan valley, and maybe also from Syria. Most of the imported small finds derive from Egypt. A cautious approach to the chronology is based on certain ceramic wares alone. The date of the lowest layers seems to be the end of the Middle or the beginning of the Late Bronze Age. The date of the uppermost layer falls provisionally within Late Bronze Age 11B.

131) Aren Maeir, Bar Ilan University and Carl S. Ehrlich, York University

*The 2000 Season at Tell es-Safi/Gath*

Tell es-Safi (most probably biblical “Gath of the Philistines”) is located on the border between the coastal plain and the Judean Shephelah. For the past couple of years, a joint Israeli-Canadian team, led by the present authors, has been conducting an archaeological project at the site. Thus far, the primary focus of our work (in Area A) has been the excavation of a well-preserved destruction level, which appears to date to the late ninth century BCE. As such, it represents a little known cultural phase, that of the Iron IIa Philistine material culture.

In this lecture we will describe the current state of our investigation of this level and present preliminary results of the typological, chronological, and spatial analysis of these finds. Of particular importance is the question of the stratigraphic-chronological relationship between the finds at Tell es-Safi and those at other sites in Philistia, the Shephelah and the southern Levant as a whole. The talk will incorporate the results of the 2000 season. In this season we are currently planning to expand our work at the site and hope to extend our knowledge of the site to include finds from earlier and later stages of the Iron age.

132) Robert Mullins, Hebrew University

*Recent Discoveries at Tel Rehov*

Tel Rehov (Tell es-Sarem) is a major Bronze and Iron Age site located ca. 5 km/3 mi south of Tel Beth Shean. Although it is not mentioned in the Bible, Rehov appears in several Egyptian sources of the New Kingdom period (11th-12th centuries BCE). A. Mazar directs the project on behalf of the Institute of Archaeology of the Hebrew University of Jerusalem.

So far, three seasons of excavations (1997-99) have revealed a well-stratified sequence from the Late Bronze Age through Iron Age II. In particular, large and well-preserved buildings from two occupation layers in the upper and lower cities have been dated to the tenth-ninth centuries BCE; a period that is under great debate at present. The finds include a large number of restorable pottery vessels, a unique pottery cult stand, clay figurines, seals and other objects. Remains of the later Iron II city destroyed by the Assyrians in 773 BCE include a thick, hastily erected 8 m-wide mudbrick wall that protected the acropolis.

The purpose of the presentation is to provide participants with an update of the latest Summer 2000 discoveries and their historical implications.
SATURDAY MORNING, 8:30–10:30

A36, Archaeology of Anatolia I
Session Theme: Current Excavations

Sharon R. Steadman, SUNY Cortland, Presiding

135) R. Lindley Vann, University of Maryland, and Robert L. Hohlfelder, University of Colorado

Survey of Aperlae in Lycia: The Season of 2000

The University of Maryland/University of Colorado team returned for a fourth and final survey season at Aperlae in Lycia in June 2000. Aperlae was a small Hellenistic town which prospered during the later Roman Empire and Early Byzantine era until its apparent abandonment in the seventh century AD. Most of the well-preserved buildings date from the last few centuries of its use and are of rather ordinary construction. Indeed Aperlae lacks the standard Greek/Roman buildings such as theaters, temples, etc., indicating Aperlae was probably simply a small Lycian town.

The major objective was the architectural recording of buildings both on land and underwater, including two baths and three churches, as well as at least twenty-five other buildings of domestic scale. More than seventy tombs and thirty cisterns have also been recorded. The well-preserved fortifications include walls on all sides of town, though the south side was removed at a later date, perhaps at the time of other building projects near the shoreline. Fortifications include a city gate and two posterns. The countryside demonstrates smaller fortified positions, some are signal towers, others are farmsteads. Professor Donald Sullivan (University of Denver) and James Bucko (James Mason University) are directing a more complete survey of the environs recording ancient terracing and hydrological data. Professor Robert L. Hohlfelder (University of Colorado) continued the recording project of the underwater features including the inundated church and what was apparently an earlier public building of Roman date.

136) Paul Zimansky, Boston University, and Elizabeth C. Stone, SUNY Stony Brook

Investigations in the Lower Town of the Urartian Fortress at Ayanis, 2000

In previous seasons an extensive settlement area surrounding the seventh century BC Urartian fortress at Ayanis, Turkey, has been investigated by shovel tests, magnetic field gradient survey, and excavations. In the 2000 season the shovel test survey will be expanded in the west and south to locate the only remaining boundaries of the settled area that have not yet been defined. Excavations will be conducted in selected areas exhibiting different architectural patterns as seen in our twenty-hectare magnetometer survey of previous seasons. We hope to open a new sounding on one of the strong positive magnetic anomalies which we suspect to be the remains of kilns or furnaces. This research should add to the little that is known of the conditions of daily life in the shadow of an Urartian citadel.
The Iron Age sequence at Kinet Höyük, ancient “Issos,” has provided a major focus for excavations at this small urban port in the northeast Mediterranean (1992–present). Location on a natural political border ensured it an eventful history. For example, the town was drawn into Neo-Assyrian and Persian military projects that left substantial archaeological remains. The Iron Age phases also illustrate shifting economic patterns in the eastern Mediterranean over the long term, from a regional network in the tenth and ninth centuries, to a greatly expanded market from the late eighth century until Alexander’s march through the Issos Plain in 333 BC.

This paper will present the salient architectural and urban features of this harbor from its earliest Iron Age revival (twelfth/eleventh century BC) through the Persian period. Changes in the site’s political and cultural affiliations, and in its immediate natural environment, prompted adaptive strategies specific to Kinet. Their bearing on broader issues of the Iron Age in the eastern Mediterranean will also be addressed.

Excavations at Ziyaret Tepe

This paper discusses the results of the first season of excavation at the Middle-Late Assyrian period site of Ziyaret Tepe on the Tigris River in Diyarbakir Province. Previous survey and magnetic field gradient survey at Ziyaret Tepe in 1997-1999 have confirmed that the site was an important urban center during the Assyrian empire, located on the northern imperial border. Furthermore, a long sequence of occupation from the late Neolithic/early Chalcolithic through the Iron Age has been confirmed for the central höyük at the site through surface survey. Excavations on both the höyük and in the extensive lower town starting in 2000 are aimed at elucidating the nature of urban settlement at Ziyaret Tepe, as well as the chronological sequence represented at the site.

Excavations at Çadir Höyük: The 2000 Season

Previous investigations at Çadir Höyük have exposed material remains ranging from the prehistoric through Late Roman/Byzantine era. The 2000 excavations concentrate on the prehistoric period which, at present, has demonstrated substantial Late Chalcolithic remains. We continue our vertical exploration in the deep sounding, which has, as of the 1999 season, yielded over four meters of Late Chalcolithic occupation. Additional work will reveal the extent of prehistoric occupation which may extend into the Middle Chalcolithic and even earlier.

The 2000 season will also further explore the four 10 x 10 trenches opened over the last several seasons. These trenches seek to expose, in a stratum-by-stratum procedure, the Late Chalcolithic domestic architecture evident thus far. Two interesting features are also primary targets in the 2000 season. One is the large-scale (1-meter wide) stone wall evident at the edge of the settlement. Upon initial exposure this wall was interpreted as an enclosure or defensive structure. However, additional work in 1999 suggests that it may be part of a large building. Further exploration should clarify the nature of this feature. A second wall, further up the mound, and in a higher (stratigraphically) context, may be the remains of a Hittite wall, which may offer evidence of a Middle/Early Bronze sequence present on the site. In addition to these investigations, research will continue on issues such as settlement organization, socio-economic structure, and long-distance trade. Progress on these research topics will be presented.

A37, Integrating Archaeology into the Biblical Studies Classroom
Melissa Aubin, Florida State University, Presiding

Here I Am at Khirbet Cana: Archaeology and Biblical Studies

This paper argues that the best way to integrate archaeology and biblical studies is to take students into the field for excavation. The first section of the paper reviews the principal alternatives to actual student participation in excavation, namely, introducing archaeological content into the biblical studies course, and teaching courses on archaeology. The paper argues that each of these approaches fails to integrate archaeology and biblical studies in an appropriate and productive way. Involving students in field excavation, by contrast, suffers from none of these weaknesses. On the contrary, it offers several pedagogical advantages. In spite of potential difficulties, then, taking students into the field is the best way to integrate archaeology and biblical studies.

141) Juergen Zangenberg, Bergische Universitat

Glimpses into a Different World: Reflections on Teaching NT Archaeology at Bangor Theological Seminary

The paper presents personal and academic reflections about my experiences as an European teaching Near Eastern/New Testament Archaeology to a class of American students. During the course I taught at Bangor Theological Seminary/Maine both myself and the participants of my class had plenty of opportunity not only to reflect upon the subject but also on our own cultural context. By attempting to reconstruct the distant New Testament world, we all were becoming increasingly aware of the fact that we also were constructing our own. This hermeneutical process of interaction between myself, the world in which I live and the “distant” archaeological “object” is something that is worth being discovered and discussed in every class concerned with archaeology. Careful reflection on that process can help prevent the misunderstanding of archaeology as “objective science,” as it might still be perceived by many students attending our classes.
143) Milton Moreland, Huntingdon College

*Foundations on Bedrock: Putting Archaeology First in NT Courses*

The focus of this paper is on teaching. It originates in my own experience and in conversations I have had with other teachers who find themselves in the complicated role of biblical scholar and field archaeologist. The general question I am pursuing is how to integrate archaeology into the classroom, in particular, I am reflecting on how one might allow archaeology to be a guiding force in the setting of New Testament introduction courses and Historical Jesus courses in an undergraduate college. The paper is divided into two parts. First, I have briefly attempted to diagnose the typical prohibitive factors by reflecting on background knowledge many undergraduate students bring to the reading of the texts of the New Testament and by examining several recent publications, including introductory textbooks which continue to lack serious information from the field of archaeology. The second section is a brief analysis of the value of starting classroom discussions about the historical Jesus and the gospel traditions with a detailed introduction into the economic situation in Galilee as revealed through archaeology before moving into the texts. In this section I have briefly evaluated the economic setting of Galilee in the early first century as it might apply to the sayings of Jesus known as the Woes.

