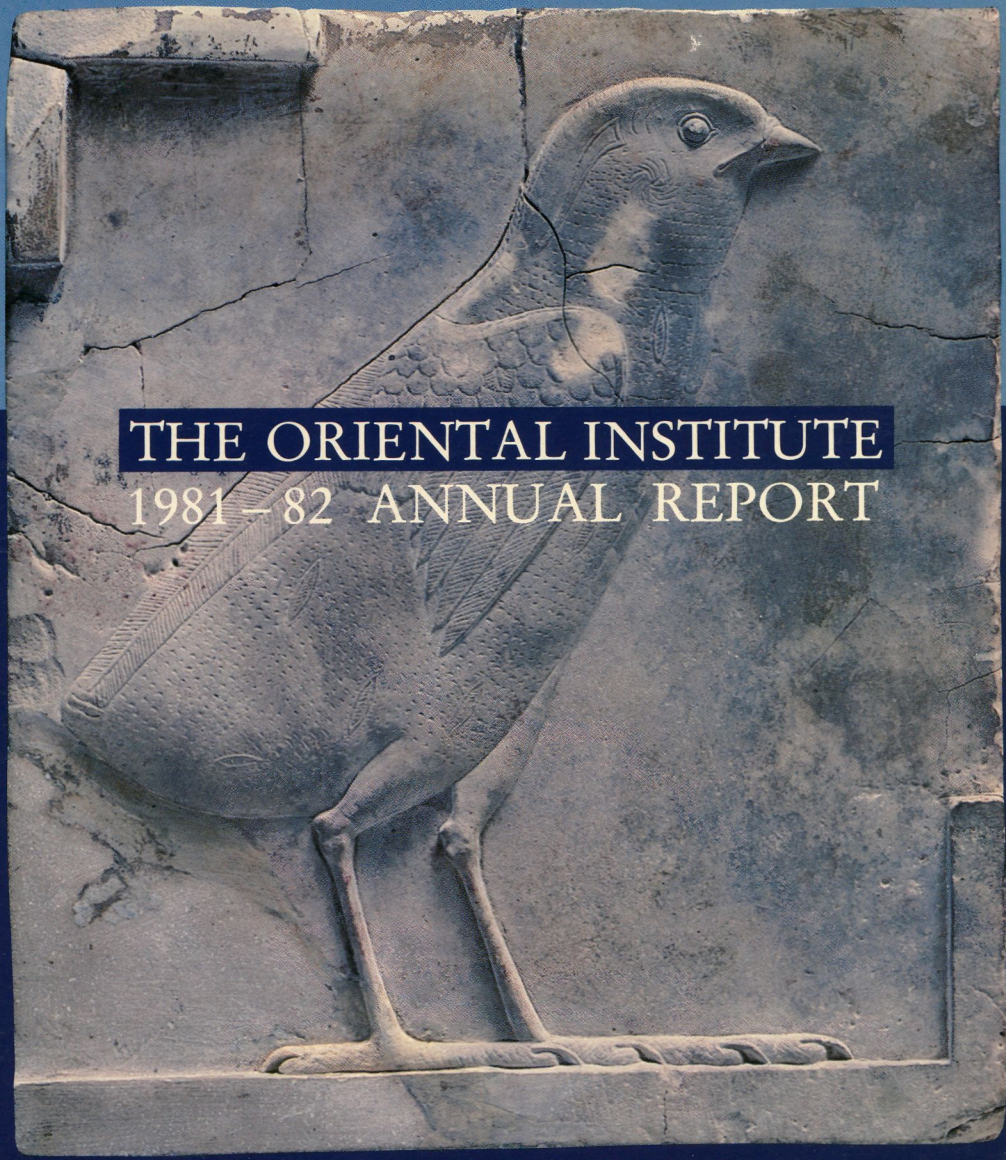

# THE ORIENTAL INSTITUTE
# 1981–82 ANNUAL REPORT

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The University of Chicago

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# INTRODUCTION

## To the Members and Friends of the Oriental Institute

As this is written, the Israelis are encamped on the outskirts of Beirut and Iranian and Iraqi armies are reported to be locked in large-scale combat north of Basra. Of the countries in which the Oriental Institute's overseas fieldwork has traditionally been concentrated, only Egypt and Turkey do not presently have armed forces mobilized on a war footing. Although no less disquieting, the deeper reality is less dominated by either state-sponsored or by terroristic violence than our media might suggest. The deadly rivalry of military build-ups, coupled with world-wide recession and continuing high rates of inflation and population growth, has brought a loss of economic buoyancy and looming problems of un- and under-employment in all but a few of the richest

OPEC member-states. Ethnic, religious and social tensions also are increasing, more often deliberately fanned by the powers-that-be than dampened by anyone. In the wake of political turbulence, there has been a continuing hemorrhage of skills and talents, a diaspora of the trained engineers, physicians, administrators, entrepreneurs and intellectuals on whom a positive trajectory for the whole region desperately depends. To operate under these circumstances as the Oriental Institute does and must, as a center of humanistic research committed to the continuities of history and of an international dialogue among scholars of all creeds, is to share some small responsibility for an indefinitely prolonged, frequently dispiriting, and yet wholly worthwhile and necessary struggle.

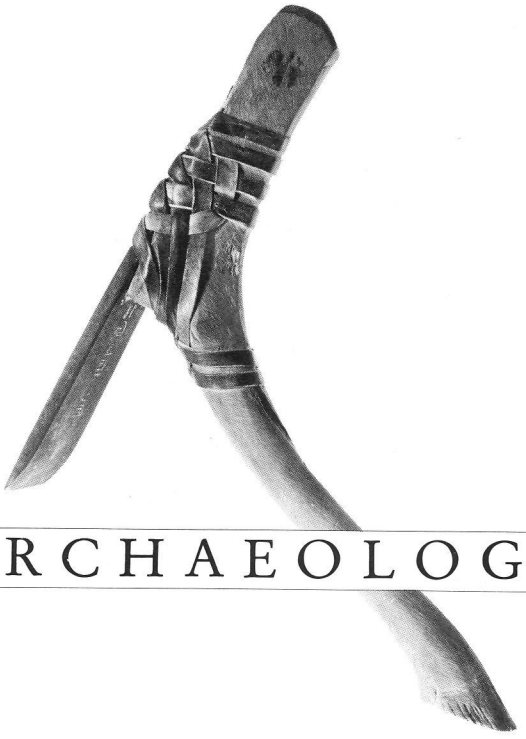
Take just three of the activities reported on individually later in these pages. McGuire Gibson tells of the fifteenth campaign at Nippur in a series that began in the 1950s. The Assyrian Dictionary, now in the homestretch with 15 volumes published and 5 of the remaining 8 (plus 3 or more supplementary volumes) in various stages of preparation, was inaugurated in 1921 with the first volume published in 1956. The year's work in Luxor that Lanny Bell describes represented the fifty-eighth season of the Epigraphic Survey, a span interrupted only during World War II. By no means all of our projects require such extended time-horizons, but they are representative of a personal as well as institutional commitment to let the importance of the problem dictate the scope and duration of the work—a commitment that, along with much else, political uncertainties now place in jeopardy.

This says nothing of still more immediate sources of financial jeopardy, affecting the Oriental Institute and the University of Chicago just as they affect virtually every other civic activity and institution of higher learning. Curtailments in federal educational and research programs and in many forms of student support are indicators of the present state of an endlessly renewed de-

bate over our society's priorities. What place do we maintain for the cumulative growth of knowledge, especially reflexive knowledge of how the human condition came to be what it is? To ask what may be only a variant of the same question, what balance do we strike between meeting short-term material needs and preserving long-term aspirations of the spirit? Of course, in a pluralistic society like ours there need be no unitary answers to such questions. But as the balance tips toward a more circumscribed set of commitments at the national level, so our dependence necessarily becomes greater on the understanding and support of our Members and friends.

In stepping down from the Oriental Institute's directorship after nine arduous years, my predecessor John A. Brinkman opined in last year's Annual Report that we were entering "what promises to be a challenging and interesting period." I am reminded (now, not when I first read his words) of what the Chinese are said to have regarded as a curse and not a benediction: "May you live in interesting times!" A year later and perhaps a little wiser, I can only express our determination to meet the challenge of these interesting times with a strengthened sense of the importance of the dialogue that links the Oriental Institute to you and with you.