144) Ann Steinsapir, UCLA

*Sanctuary to Baalshamin at Sia’: Landscape and Cultural Identity*

Attempts to derive meaning in the landscape have become part of the archaeological discourse in recent years. The symbolic significance of landscape has served as a valuable component for investigating cultural identity. The Sanctuary dedicated to Baalshamin at Sia’ in the Syrian Hauran provides an example of how the landscape was transformed by the addition of architecture in order to assert local identity within a volatile territory in the first centuries of the common era. Early investigations focusing on buildings and epigraphy at the site identified Sia’ as a Nabatean sanctuary with late Roman additions. Another interpretation of the cultural identity of the builders can be postulated by utilizing landscape methodologies.

An investigation that places the buildings, inscriptions and iconography into a broad framework including the surrounding countryside, suggests that the builders of Sia’ were a distinct group who sought to stress their identity in the region. I propose that the succession of buildings at the sanctuary brought certain geographical phenomena together emphasizing the sacred nature of the site to the indigenous population. Furthermore, the buildings were deliberately placed in order to bring a specific part of the surrounding territory into view both physically and symbolically. Over time, the building program created a visual boundary framing the small yet distinct geographical region at the foot of the Jebel al’Arab. Thus, a group whom Josephus enigmatically calls “natives of the region” (JA XV 112-118) were able to mark their territory and retain their autonomy during two hundred years of political upheaval.

145) Anne Chapin, Brevard College

*Minoan Ethnicity and Aegean Landscape Painting*

Neopalatial Minoan landscape art, widely appreciated for its lively depictions of the natural world and for its connections with Minoan religious belief, is recognized by archaeologists today as an emblematic feature of Minoan material culture. This paper examines landscape painting as an expression of Minoan ethnicity and argues that landscape art helped to define religious and political affiliations through visual means while doubly serving to establish the boundaries and hierarchies of the Minoan cultural sphere known as the “thalassocracy.”

This argument is based upon the theory that landscape art reflects a system of Minoan religious belief in which the divine power of a goddess associated with nature is made manifest through the supernatural profusion of plants and animals found in Minoan nature paintings. The spread of landscape art throughout the Aegean during the Neopalatial period thus not only reflects the impact of Minoan influence on the non-Minoan populations of the Aegean, but also may...
preserve visual statements of religious, cultural, and perhaps political ties to the Minoan elite power structure.

146) Louise Hitchcock, UCLA

“One cannot export a palace on board a ship”: Interpreting Identity and Architectural Influences Between Cyprus and the Aegean

Toward the end of the Late Bronze Age (thirteenth century BCE) Cypriot architecture is distinguished by the emergence of monumental buildings connected to regulation of the copper industry and olive oil production. Especially significant is the proliferation of ashlar buildings in the thirteenth century BCE at Kalavassos-Ayios Dhimitrios, Maroni-Vournes, and Alassa-Palaeotaverna, pushing the emergence of monumental ashlar buildings in Cyprus back one century. They exhibit a level of refinement and sophistication only previously hinted at, at sites like the Ififth century ashlar gate at Nitovikla. Although they manifest similarities in construction and masonry technique, there is substantial diversity in terms of their architectural vocabulary.

The appearance of Aegean symbols, influences, design elements, and social practices further characterize these buildings and others at Hala Sultan Tekke, Kition, Kouklia, and Myrtou-Pighadhes. These features include the appearance of “Horns of Consecration,” stepped blocks, a tradition of engraved “mason’s” marks, aniconic cult representations, particular orientations, organizational practices, an accumulation of repeated design elements or modules, pierced slabs used as sacrificial loci, bench shrines, “tripartite” or triadic shrines, and basin buildings. This paper examines and evaluates various methods and theories for explaining intercultural connections as they relate to architecture including colonization and ethnicity, peer polity interaction, Mnemohistory (the remembrance of the past), Structuration (the relationship between daily routine and the formation of cultural identity), modified diffusion, and evidence for itinerant builders.

147) Andrew McCarthy, University of Edinburgh

Identity, Style and Memes: Cylinder Seals and Shared Complexity in the Urban Revolution

Various forms of external symbolic storage served as physical manifestations of identities that were forming in the periods leading up to the Urban Revolution and through them we can interpret patterns of socio-cultural change. Contrary to popular models of culture change, civilization did not branch out from a “core” and spread to a “periphery,” but rather was the result of a dynamic interaction between all of the participants of the complex co-adapting network that made up the greater Near East at this time. Through memethory (theory of transmittal of information patterns from one individual memory to another), stylistic analysis, and statistical archaeological sampling of ancient glyptic artifacts, it will be shown that the first state societies simultaneously co-evolved as socio-economic responses to new definitions of identity. In the several millennia from ca. 8000–3100 BC the Near East was a complex system that was interacting through a combination of exogenous and endogenous changes (that is: autochthononous evolution and external diffusion).

At the turn of the third millennium, a revolution occurred due to human interaction with this complex system. A new system was arranged, where increased organization and structure on a regional or “state-level” was evident, and this new system continued on until the next restructuring was needed. This new system was structured by an added layer of identity and the reorganization of the pre-existing identities within new social structures (state societies) each of whose developments were sensitive to their initial conditions.

SATURDAY MORNING, 9:00–12:00

A39, Public Program I

148) Ann Killebrew, University of Haifa, Israel

Developing Megiddo for the Public

The archaeological heritage of Israel has been the focus of intense scholarly research for well over 100 years. However, Israel’s past also holds great local and international significance for the general public. Increasingly archaeologists working in Israel are realizing that their responsibilities also include presenting the scholarly results of their excavations to a broad and multi-cultured public. Several public archaeology programs at Megiddo, Qasrin and Akko will illustrate the different approaches and difficulties involved in presenting the past to the public.

149) Kyle McCarter, Johns Hopkins University

Wadi el-Hol and the Origin of the Alphabet

It is widely agreed that the alphabet was invented in the Ancient Near East by speakers of an archaic dialect in the language group that also includes Phoenician, Hebrew, and Aramaic. Viewed from a long range historical perspective, this view was an event of extraordinary significance in the development of civilization since it broke the monopoly on writing maintained by the scribal elites of ancient Mesopotamia and Egypt. In effect, the alphabet democratized literacy. A recent discovery in Egypt which made front page of the New York Times, November 14, 1999, sheds important new light on the origin of the alphabet and requires some surprising modifications in our understanding of its earliest history. Using the Egyptian discovery as a starting point, this lecture offers a new hypothesis on the origin and early history of the alphabet.

150) Eric Cline, George Washington University

Armageddon: The Origins of the Big Bang at the End of Time

Apocalypse. Judgement Day. The End Time. Armageddon. Students of the Bible know it as the place where the cataclysmic battle between the forces of good and the forces of evil will unfold. But few know that Armageddon is a real place, one that has seen more fighting and bloodshed than any other spot on earth, for Armageddon is a corruption from the Hebrew Har Megiddo and means literally the “mount of Megiddo.” At least 34 bloody conflicts have already been fought at the ancient site of Megiddo and adjacent areas of
the Jezreel Valley during the past 4,000 years. The names of the warring generals and leaders reverberate throughout history: Thutmose III; Deborah, Barak, and Sisera; Gideon; Saul and Jonathan; Shishak; Jehu, Joram, and Jezebel; Josiah; Antiochus; Ptolemy; Vespasian; Saladin; Napoleon; and Allenby, to name but a few of the most famous. Throughout history Megiddo and the Jezreel Valley have been Ground Zero for battles that determined the very course of civilization. No wonder that the author of Revelation believed Armageddon, the penultimate battle between good and evil, would also take place in this region! The Battles of Armageddon introduces the audience to a rich cast of ancient and modern warriors, while tying together for the very first time the wide range of conflicts that have been fought at Megiddo and the Jezreel Valley from the Bronze Age to the Nuclear Age, in the place called Armageddon.

151) Anson Rainey, Tel Aviv University

The Amarna Letters and Canaan

Abstract not available

152) Peter Piccione, University of Charleston

Introduction to video presentation

In Spring 2000, the Egyptian history class at the College of Charleston staged for the campus community the sacred drame of Edfu, the “Victory of Horus.” This liturgical drama is recorded on the scenes and texts of the walls of the Temple at Edfu currently visited by many tourists.

The Edfu drama reveals important aspects of Egyptian life and living, while demonstrating the essential ethical and political elements at the core of Egyptian society, including the primary role of god-king. The drama was performed outdoors with all the students participating in the production in some manner. A video will be shown of the preparations and the performance.

SATURDAY, 9:00–3:00

A40, Outreach Education Teacher’s Workshop

(Separate registration required, see page 19)

Session Theme: Archaeology in the Classroom

Judith Cochran, J.M. Cochran Enterprises, Inc., Presiding


Welcome

154) Cumberland Museum Director

Educational Opportunities at the Museum

155) Carolyn Draper Rivers, Educational Outreach Committee

Overview of Outreach Education

156) Judith Cochran, J.M. Cochran Enterprises, Inc. and Christine Nelson, Archaeology Education Outreach Program

The Archaeological Process: Interpreting Personal Artifacts

Interpreting finds and problem-solving are at the heart of the archaeological process. Teachers bring artifacts from their own homes, catalog and interpret them. They also interpret/reproduce artifacts from the past.