ROBERT MCC. ADAMS





# The Epigraphic Survey

*Lanny Bell*

The 1981–82 season of the Epigraphic Survey was our fifty-eighth. During the course of it we celebrated the golden anniversary of the present Chicago House, opened in October of 1931. With age comes the need for ongoing renovation; this year's projects included electrical cables, repairs to sidewalk and masonry, a new water tank, preparing a new floating dock for our landing, rewinding the coil of our electric generator and pulling and replacing the 12 m. pipe of our deep water well. We also installed new draughting lamps on tables in the library, offices and studios, prepared three portable light tables for tracing drawings and examining photographic negatives, and leveled and adjusted our antique enlarger in the darkroom. Two improvements in darkroom safety were the ac-

quisition of a breathing mask for Youssef, our photographer's assistant, to help filter out the chemical fumes to which he is exposed in his work; and the sending of the remainder of our disused cyanide stock to the laboratory of the Franco-Egyptian Center at Karnak, where they can use and care for it properly. All this work was done either directly by or under the careful supervision of our capable chief engineer and two conservators. Three administrative matters affecting the well-being of the house were continued from last season: securing our claim to the landing-stage on the river bank in front of the house, for the protection of our peace, privacy and security, involved submitting new applications to the Qena Navigation Authority and the Nag Hammadi Irrigation Authority; a workman fired in the spring of 1981 has now filed a countersuit for compensation; and our appeal for real estate tax relief is still pending. But time passes, and the odometer of our 1950 Chevrolet finally recorded 40,000 miles.

As usual, the thrust of our scientific work revolved around preservation. Our well-known epigraphic technique focuses on the team approach to the problem of preserving ancient records, where the separate skills of several individual staff members (Egyptologists, artists and photographer) are combined in the production of every completed facsimile drawing. But we are concerned for the total needs of the monuments entrusted to our care, and we were pleased to be able to include two archaeological conservators on our team this season. Recording and conservation are two complementary aspects of our effort to prevent the loss of cultural data through deterioration.

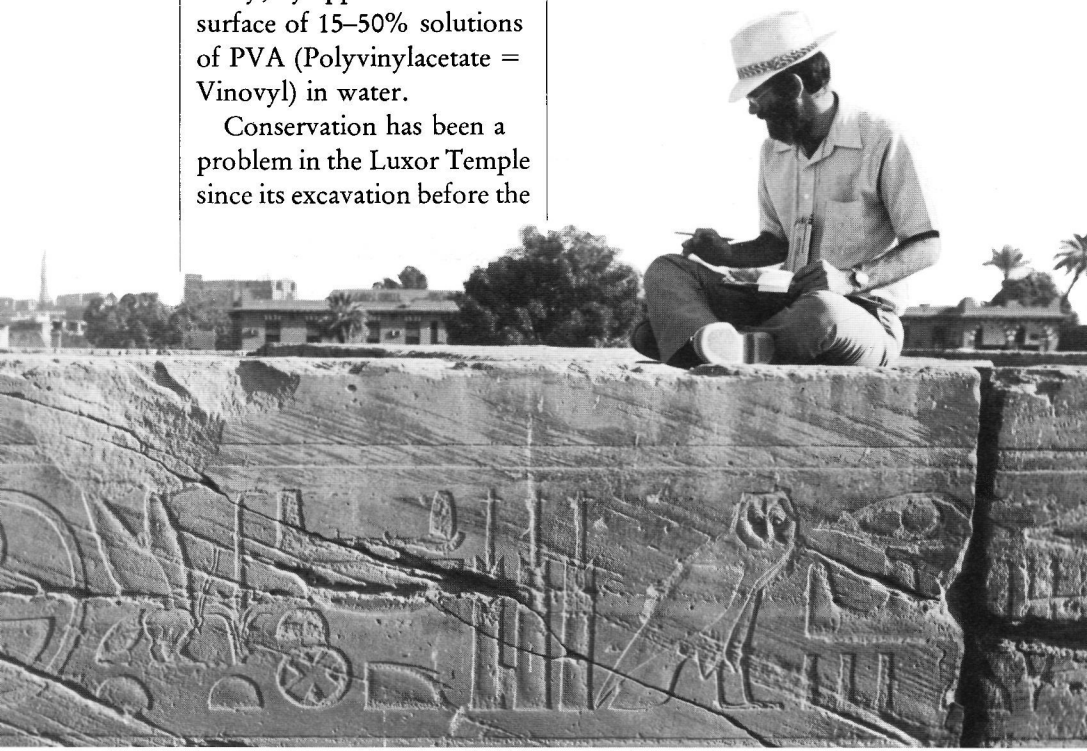
These interrelated interests were combined in an unanticipated way this year, when we were requested by representatives of the Egyptian Antiquities Organization (in view of our experience on top of the columns as reported last year) to help place plaster breaks between the architrave blocks of the columns in the Court of Amenhotep III at Luxor. Given the fragile condition of much of the ancient sandstone there, the recent

earthquakes, the possible settling of the ground under the columns by infiltration from the high water table, and the armies of tourists marching past daily, we were all anxious to determine whether any shifting was occurring which might destabilize the columns. We shall return to check the results next fall. While in such a position, however, (walking 13 m. above the ground level on stone paths about 1.5 m. wide) we took advantage of the opportunity to make the first complete photographic record of the inscriptions on the sides of these architraves, collating older copies of them, and recording the eleven not published previously. We can now make some 65 improvements in the earlier copies. This documentation will be of use in our study of the inscriptions on the architraves of the Colonnade and in our understanding of the role of Luxor Temple in ancient Egyptian religion. Tourists were either fascinated by this activity—some attempting to climb up the scaffolding behind us—or annoyed that our presence spoiled the pictures they wanted to take of the unencumbered architectural features of the temple in the limited time they had set aside to visit it. A distraught tourist tried to take one of our short ladders to use as a stretcher for the transport of a fellow tour member who had collapsed in the heat; on another occasion our laddermen literally carried a tourist out to a waiting taxi to be rushed back to her air-conditioned hotel.

Our two staff conservators were with us for three months, from January to April; fortunately, we expect them to return for the whole of the next season. In Luxor Temple we collaborated very closely with the Egyptian Antiquities Organization restorers and also received welcome advice on materials and techniques from Dr. Abd el-Latif Arfani, Director of the Cairo Museum's Restoration Section. This season six loose fragments in danger of falling from the columns and walls of the Colonnade were reattached by the Antiquities Organization's restorers at our request; these specialists also assisted in the removal of modern pencil, ink and chalk graffiti. In return, we made our ladders

and adjustable aluminum scaffolding available to them as needed elsewhere in Luxor Temple. Our conservators assisted in the consolidation of a small stele found during the Antiquities Organization's clearance of the Court of Ramesses II; they have strengthened 27 crumbling sandstone fragments which we have included in our study, by application to their surface of 15–50% solutions of PVA (Polyvinylacetate = Vinovyl) in water.

Conservation has been a problem in the Luxor Temple since its excavation before the



*Richard Jasnow checks earlier copies of architrave texts from the Court of Amenhotep III in Luxor Temple (photograph by L. Bell).*

turn of the century: consolidation of columns had to be carried out practically in the footsteps of the excavators, and the flood waters of the Nile were deliberately conducted into the temple shortly thereafter, in hopes of leaching out some of the destructive salts from the stone. At Medinet Habu, our conservators monitored the needs of that site so that recommendations may be presented to the Antiquities Organization for its immediate and long-term care. The high water table is a major problem there, and it was necessary this year to impregnate one particularly fragile block, crumbling to sand in a wall of the Eighteenth Dynasty Temple, with a 15% PVA solution. The disintegration of the lowest courses of sandstone has led to the shifting of walls, with the result that the downward pressures exerted by the roofing slabs are now distributed unevenly. Large flakes have already been forced out of the walls where the pressure has become too great.