Great hands-on classroom activities illuminate all aspects of archaeology and problem-solving. Meaningful stratification activities and meticulous record-keeping illustrate what happens on an actual dig. Activities include decoding ancient writing, designing an Egyptian tomb in a shoebox, and constructing a time capsule.

158) Christine Nelson, Archaeology Education Outreach Program

Simulating a Dig Experience

Simulating an actual dig includes a demonstration and step-by-step instructions regarding the material needed to construct a square, and how to procure artifacts to represent a variety of cultures and historical time periods. This program has been successfully implemented in over 200 elementary, middle, and high schools in the U.S. and Canada.

SATURDAY MORNING, 10:45–12:45

A41, Archaeology of Anatolia II

Session Theme: Merchants and Traders, Farmers and Herders

Timothy Matney, University of Akron, Presiding

159) Marie-Henriette Gates, Bilkent University, Turkey

Kinet Höyük and the Case of the Vanishing Bronze Age Merchants

One axiom of archaeological analysis equates trade with ceramic imports, volume of trade with frequencies of imported pottery, and extent of trade networks with variety of ceramic types. But what of sites where pottery was apparently not an imported commodity, despite every indication that their economy involved long-distance, cross-cultural commerce?

This situation characterizes the Middle and Late periods at Kinet Höyük, on the Iskenderun Bay’s east coast. Destruction levels with large samples of pottery in situ have produced remarkably few imported vessels, although the site’s function as a second millennium harbor, with contacts beyond the Cilician coast, is certain. This paper will discuss the challenges of documenting a network of exchanges that
did not include pottery; the near-absence of Cypriot pottery in coastal Turkey outside the Uluburun shipwreck; and the contrast between harbors and inland sites in the archaeological record. It will propose, in place of pottery, alternative evidence to make the vanished Bronze Age merchants reappear.

160) Jennifer Ross, Hood College

*Near Eastern Trade in Precious Metal Vessels: Plated Plates and Base Basins*

Diplomatic exchange in the form of precious metal vessels, enhanced with applied and engraved ornament, is attested at various points in the history of the ancient Near East. In particular, the Amarna letters provide evidence for the interchange of silver and gold cups and jars within the complex network of royal relationships during the International Age. Less well-known, but no less well-attested, are precious metal containers given to various recipients according to the early second millennium tablets from the palace at Mari. Another such system of exchange seems to appear in the texts from third-millennium Ebla. This paper will explore the background and history for the exchange of precious metal vessels, especially examining the possible reasons behind the movement of gold and silver in this particular form.

161) Marcella Frangipane, University of Rome, Italy

*Tradition and Innovation, Mesopotamian Traits and Originality in the fourth Millennium Public Architecture at Arslantepe (Turkey)*

The recent discovery of a monumental public building belonging to the middle of the fourth millennium at Arslantepe (Malatya, Turkey) brings new light on the characteristics of the development of the large public area with complex monumental architecture known from the Late Uruk period (at the very end of the millennium), and shows the existence of a local tradition with the adoption of original solutions besides a deeply-rooted sharing of cultural traits with the Mesopotamian world. A peculiar bipartite plan is established for ceremonial architecture and the different public functions are organized in one single planned complex of buildings following some Anatolian traditions, whereas other technical and formal features clearly recall the Mesopotamian environment. Among the local traits, the development of an extraordinary iconography in wall paintings represents one of the most outstanding features. All the elements suggest important considerations on the nature of the centralization process in the Euphrates Valley north of the Taurus mountains, illuminating its peculiar forms and dynamics of growth.

162) Gabriela Castro Gessner, Binghamton University

*Understanding Use of Space: Households in the Halaf*

Research in small-scale societies for the sixth millennium in Northern Mesopotamia has largely focused on social complexity. At the inter-site level, variation has been established in terms of subsistence patterns, communal layout and size. Recently, the need to assess social and economic variability at the intra-site level has been recognized, however, research on households and domestic use of space is limited. Based on work done at the site of Kazane in southeastern Turkey, I review discussions on economic and social organization for the Halaf, with an emphasis on households and activity areas. In this paper, I approach the identification of households for the Halaf, from the distribution of activities on exterior pebble surfaces.

163) Michael Rosenberg, University of Delaware

*Recent Excavations at Demirköy Hoyuk, an Aceramic Neolithic Site in Eastern Turkey*

Demirköy Hoyuk is the first excavated aceramic Neolithic site within the upper Tigris drainage in eastern Anatolia to document the transition from the settled hunter-gatherer societies of that region, as typified by Hallan Cemi, to the fully developed food producing societies of that region, as typified by Cayönü. It ties the two together both chronologically and culturally, and has yielded evidence concerning the nature of that transition in economic, socio-political and ideological terms. Not all the changes so documented are consistent with what had been earlier expectations.

A42, Celebrating 30 Years of Research at Tell El-Hesi I

Session Theme: Current Research

W. J. Bennett, Jr., Archaeological Assessments, Presiding

164) James L. Phillips, University of Illinois, Chicago

*Residual Hesi*

This paper reports on work recently undertaken by the speaker. Yuval Goren, Avi Gopher, and Jeff Blakely. As the final report of Hesi is being prepared for publication, the entire ceramic and lithic inventories have been re-examined. In so doing it has been noted that small quantities of both lithic and ceramic remains that predate the established stratigraphic matrix by millennia have been found in residual contexts all the way up through the Persian Period remains. These Neolithic and Chalcolithic lithics and ceramics have been isolated and studied, and it is now possible to establish that the Hesi site was in use for millennia before the recovered stratigraphic matrix began to be created. This paper will examine three aspects of residual Hesi: first I will discuss in what pre-Bronze Age periods humans used the Hesi site; two, I will suggest how the site was used during these periods; and three, I will comment on the difficulties in interpreting a residual archaeological record.

165) Roger W. Anderson, Argonne National Laboratory

*Towards an Absolute Date for the Early Bronze Age at Tell el-Hesi*

The excavations at Tell el-Hesi have produced a number of clues for the dating of the Early Bronze Age (EBA) at this...
site. The EBA has so far been primarily identified in Fields VI and IX. Among the material cultural remains is a glaçis. In addition, clearly identifiable EBA pottery has been found in many loci. Also, animal figurines, bone sheaths, and mace heads from the EBA have been excavated. These additional clues help in producing a solid relative chronological date of the EBA, but do not provide an absolute date for the EBA at Hesi.

The excavations at Tell el-Hesi have produced a considerable quantity of seeds in Fields VI and IX in EBA loci. Many of these loci are sealed and uncontaminated. A botanist already identified the types of seeds on site during the field season. However, the seeds can provide additional information on the dating of the EBA at Hesi.

Seeds from several loci have been analyzed by the C14 method. This study of the seeds produces an absolute date in several places for the EBA at Tell el-Hesi. The absolute dating of the EBA at Hesi also helps to understand other EBA sites in the region.

166) Ralph W. Doermann, Trinity Lutheran Seminary

The Iron Age (Strata IX-VIIII) at Tell el-Hesi

After eight seasons of excavation the information from the Iron Age strata will be summarized and evaluated. Early Iron I and Iron II strata (Strata X and IX) were covered by a massive construction dated to the mid-ninth century BCE (Stratum VIIIId). Retaining walls and a construction glaçis on the south slope of the tell were constructed to support a major pier/fill system which raised the height of the tell by at least 21 feet, probably in order to enable the site to serve as an early warning station for the military garrison at Lachish. Signal fires would be used to announce the approach of enemy troops moving in from the coastal plain.

167) James W. Hardin, Mississippi State University

Southwestern Judah in the Late Eighth Century: When Was Hesi’s Stratum VIII Destroyed?

Were the sites of Tell Beit Mirsim, Tell Halif, Tell Beer-Sheba, and Tell el-Hesi, all of which are generally assumed to have been destroyed by the armies of Sennacherib in 701 BCE, actually destroyed some years earlier? To examine this question we shall examine the primary Assyrian, Egyptian, and biblical sources to establish a basic military and political history for southwestern Judah in the late eighth century. Next we shall turn to archaeology and examine the dating and distribution of stamped lamelek jars, and for southwestern Judah, we will superimpose that distribution on the topography of the region along with its road system. With this background we will then analyze the stratigraphic and ceramic records for Tell Beit Mirsim, Tell Halif, Tell Beer-Sheba, and Tell el-Hesi paying particular attention to the find spots of lamelek jar stamps and private seals as well as any other ceramic forms that may indicate a chronological distinction between these sites and Lachish III. Finally we will compare and contrast our observations drawn from the historical record with those drawn from the archaeological record to argue our question.

168) John R. Spencer, John Carroll University

Ostraca from Tell-Hesi

In the eight seasons of the modern excavations of Tell el-Hesi, a small number of finds were identified by the excavators as ostraca. This presentation will deal with these finds. The first section of the presentation will examine the identifications of these finds as ostraca, confirming or rejecting such identifications. The second section will be devoted to an examination, interpretation, and translation of the writing on those sherds legitimately identified as ostraca. The paper will conclude with a discussion of the significance of the finds for understanding the site of Tell el-Hesi.

169) Fred L. Horton, Wake Forest University

What Was the Name of Tell el-Hesi in the Biblical Period?

This paper explores the identifications modern scholars have made of Tell el-Hesi with sites from the biblical period. After a brief discussion of the meaning of site identifications in historical geography, biblical studies, and archaeology, the author examines each identification in detail and concludes that the archaeological data is insufficient to support any of them completely.

Employing results from Blakely’s recent rephasing of the Hesi site, the author contends that the archaeological evidence suggests that Hesi, whatever its ancient name, was in fact Judahite from the tenth through the eighth centuries and that it was functionally linked with Judah’s SW border throughout this period. Despite the past failures of scholars to identify the site convincingly with a biblical site, the author believes that the ancient name of such an important site is likely preserved in the biblical materials and may yet be recovered.

170) Michael D. Coogan, Stonehill College, Respondent

A43, Mortuary Practices

Rachel Hallote, Pennsylvania State University, Presiding

171) Byron R. McCane, Converse College

Jewish Ossuaries in the Early Roman Period: Continuity and Change in Death Ritual

The rise of Jewish ossuaries during the Early Roman Period has stimulated lively (and at times acrimonious) debate among archaeologists. What were the factors which prompted the use of these individual containers for secondary burial? The earlier dispute between E. Meyers, who regarded ossuaries as a Jewish adaptation of ancient Near Eastern techniques of secondary burial, and L. Rahmani, who argued that ossuaries were a “uniquely Jerusalemite” phenomenon, subsided without arriving at a resolution. Yet subsequent advances in both material evidence and theoretical frameworks render such a resolution long overdue. This paper argues that ossuaries arose as Jews adapted their traditional custom of secondary burial to newer Hellenistic cultural norms valorizing the human individual.
The first section of the paper briefly described Jewish ossuaries, including their physical characteristics and typical archaeological context. Emphasis falls upon the fact that ossuaries are most frequent in Jewish tombs near Jerusalem during the Early Roman Period. The second section of the paper reconstructs the ritual process by which secondary burial in ossuaries took place. Illustrative finds are examined in order to identify similarities and differences between the ritual of ossuary burial and earlier forms of secondary burial. The closing section of the paper argues that the use of an individual container for secondary burial in a family tomb both preserved customs with roots in ancient Israel and embraced newer Hellenistic concepts of the individual. Jewish ossuaries thus exemplify what Bowersock has called Hellenism’s “new and more eloquent way of giving voice” to local and indigenous traditions.

172) Stuart Swiny, SUNY-Albany

*What Can Death Tell Us About Early and Middle Bronze Age Life in Cyprus?*

Hundreds of Early and Middle Bronze Age burials have been systematically excavated and recorded since the Swedish Cyprus Expedition began work on the island in the 1920s. Despite eighty years of careful study focusing on the human remains, the funerary architecture and the offerings found in the chambers many basic issues remain unanswered. Were chambers dug for individuals in anticipation of their deaths, did kinship ties dictate the burial sequence and grouping in individual chambers and can status be determined by the quality (in our eyes), quantity and nature of grave goods? Other questions may be asked concerning the disposal of the dead from individual settlements since it would appear that an insufficient number of chambers was dug to accommodate all the dead from any given habitation site. This is especially obvious with respect to heavily underrepresented infants and children. Information from unpublished Early and Middle Bronze Age cemetery excavations at Sotira Kaminoudhia and Episkopi Phaneromeni will be used to illustrate the discussion.

173) Andrew Cohen

*The Ritual Context of Mortuary Practices: A Mesopotamian Case Study*

Death has the potential to disrupt social systems, and in order to prevent such disruption, social groups institutionalize their response to the death of their members. The entire cycle of institutionalized activities that constitutes this response may be called the “death ritual.” This paper presents a way of looking at mortuary practices, one which emphasizes the relationship between mortuary practices and the other sets of activities that are commonly a part of death rituals. It begins by describing a seemingly anomalous mortuary practice from Early Dynastic period Southern Mesopotamia—the human sacrifice attested in the Royal Cemetery of Ur. Then, the paper presents the results of cross-cultural studies indicating that death rituals may be seen to create parallel domains of activity centering on the mourners, the corpse, and the soul or spirit remnants of the defunct body. Next, the results of my research on early Mesopotamian mourning and conceptions of the soul are outlined. These findings help explain the Royal Cemetery phenomenon. The paper concludes that considering mortuary practices as part of death rituals is a potentially useful way of understanding both the mortuary practices themselves and the social significance of the death rituals of which they are a part.

174) Michelle Bonogofsky, University of California, Berkeley

*Postmortem Dental Evulsion in the Modeled Skulls from the Levant: Perceptions or Deceptions?*

The dietary changes that occurred in the ancient Near East during the development of agriculture and the domestication of animals resulted in increased tooth loss due to higher rates of attrition and dental caries. These rates of tooth loss appeared to explain the reasoning behind a perceived mortuary practice which involved dental evulsion in the modeled skulls from the Pre-Pottery Neolithic B period in the Levant. New evidence, gained through the use of computed tomography and a re-examination of the original osteological and photographic materials, demonstrates that intentional post-mortem dental evulsion was not necessarily practiced on these skulls.

175) Alexander Joffe, Boston University

*Death, Prosperity, Health: Mortuary Practices in the Iron Age*

The Iron Age Southern Levant displays a tremendous variety of mortuary practices, a profound manifestation of a multiethnic society in an international age. After some three millennia of urban development the primary mortuary concerns are the representation of wealth and status, accomplished in part through the use of non-local practices. Distinguishing the ethnicity of the deceased, and their belief systems, remain outstanding problems.

176) Robin Knauth

*“Are There No Graves in Egypt…?” Supreme Irony, Grave Concern: Erichtho Revisited*

“There are no graves in Egypt that you have brought us out into the wilderness to die??” (Exod. 14:11-12 ) The typical casual western reader will have a tendency to read this line from the wilderness complaining stories as simple sarcasm: of course one can be buried anywhere, but God brought the Israelites out of Egypt not for death, but for life—to fulfill the promise to Abraham! However, a bit of digging reveals this statement to be more than simple sarcasm. It is demonstrably at once a statement of supreme irony and an expression of genuine concern over place of burial. Herbert Brichto’s brilliant and convincing thesis regarding the Israelite cult of the dead (“Kult, Cult, Land and Afterlife—A Biblical Complex” in *HUCA*) provides the best context for understanding the full impact of this wilderness complaint, as well as a number of other heretofore poorly understood biblical texts. Brichto treats a law in Deut. 21:18-21 which connects disobedience to parents with “gorging and guzzling,” punishable by stoning. As he observes (p. 32), imposition of the death penalty for gluttony does not merely reflect a concern for “selfish ingratitude.” It is concern for the inheriting son’s
fitness to carry on the ancestor cult which drives the severity of punishment. I would push his assertion further: perhaps the crime of “gorging and guzzling” was specifically that the son was himself eating and drinking food offerings intended for the ancestors (as Eli’s sons ate sacrificial fat portions intended for YWHH)! Such a possibility could also make better sense of the famous passage in Gen. 25:29-34, in which Esau is said to “despise his birthright”—selling it to Jacob for some “red stew.” Suppose the “red stew” was not simply a dish of lentils, but was prepared specifically as a food offering for the ancestors, the red representing blood (or even literally “consisting of blood”), then Esau’s insistence on eating this sacrificial blood stew should rightly cost him his birthright of primary responsibility for the ancestor cult—the more so in accordance with the Deuteronomic law above.

A44, The World of Women: Gender and Archaeology
Beth A. Nakhai, University of Arizona, Presiding

177) Carol L. Meyers, Duke University

Fore-Grounding Women: The Case for Household Archaeology

The household has been a focus of archaeological research by anthropologists for decades. Yet, households have been virtually ignored—apart from concern for their archaeological plans (i.e., the four-room house) and origins—in Syro-Palestinian archaeology. Because they are ubiquitous, involve the use of material culture, and always have women among its members in roughly the same proportion as men, households are clearly the major site for the archaeological investigation of gender roles in any pre-modern society. Microscale analysis of domestic structures and their associated contents can provide information about women’s activities and social relationships. This paper will consider the paucity of such research agendas in Syro-Palestinian archaeology and suggest possibilities for household archaeology that foreground women.

178) Susan Ackerman, Dartmouth College

Recent Biblical Scholarship on Gender and the Contribution of Archaeology

It was just a little more than twenty-five years ago that in many respects launched the current generation of feminist biblical research: Phyllis Trible’s “Depatriarchalizing in Biblical Interpretation” (in JAAR 41 [1973], 30-48), and Phyllis A. Bird’s “Images of Women in the Old Testament” in (Religion and Sexism: Images of Women in the Jewish and Christian Traditions [ed. R.R. Ruether; New York: Simon and Schuster, 1974] 41-88).

Since that time, feminist biblical scholarship has blossomed, although I think it is fair to say that the bulk of the work in the discipline has been done by scholars who take their methodological cues from Trible in pursuing a primarily literary feminist analysis. Conversely, the more historical approach embraced by Bird has been less widely adopted, by scholars such as Jo Ann Hackett and Carol Meyers (Meyers in her 1988 book Discovering Eve: Ancient Israelite Women in Context and Hackett in her 1985 article “In the Days of Jael: Reclaiming the History of Women in Ancient Israel” and in her 1987 piece “Women’s Studies and the Hebrew Bible.”) Notably, both these scholars focus their efforts on Israelite women of the Iron I period.

This paper will discuss the features of the recent archaeological discoveries of the Iron I that make reconstructions like Hackett’s and Meyer’s possible and will consider the sorts of research designs that excavations of Iron II sites could employ in order to help bring our descriptions of ancient Israelite women forward into the first millennium.

179) Kerry Adams, University of Arizona

An Ethnoarchaeological Approach to Gender in Ancient Israel

Over a decade of scholarship concerning an engendered past has evolved little evidence for a “theory of gender” applicable to the archaeological record. However, interpreting gender-specific behaviors based on artifacts, spatial analysis, and historical documentation requires a more concrete development of model- and theory-building scholarship on gender in order for an engendered past to move beyond the abstract stage. Ethnoarchaeology is one model-building tool that has been used to develop a greater understanding of an engendered past. This paper will outline the contributions of ethnoarchaeology and ethno-historic scholarship in relation to the identification of gender, and it will discuss where these findings might be honed as a model for interpreting gender in the archaeological record from Ancient Israel. This paper will show how ethnoarchaeology will continue to illuminate women’s lives in Ancient Israel.

180) Melissa Aubin, Florida State University

Fighting off Fictions and Finding a “Usable Past”: The Contributions of Women in the Field

Despite advances that women have made over the last century in the field of Near Eastern archaeology and its related disciplines, our contemporary popular culture continues to imagine the archaeologist as a hyper-masculine figure-type. He remains subtly linked to the masculinist ideals of the waning colonial era in which European fetishization of the East was ideologically linked to the beginnings of Syro-Palestinian archaeology. Why do these reminders of a past era linger? What cultural assumptions regarding gender are still at work in the popular characterization of the Near Eastern archaeologist, and how are these notions conveyed in the various media that tacitly (and, indeed, explicitly) teach us gender propriety?

My paper is designed to identify a selection of these factors and discuss the impact that such cultural tropes have on the day-to-day lives of women who become archaeologists. More importantly, I would like to challenge the resulting representation by presenting the very clear disjuncture between such popular imagery and the socio-historical reality of women’s long-lived presence in the discipline. In so doing, I will review contributions made by particular women to the history of Near Eastern Archaeology, including but not limited to Olga Tufnell, Gertrude Lowthian Bell, Hester Stanhope, Kathleen Kenyon, and Crystal Bennett, commenting on the practical value of memorializing the careers of
women forebears for creating a more female-friendly field. Finally, I will point out a selection of the many tangible and intangible factors that once thwarted and continue to complicate women’s representation in the profession.

SATURDAY AFTERNOON, 2:00–3:20
A45, Public Program II

181) Oded Borowski, Emory University
Daily Life in Ancient Israel

This slide presentation will cover topics such as what were the typical living accomodations of the Israelites? What was the daily routine of the Israelites? What did they eat, drink? How did they prepare their food? What was the economy like? And how do we know the answers to some of these questions?

182) Peter Feinman, Manhattanville College
William Foxwell Albright and the Founding of Biblical Archaeology

The story of Albright’s call as a child with the reading of *A History of Babylonia and Assyria* by R.W. Rogers is an oft-repeated part of the Albright legend. But what is the *Sitz im Leben* of this story? Suppose this tale of the founding father was excavated by future archaeologists just as the tales of Sargon the Great (an Albright favorite) had been: how would it be treated? What lessons can we learn from it about both scholars today and about how writers in the ancient world treated the stories of the giants of their own traditions?

This paper will investigate the world in which young William matured in order to determine continuities and changes from within the world of the adult Dr. Albright. It will examine that world in both Chile and Iowa to determine what he read as a child and the surrounding cultural context of the American Methodist world in the waning years of the 19th century and beginning of the twentieth century. Based on this investigation, it will be possible to correlate the state of biblical scholarship as it was revealed to him as child with the tenets of Biblical archaeology he supported as an adult. This paper will conclude that the decision to purchase the book by Rogers was the first in a series by Albright culminating in *From the Stone Age to Monotheism*.

SATURDAY AFTERNOON, 2:00–4:00
A46, Individual Submissions II

Mark Chavalas, University of Wisconsin-La Crosse, Presiding

183) Aaron Burke, University of Chicago
Revisiting Tarshish: Merchants, Mercenaries or a Migrant “Sea People”?

In addition to references to Tarshish in the Hebrew Bible to Tarshish, others have been found among Phoenician and Akkadian sources. Though the Spanish region of Tartessos has been correlated with these references by means of an excessive dependence on classical sources, this identification has depended upon a single philological argument and the region’s association with silver mining. It is only in the light of our understanding of historical developments among maritime peoples during the early Iron Age that a more suitable identification of Tarshish is possible. Though recent years have seen advances towards understanding the maritime cultures of various groups among the “Sea People,” such as the Philistines, various other groups have received less attention. Among these groups are the Tursha. The prominence of the Tursha in the eastern Mediterranean was followed by their sudden disappearance at the end of the thirteenth century. This led G. A. Wainwright to suggest that the Tursha were the ancestors of the Etruscans according to classical sources, though without additional support. Only recently the late G. W. Ahlström suggested a new translation of the Nora Stone in which the biblical Tarshish appeared alongside the Sherden. The significance of his suggestion is only fully understood when it is realized that less than three centuries passed between references to the LBA Tursha and those concerning Tarshish. In light of such evidence it is now possible to provide several lines of evidence which support the identification of Tarshish as descendants of the LBA Tursha.

184) Michael Weigl, University of Vienna
Tel Yakush, Jordan Valley: Considerations on Historical Geography

The Early Bronze Age site of Yakush, located in the Jordan Valley, was first excavated by the Oriental Institute of the University of Chicago (D.L. Esse) in 1989 and 1991. Excavations produced an area of settlement populated in all phases of EB. Towards the transition between EB I and EB II occupation reached its peak, amounting to roughly 6 acres of populated area. Excavations are going to be resumed in May and June, 2000 as a joint project field school (University of Chicago; University of Toronto; University of Vienna). Earlier surveys indicated the strategic location of the site might have been an important factor for the development of the settlement right from its onset. As already observed by D.L. Esse, Yaqush is located near one of the major fords of the Jordan River and at the eastern outlet of Nahal Tabor. Remains from Roman and even Arab times suggest the high importance of the area’s geographical location at the intersection of important transit routes. The paper will elaborate on these historical-geographical considerations.

185) Susan Cohen, AIAR
The Nature of MBIIA Settlement Patterns in the Southern Levant

The MB IIa period in the southern Levant may be divided into four broad development phases using a ceramic typology based on the ceramic repertoire of Tel Aphek. Using this typology, it is possible to determine each site’s place
The boats are of varied types: The “Fan” type of the Akko-Kition group, the “Animal head” type, the “Aegean” type and others. Their appearance is not limited to one area, on the contrary, their mariners seem to have roamed the Eastern Mediterranean.

The boats are dated to the thirteenth and twelfth centuries BCE, the epoch in which the enigmatic “Sea Peoples” are placed. The newer information should be incorporated into the known data associated with the period.

A47) Dan Davis, Texas A & M University

Maritime Space and Night-Time Sailing in the Ancient Eastern Mediterranean

Ancient Mediterranean seafarers were very familiar with local and regional wind regimes, and to a great extent winds were predictable and dependable, especially in the Aegean but also in the open sea between the three continents. With landmarks readily at hand, it was a matter of adjusting sail to steady up on course, whether shuttling between islands or coasting at a safe distance. But in multi-day crossings, such as between Crete and North Africa, which are well attested in Greek and Roman sources, piloting without reference to land was a different matter altogether. Apart from winds, effective navigation during multi-day crossings depended almost entirely on celestial orientation—the position of the sun by day and constellations by night. And there are many mentions of the employment of such tools in the sources. Even so, the modern conception of ancient navigational practice is skewed with the anecdote, “they never strayed far from land and beached their ships every night.” Clearly this was not an option on multi-day passages. I submit here that trans-regional, multi-day voyaging was common place during the Iron Age, if not earlier, and that a system of celestial navigation existed. This system took the form of steering and orientation stars, that is, stars whose rising and setting bearings were harnessed as a mark by which to steer straight courses toward predetermined destinations. Throughout the Iron Age, the ability of seafarers to harness these natural tools served to influence paths of trade and communication between the three continents.

A47, Maritime/Nautical Issues

2000 Annual Meeting Abstracts
In excavations at Tel Nami, which is a coastal site about 15km south of Haifa, Israel, a triton or trumpet shell was found with other cultic objects in a small room inside a Late Bronze Age IIb sanctuary. Triton shells of the species Choronia tritonis variegata and Charonia lampa lampas appear in low frequencies in the waters of the Mediterranean Sea and as archaeological finds in the sites of the region. While the earliest find is from a Neolithic human burial in a Ligurian cave in Italy, these shells are better known from sites in the Levant and the Aegean region. Among their many functions are containers, musical instruments, and cultic uses. This last function can be learned from the famous rock crystal seal stone from the Idaean cave on Crete, dated to MM IIIB–LM IIIA1. It shows a woman standing before an altar who seems to be blowing a trumpet shell, perhaps summoning a deity. In this session I will review the distribution of the Triton shells, both from a marine biological and archaeological perspective, surveying finds through the Neolithic to Iron Ages. Utilizing the find from the cultic context at Late Bronze Tel Nami as a case study, and archaeological and ethnographical parallels, I will explore Aegean cultural influences on Tel Nami and the relationship between this marine organism and coastal cultic practices.

Iron Age Merchant Ships off the Seaport of Askelon

The 1999 Deep Water Survey of Askelon, directed by Robert D. Ballard and Lawrence E. Stager, investigated two ancient shipwrecks resting upright on the bottom of the Mediterranean, some 50 kilometers west of Askelon, in waters about 400 meters deep. Using the remotely operated vehicle system MEDEA/JASON, we were able to survey and map the two shipwreck sites as well as recover forty artifacts from the wrecks themselves. The cargoes of both ships—the Tanit and Eliissa—were nearly identical: each carried at least 350 amphoras of the most common type found in Phoenicia and northern Israel in the latter half of the eighth century BC. Most of the recovered amphoras were lined with resin, indicating wine as their original content. The upper tier of amphoras preserved the shape of the ships’ long-vanished hulls, some 18 meters long and 6 meters wide. The personal items of the crew were concentrated in the galleys (stern) and included cooking pots, a lid, a bowl, an incense stand, and a wine decanter with mushroom-lipped rim—the “calling card” of the Phoenicians. Stone anchors amidship and at the bow indicate that the ships were headed west, probably toward Egypt or the fledgling colony of Carthage, when they founded in the same storm.

These merchant ships were broad in the beam; what the Greeks called “tubs” (gauloi); what the Phoenicians and Israelites called “ships of Tarshish.” Their single-commodity cargoes of nearly uniform amphoras (with a capacity of 18–19 liters each) once filled with wine will be used to suggest that market forces were at work in the Phoenician maritime economy.

Triton Shells from the Eastern Mediterranean and their Cultic Use During the Late Bronze Age

In excavations at Tel Nami, which is a coastal site about 15km south of Haifa, Israel, a triton or trumpet shell was found with other cultic objects in a small room inside a Late Bronze Age IIb sanctuary. Triton shells of the species Charonia tritonis variegata and Charonia lampas lampas appear in low frequencies in the waters of the Mediterranean Sea and as archaeological finds in the sites of the region. While the earliest find is from a Neolithic human burial in a Ligurian cave in Italy, these shells are better known from sites in the Levant and the Aegean region. Among their many functions are containers, musical instruments, and cultic uses. This last function can be learned from the famous rock crystal seal stone from the Idaean cave on Crete, dated to MM IIIB–LM IIIA1. It shows a woman standing before an altar who seems to be blowing a trumpet shell, perhaps summoning a deity. In this session I will review the distribution of the Triton shells, both from a marine biological and archaeological perspective, surveying finds through the Neolithic to Iron Ages. Utilizing the find from the cultic context at Late Bronze Tel Nami as a case study, and archaeological and ethnographical parallels, I will explore Aegean cultural influences on Tel Nami and the relationship between this marine organism and coastal cultic practices.

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These merchant ships were broad in the beam; what the Greeks called “tubs” (gauloi); what the Phoenicians and Israelites called “ships of Tarshish.” Their single-commodity cargoes of nearly uniform amphoras (with a capacity of 18–19 liters each) once filled with wine will be used to suggest that market forces were at work in the Phoenician maritime economy.

Triton Shells from the Eastern Mediterranean and their Cultic Use During the Late Bronze Age

In excavations at Tel Nami, which is a coastal site about 15km south of Haifa, Israel, a triton or trumpet shell was found with other cultic objects in a small room inside a Late Bronze Age IIb sanctuary. Triton shells of the species Charonia tritonis variegata and Charonia lampas lampas appear in low frequencies in the waters of the Mediterranean Sea and as archaeological finds in the sites of the region. While the earliest find is from a Neolithic human burial in a Ligurian cave in Italy, these shells are better known from sites in the Levant and the Aegean region. Among their many functions are containers, musical instruments, and cultic uses. This last function can be learned from the famous rock crystal seal stone from the Idaean cave on Crete, dated to MM IIIB–LM IIIA1. It shows a woman standing before an altar who seems to be blowing a trumpet shell, perhaps summoning a deity. In this session I will review the distribution of the Triton shells, both from a marine biological and archaeological perspective, surveying finds through the Neolithic to Iron Ages. Utilizing the find from the cultic context at Late Bronze Tel Nami as a case study, and archaeological and ethnographical parallels, I will explore Aegean cultural influences on Tel Nami and the relationship between this marine organism and coastal cultic practices.

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Halaqlah and Jamal Bargouth. The project body was students of Birzeit University and shared with local and international volunteers.

195) Chang-Ho Ji, La Sierra University and Jong Keun Lee, Sam Yook University

*The Dhiban Plateau Project, 1999: The Versacare Expedition*

The third season of the archaeological survey in the Dhiban Plateau was conducted for five weeks in 1999. In the first half session of the fieldwork, the survey concentrated on the area between Khirbat al-Jamayil and the modern King’s Highway; in the second half, the area west of the highway. During the 1999 survey 206 sites were investigated; when added to the 215 sites visited in previous years, these bring the survey site total to 421. The ancient sites are dominated by small watchtower-like structures, which account for approximately sixty ancient cities or villages in the 1999 survey area. Turning to the site location, note that 185 sites are situated in the plateau rim area; ancient sites are distributed predominantly in the 2 km narrow band around the plateau, but only a few sites occur in the central plain area, thus confirming the bimodal site distribution noted in previous fieldwork.

To summarize the results of three-year field research, the survey region seems to have had a substantial population in the Iron II, late Hellenistic-Byzantine, and Islamic periods. The survey results also show that the settlement history of the western half of the Dhiban Plateau is similar to that of the eastern region, and this fact indicates that the whole plateau can be treated as one geographical unit for the diachronic study of settlement history in central Jordan. A careful analysis of survey data, however, indicates some subregional disparity; a concentration of ancient sites in the northern and southeastern regions is bounded by Saliyah, Leahun, Aliyan, and Dhiban, and this concentration contrasts with the southwestern and eastern parts of the plateau. This incongruity appears to be related to various factors such as roads, climate, socio-economic system, and political history. Some of noticeable sites will be discussed in detail, many of which are new sites and deserve intensive excavations in the future.

196) W. Harold Mare, Convent Theological Seminary

*The 2000 Abila of the Decapolis Excavations*

The 2000 Abila of the Decapolis Excavation, northern Jordan, June 17 to August 5, conducted under the direction of W. Harold Mare, St. Louis, will concentrate on the following fourfold objectives and activities. On Tell Abila, the north tell, we will expand laterally the deep trenches to help determine the extent of the Iron and Bronze Age settlements on that part of the tell, and also we will probe the perimeters of the sixth century Christian basilica (Area A) there to expose any auxiliary buildings. On the south tell, Umm el’Amad, we will finish the excavation and reconstruction work on the seventh-eighth century basilica (Area D) on the east, and probe all around the perimeter of the sixth century basilica (Area DD), on the west, to determine more exactly the position and preservation of the church’s outside walls and the extent of the narthex. In the civic center in between the two tells we will probe the full extent of the finely-cut ashlar Greco-Roman wall in the theater cavea, probe further into the vault and settling system of the bathhouse, and will excavate building structures all around the perimeter of the twenty-six column cruciform basilica we restored in 1999. Finally, we will continue seeking the major location of the Iron-Bronze Age cemetery and continue excavating Hellenistic-Roman-Byzantine tombs as well.

198) Farland H. Stanley, Jr., University of Oklahoma

*The Octagonal Church on the Temple Platform: Architectural Parallels*

Excavations since 1989 have now exposed most of what still exists of an octagonal church on the Temple Platform, built about 500 CE. Of it there survive the octagonal foundations of the outer walls, built of the local kurkar sandstone; an inner octagonal foundation that presumably carried a sty-
lobate; numerous fragments of marble floor paving; and a number of wall blocks once reveted in marble, some *in situ*. Entrances are known on the north and south, and a main entrance and narthex may be presumed on the west. There are also columns, capitals, chancel screen posts, and other architectural fragments in marble, and recently the excavators have identified a bema and apse on the east, the base of the ambo or pulpit, and perhaps foundations of a martyr shrine at the church’s centerpoint. The church’s dedication remains conjectural, but this may be the Church of St. Procopius, Caesarea’s first Christian martyr, mentioned in literary sources.

The octagonal church was one of a group of churches in Palestine built between the fourth century and the early sixth. Most important of these were the Church of the Holy Sepulcher in Jerusalem, the Church of St. Peter in Capernaum, the Theotokos church on Mt. Gerizim, and the Kathisma on the road between Jerusalem and Bethlehem. Less well known but perhaps likewise dedicated to St. Procopius was a comparable building at Scythopolis, of which excavations in the 1930’s yielded some evidence. The Muslim Dome of the Rock, the latest building in the series, shared several design features with the Caesarea church. The aim of this paper is to study, in light of comparisons, the design of the Caesarea church and its likely function in the urban liturgy of Caesarea.

199) Avner Raban, The Recanati Center for Maritime Studies, University of Haifa

The “Reflecting Pool” in Area I at Caesarea

One of the more enigmatic multi-phase structures known from recent excavations at Caesarea is the so-called “reflecting pool.” This structure began as an 8 x 22 m. extension pier built of loosely-laid ashlar blocks that was installed against the eastern quay of the Inner Harbor basin. This pier was centered on the staircase, 20 m. wide, that led upward and to the east, from the Herodian quay to the Temple Platform, site of Herod’s temple to Roma and Augustus. This pier was built during the second century CE and subsequently was reinforced several times.

About 500 CE the staircase to the Temple Platform was rebuilt only 10 m. wide, and a new broader platform was laid over the Herodian quay. At this time, apparently, an ashlar wall was built on the perimeter of the of the extension pier, and this perimeter wall enclosed a 6 x 21 m pool, likewise centered on the Temple Platform staircase, that contained fresh groundwater 0.4-0.8 m. deep. The pool might have reflected the staircase and probably also the monuments on the western facade of the Temple Platform, where a Christian church had replaced the former temple. It recalls reflecting pools dating to about this period exposed recently at other sites, including Beth Shean. Yet one wonders how the Caesarea pool would have functioned, since the reflected buildings would have been visible only from the west.

During the sixth century CE and later, this pool was flooded on two or three occasions by the sea and was silted up by beach deposits. Eventually, towards the end of the Byzantine era, various small-scale structures were built over it that were not related either to the pool or to the harbor.

200) Jennifer A. Stabler, University of Maryland

*The Architectural and Spatial Organization of the Islamic Residences in Area LL*

Caesarea Area LL is located on the northern side of the Inner Harbor basin and on the east side of the main harbor basin. Excavations were initially carried out by Lee I. Levine and Ehud Netzer of the Hebrew University in the 1970’s. The area was reopened by the Combined Caesarea Expeditions in 1996, and excavations continue in the area today. This sector of the city was a warehouse district during the Roman and Byzantine periods. When the city was captured by Muslim invaders in 641 CE, the large warehouse were no longer of use to the city’s new inhabitants and were allowed to collapse. The area lay abandoned for a period of time prior to the subdivision of some of the warehouse rooms to form residential quarters. During the ninth century CE, a new planned residential district was laid out that reflected the new cultural traditions of the Islamic occupants.

This paper will detail the construction techniques and layout of these residences and illustrate how they differed from their Roman and Byzantine predecessors. Although the Islamic house somewhat resembled the Roman and Byzantine house, there were distinct differences that set them apart. The focus of the Islamic house was on the interior courtyard, which was accessed indirectly from the street and sheltered the family inside from the outside. This was in marked contrast to Roman and Byzantine houses, which were accessed directly off the street and used the visible exterior space to convey to those on the outside the status and position of the occupants. This shift in house layout marked a shift in cultural traits from Roman/Byzantine to Islamic traditions.

SATURDAY AFTERNOON, 4:15–6:15

A50, Celebrating 30 Years of Research at Tell El-Hesi II

**Session Theme: Reflections**

Bruce T. Dahlberg, Presiding

201) John E. Worrell, Brimfield, MA

*Tell el-Hesi: The Dream*

The Tell el-Hesi project originated as the confluence of dreams. Several young archaeologists, trained primarily during the sixties at Shechem and Gezer, strained for the opportunity to meld the approaches of the “new archaeology” with the rigorous methods of their traditional training. Master teacher and visionary, George Ernest Wright, had an even larger agenda for bridging the old and the new, the dreams and the realities. This paper reflects on pain and pleasure in the reification of that dream.

202) J. Kenneth Eakins, Golden Gate Baptist Theological Seminary

*Tell el-Hesi: Reflections on the Bedouin Cemetery (Stratum II)*

An extensive Late Arabic Period Bedouin cemetery overlaid all of the major excavated areas at Tell el-Hesi, Israel. A
There was also evidence of a stone-paved ramp leading up to an open courtyard, preceded in turn by a series of small rooms. A thick mud-brick city wall, which for a part of its length was faced with stone, separates the different areas, five distinct phases of occupation, all butting up against one another. EB II in the lowest levels of the area occupied by the high temple was identified as “Amorite”; this was first said to be “Early Bronze Age” by W.F. Albright. The Joint Expedition made a few probes into the early occupation levels, and then the city extended much further to the south. Excavation began in 1975, and then carried on full-scale excavations in the 1977, 1979, 1981, and 1983 seasons. There is some evidence that the site was occupied and when abandoned, and it will attempt to describe how the site’s function changed in order to meet ever changing political, social, military, and environmental realities.

This body of data is readily available and need not be rehearsed here. Rather, the intent of this paper is to address other issues. From our vantage point in time, this is an opportunity for reflection. There are questions to be addressed. Should the cemetery have been excavated? If so, was the decision to excavate the graves with the greatest care possible, with the expenditure of much time and effort, justified? What return has been received from this major investment of resources? What kind of sensitivity, respect, and responsibility does the excavator of human remains owe to the deceased and to the living?

203) W. J. Bennett, Jr. Archaeological Assessments, Inc.

Tell el-Hesi: Reflections on the Process of Understanding the Persian Period (Strata IV and V)

The main focus will be on the success we achieved in putting into operation many/most of the strategies and techniques we used in the project. Next we will examine what we learned about the issues we faced in trying to use/interpret the data we assembled. The issues are these: how to factor in the things that should be in the “good” loci but are really found elsewhere (the issues of getting a representative sample), and how to factor out the things which shouldn’t be there but are. It’s the old “Middle Range Theory” issue. The key is probably to conduct extremely careful, detailed “testing,” in the least invasive way(s) to get the best possible handle to know what you are likely to encounter before “true” excavation begins.

204) James F. Ross, Virginia Episcopal Seminary

The Early Bronze Age Stratigraphy of Tell el-Hesi

The Petrie and Bliss expeditions to Tell el-Hesi identified several phases of early occupation which they identified as “Amorite”; this was first said to be “Early Bronze Age” by W.F. Albright. The Joint Expedition made a few probes into EB in 1975, and then carried on full-scale excavations in the 1977, 1979, 1981, and 1983 seasons. There is some evidence of EB II in the lowest levels of the area occupied by the high temple of Area 1, but then the city extended much further to the south in EB III. For that period the expedition found, in some areas, five distinct phases of occupation, all butting up against a thick mud-brick city wall, which for a part of its length was double. These phases varied from a mere “squatter” occupation apparently after the abandonment of the city to a large open courtyard, preceded in turn by a series of small rooms. There was also evidence of a stone-paved ramp leading up to a probable postern gate in the city wall, and an interesting glacis outside that wall.

205) Jeffrey A. Blakely, Archaeological Assessments, Inc.

Tell el-Hesi: The Dream in Retrospect

The Hesi experience was unique. As is frequently pointed out, individually other projects were doing things similar to Hesi when it first went into the field in 1970, but at Hesi they were joined in a unique way and they produced, what I believe to be, unique results. Nonetheless, Hesi was an experiment that has yet to be completed. Literally, the report is not in, but every day the results of the Hesi experiment are coming into sharper focus as I come to understand what we did and what it meant. I shall endeavor to discuss some of our results in this overview. First, I will examine and comment on some of the methodological and structural issues that began with “The Dream” and continued to be modified through the excavational and analytical stages of the project, a process that continues to this day. Second, I will present in outline form our next “final” report, A Mound of Many Cities Rediscovered. This report will investigate how the Hesi site was used and reused for over 10 millennia, from the Neolithic through the site’s current use as an Israeli training facility. This summary will examine the site, both when occupied and when abandoned, and it will attempt to describe how the site’s function changed in order to meet ever changing political, social, military, and environmental realities.
ligious, social, and economic background. As way of conclusion, the paper will address the sorts of expectations Muslims had of the Holy Land and how their images compared to reality.

208) Uzi Baram, New College of the USF

*A Legacy of the Grand Tour: Travelers to Palestine and What They Saw That We Miss*

One of the tools to investigate the Middle Eastern past is the accounts of travelers to the region over the modern period. Those writings frequently are invoked by archaeologists when providing context for the places being excavated. Whether as scientists, religious pilgrims, or as part of the Grand Tour, thousands of Westerners traveled to the Holy Land and many wrote about their observations and experiences.

The Grand Tour, a foundation for elite education and social polish, was a fixture in the seventeenth and eighteenth century and a shared experience of the upper classes of Western Europe. With improvements in transportation during the nineteenth century, the Grand Tour moved east to regularly include tours of the Holy Land. Travelers on the Grand Tour left us with a wealth of data on the region. Several scholars have exposed the agendas and implications of the travel accounts; with those insights, a critical re-examination of the data can be the next step. This paper explores several aspects of what was seen by travelers to Palestine in the late Ottoman period. The landscapes of antiquity and the cultural diversity recorded by such writers as Mark Twain, Edward Robinson, Lawrence Oliphant, among others, will center the analysis of the changes in the landscape of Ottoman Palestine.

209) Morag Kersel, University of Georgia

*Bitten by the Bug: Agatha Christie in the Middle East*

“I was bitten,” exclaimed Agatha Christie, after hearing tales of the Orient Express, Baghdad and the Middle East. Five days later, Christie embarked on a journey that would begin her love affair with the Middle East and archaeology. Christie’s popularity and critical acclaim peaked in the thirties and forties, when she was at the height of her creative powers. During this period she set many of her novels in the Middle East, with archaeologists as characters. The reader participates in a vicarious adventure in these novels with exotic “Oriental” settings. The landscape provides a place of intrigue as well as the likely scene for the enactment of murder. As in all Christie’s novels, place never overshadows action or character, but by re-creating the lifestyle of a culture, she effectively develops a credible milieu for exploring the psychology of the crime. What do her novels tell us about the landscape, archaeology, of the native inhabitants—and can we distinguish Oriental fantasies from accurate and useful descriptions?

A52, Workshop on Caesarea Maritima II

Session Theme: Reading Texts and Artifacts in Inhabited Space

Clayton Miles Lehmann (University of South Dakota), Presiding

210) Laurie A. Brink, University of Chicago and Dominican University

*Canonical Texts and Archaeological Evidence: Caesarea and Herod’s Praetorium in the Acts of the Apostles*

While the days of using the biblical text as a site map for archaeology are (thankfully) past, we do rely on historical texts to frame our empirical evidence and direct our synthesis of the material. How then is one to distinguish the history from message in texts designed as apologies? Of particular import to Caesarea is the Acts of the Apostles, the only book in the New Testament that narrates the life of the Christian community after the death of Jesus. Acts locates Caesarea as one of the points of origin for the Christian movement. Here the Centurion Cornelius was baptized by Peter (Acts 10), Philip the evangelist lived with his four daughters (Acts 21:8-9), and Paul was imprisoned for two years (Acts 23-26) in a place called explicitly “Herod’s Praetorium” (23:35).

Biblical scholars themselves debate the historical accuracy of Acts, some even claiming the work to be a first-century Roman novel! While its genre and sources remain in dispute, the author did write with historical verisimilitude, presenting the story in a narrative context that would appear accurate to his readers. However, the question for those in field today is how accurate Acts is, and what historical conclusions are warranted?

In order to determine the viability of a canonical text as an archaeological tool, one must first acknowledge the text’s primary concern is not history, but faith. Yet a little truth does perhaps protrude above the literary veneer. We may proceed cautiously by comparing the canonical text with other Greco-Roman historiographies and epigraphic evidence that can serve as corrective lenses for Acts’ apologetic vision.

211) Kenneth G. Holum, University of Maryland

*The Late Antique Praetorium at Caesarea: Reading Inscriptions in Inhabited Space*

In the newly-published *Greek and Latin Inscriptions of Caesarea Maritima*, containing texts discovered before 1993, Clayton Miles Lehmann and Kenneth G. Holum published a series of inscriptions from the so-called Archives Building that identified it as one wing of the imperial governor’s residence, or prætorion, of fourth- through early-seventh-century Caesarea. Between 1993 and 1998 Joseph Patrich confirmed this identification in further excavations that yielded much more evidence of the governor’s residence, including, on one east-west axis, a monumental entrance facade, a central courtyard, and an audience hall, and, on the northwest flank, a private bath that suggests a more private wing of the residence adjacent on the north. The same excavations also extended across a street to the east, and here too evidence appeared of structures that were part of the imperial complex.
The same 1993–98 excavations brought to light a number of Greek inscriptions not included in the newly-published volume, while expanded knowledge of the residence invites more searching analysis of the texts in terms of the space they occupied. For example, this type of reading brings out the force of the most important newly-discovered text from the governor’s residence. This is an as yet unpublished imperial decree of the fifth century limiting the fees or bribes that an imperial functionary could legitimately demand for services such as copying documents. Read in inhabited space, this text conveyed both to functionaries and to the consumers of the building’s services the message that the emperor’s absolute power was to be exercised responsibly and in accord with the law. This reading, it will be argued, best accounts for the effort of inscribing the text and affixing it to a wall of the imperial governor’s residence.

212) James Schryver, Cornell University

The Decline and End of the Promontory Palace of Herod the Great

Preliminary study of the ceramic evidence from the post-architectural layers on the Promontory Palace site has indicated that the destruction of the palace complex may have been a gradual, though possibly quite systematic, process. Stratigraphic analysis has failed to identify a single, great destructive event. Instead, a heterogeneous range of destruction layers is evident: robber trenches, burned surfaces, fill debris, quarrying.

By combining new ceramic evidence with an examination of the relationship of different strata within the destruction layers of the palace, the excavators will finally be in a position to consider and address the various theories posed over the years. This paper presents preliminary interpretations of Harris Matrices created for key areas of the palace. Dates obtained from the ceramics, glass, and coins recovered within these loci have been utilized to help form these interpretations. The ultimate result will allow excavators of other areas to see specific destruction-related events as well as widespread strata such as that containing the Islamic burials. In this manner, the study will illuminate the nature and dating—or at least, phasing—of the final decline of the palace.

212a) Jennifer Ramsay, Simon Fraser University

Waterlogged Plant Remains from Caesarea’s Harbor: Evidence of Trade or Trash?

A rich assemblage of waterlogged plant remains was recovered from the harbour at Caesarea during the 1993 season. Now identified, these remains represent several varieties of edible fruit and several nut species. In addition, botanical samples were retrieved and identified during the 1997 harbour season. Although more modest in quantity, these remains are quite different in composition from the 1993 material. There are two probable interpretations for these remains: trade or trash. Since the material was recovered from the harbour, it could represent import or export products. Since, however, none of the flesh of the fruit or nuts survived in the 1993 material, more likely this material represents a refuse dump. The 1997 material includes a wider variety of cereal and legume species, which could mean either trade products or products consumed locally. Regardless of whether the waterlogged botanical remains were trade or trash, such assemblages are important, because they help us reconstruct the local diet as well as the role of trade in the local economy.

213) S. Thomas Parker, North Carolina State University

Introduction to the Roman Aqaba Project

This section will serve as a forum to disseminate some significant information about this project and to elicit discussion useful both for analysis of evidence collected to date and in guiding future research. The program is designed to focus on one major theme: the economy of the Roman port of Aila (modern Aqaba). The project seeks to answer the following principle question: what was the role of the city of Aila in the economy of the Roman Empire and how did it evolve over the centuries of the city’s existence? The project’s research design consists of two major components: 1) a regional archaeological and environmental survey of the environs of Aqaba, focusing especially on Wadi Araba north of the city, and 2) excavation of several areas within the ancient city in order to learn about its history, and to recover artifact material for analysis. Since 1994 the project has conducted three major field seasons (a fourth is scheduled for 2000) and is providing much important new evidence about one of the important nodules of international trade between the Roman Empire and its eastern neighbors. This evidence may enhance our understanding not only of this port on the Red Sea, but also of the role of trade in the economy of the Roman Empire.

The proposed workshop will examine several key elements of Aila’s economy through presentation of specific results from two excavation areas within the city of Aila (a domestic/industrial complex, the city fortifications and associated structures) and analysis of three categories of material cultural evidence (glass, faunal remains, botanical remains) recovered by the project.

214) Alexandra Retzleff, University of North Carolina at Chapel Hill

A Nabataean/Late Roman Industrial and Domestic Complex at Aila

Excavation in a northern sector of ancient Aila has revealed a stratified sequence of occupation from the end of the first century BC to the fourth century AD. The early Roman/Nabataean level is characterized by a large outdoor courtyard with cooking and storage facilities; current research focuses on the mudbrick structures now identified to the north and south of this courtyard. A later Roman period complex was constructed after the abandonment of this early Roman/Nabataean area, reusing some of the earlier walls and extending over the courtyard.
This later complex comprises two main structures, built of mudbrick and stone, which combine domestic and industrial installations. The domestic function of the complex is suggested by two large *pithoi* and several clay ovens placed in the corners and along the walls of the northern structure. A *pithos* filled with natural clay, also found in the northern structure, indicates the location of a small ceramic workshop. In the southern structure, a concentration of bronze and iron fragments may suggest a metal workshop. These workshops were apparently sites of small-scale household industries.

Local fishing is attested by the discovery of fishhooks and fish bones, including an in-situ deposit of many small bones in an open bowl, which possibly represents residue from *garum* sauce. Imported items were also found in this late Roman period complex, notably frog lamps and amphorae from Egypt and amphorae from the Gaza region, as well as ceramics from more distant origins.

### 215) James A. Terry, Stephens College

**The Byzantine City Wall of Aila**

Excavations have uncovered a substantial portion of Aila’s city wall. Constructed of masonry with a rubble core, the wall stands up to four meters high and features square, projecting towers at intervals and U-shaped, mudbrick interior platforms. Only 1.10 to 1.4 meters wide, it clearly was not designed to withstand a siege—rather it was meant to keep out lightly armed nomadic raiders.

Two coins of Constans II, one from the wall core and one from the construction fill inside one of the towers, provide a *terminus post quem* of the mid-fourth century. According to historical sources a severe earthquake struck the region on May 19, 363—a quake strong enough to topple monumental structures at Petra. It is tempting therefore to see the city wall as part of a re-fortification campaign begun in the aftermath of the earthquake.

The direction and curvature of the excavated portion of the wall suggest that it enclosed the fortress situated on the beach some 300 meters to the south. This in turn raises the question of the original identity of this fortress. It has been argued that it is the headquarters of Legio X Fretensis, reused in the Early Islamic period (E. Knauf and C. Brooker in ZDPV 104 [1988] 179-81). This theory will be re-examined in light of the results of the 2000 excavation season and comparison with other urban legionary fortresses and their enclosing city walls.

### 216) Janet Jones, Bucknell University

**The Roman and Byzantine Glass from Aila**

Research on the significant corpus of glass vessels of Roman and Byzantine date from the Roman port of Aila has focused on questions of where the glass originated and whether it was brought to Aila for export. Analysis indicates that rather than being a center for the export of luxury glass at this time, the city was engaged in the small-scale importation of tablewares and some luxury wares, probably for local consumption.

There are strong parallels between several categories of glass from Aila and finds from Roman levels of Quseir al-Qadim, a more southerly Egyptian Red Sea port founded for the purpose of long distance trade. Parallels include the ubiquitous cast ribbed bowls of the early empire, unguentaria (including a distinctive type with a solid base), and cast colorless fine wares. The last category represents a class of luxury glass wares produced in Egypt and transported in quantity overland to the Quseir al-Qadim for export. These classes of glass vessels find their way to Aqaba only in small quantities.

The Aila corpus consists of a large percentage of blown lamps and tablewares used locally, including an important group of lamps and luxury vessels from the mud-brick structure dated to the third and fourth centuries CE. Interesting vessel types from Aila include vessels with engraved decoration, sprinkler bottles, plates with distinctive crimped handles, bottles with internal threads, and mold-blown vessels. Notable is a fragmentary example of a well-known mold-blown drinking cup type of the early first century CE decorated with stylized wreaths and palm fronds and inscribed “AABE THN NEIKHN” (take the victory).

### 217) Peter Warnock, University of Missouri

**The Archaeobotanical Remains**

Analysis of botanical remains from the Roman Aqaba Project (RAP) provides us with a glimpse into the past environmental conditions and cultural practices occurring at the site. Preservation of those remains recovered from the site is good, however, the remains are limited due to the nature of the site’s abandonment. Since the site was abandoned rather than destroyed, the preservation of material through charring is limited. The presence of a fluctuating water table has also had a deleterious effect on the preservation of remains. Recovered remains examined to date suggest that local materials were utilized to their fullest. botanical material from the site, both seeds and wood, represent plants likely to be found in the local flora, or from areas close to the site. Preservation and abundance of material, especially exotics, is limited due to the site’s abandonment in antiquity and the natural decay of non-carbonized materials.

### 218) William Grantham, Troy State University

**The Zooarchaeological Remains**

Domestic animals constitute an important aspect of ancient economies. In addition to contributing to household subsistence, they play a significant role in local and regional economies. Analysis of faunal assemblages can reveal information on herd production strategies, marketing strategies, and household food preparation and consumption behaviors. While much emphasis has been placed on the analysis of faunal remains from earlier periods in the Near East, few studies have focused on the Roman and Byzantine Periods. Aqaba offers an opportunity to increase our limited body of knowledge available from these periods. This presentation will analyze the role of herd animals in the domestic and market economies and household consumption behaviors at Roman-Byzantine Aqaba and evaluate the regional role of herd animals through a comparison with the limited number of faunal assemblages available from other Near Eastern Roman and Byzantine Period sites.