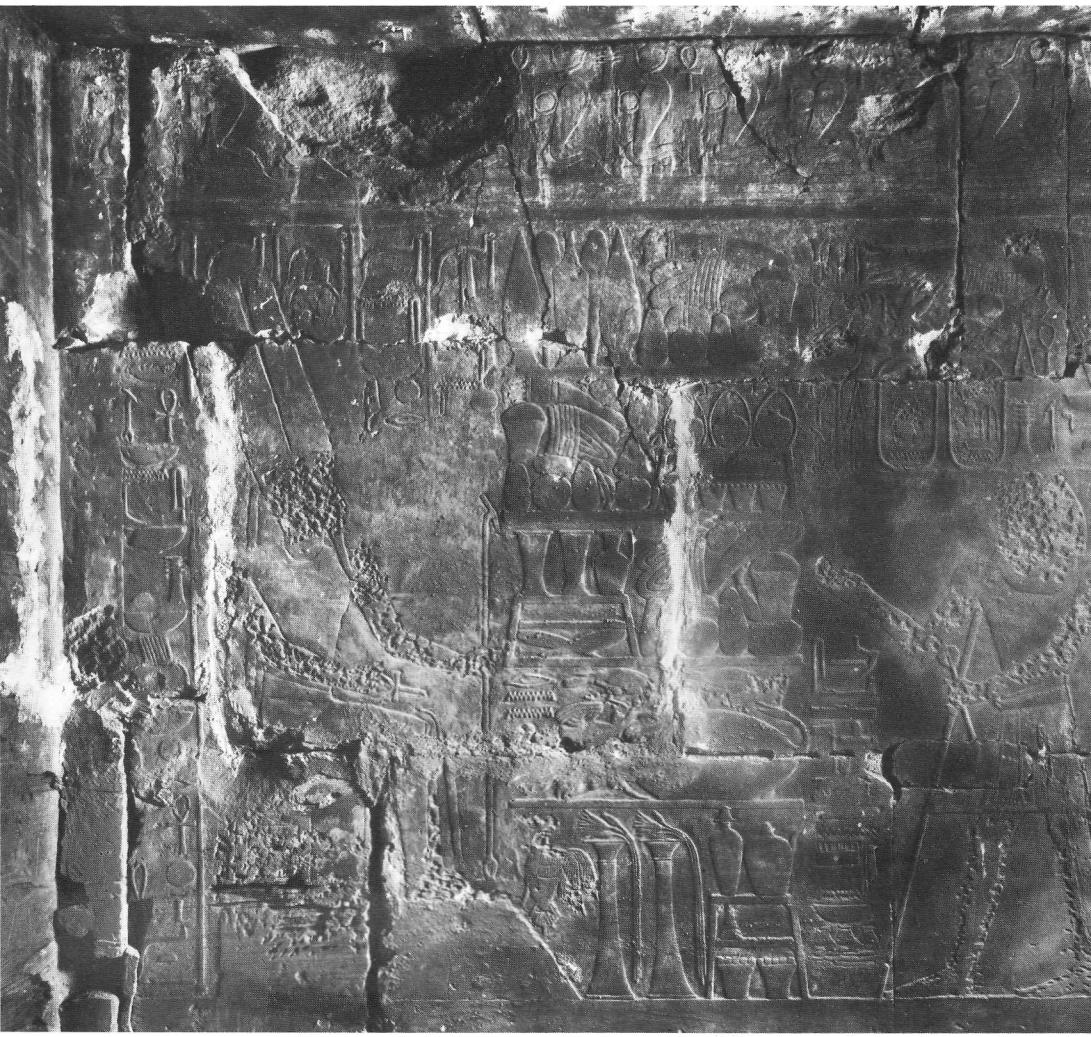
The walls and ceilings behind the barque shrine in the Amun Temple at Medinet Habu, where nearly all the roof is still in place, were blackened with smoke from domestic fires when the whole temple area was inhabited in post-pharaonic times. Later ages added further encrustations of dust and dirt, completely obscuring the wealth of painted detail in the reliefs of Hatshepsut and Thutmose III. Having observed the salutary effects of occasional rainstorms washing over the reliefs in areas where the roof has fallen, chances for the successful removal of this overlay by the application of chemical solvents seemed very good. From the beginning it was clear that a much earlier cleaning effort on selected walls had already removed much of the paint by scrubbing, smearing the residue across the adjacent reliefs. The extent of repairs possible in these areas is unfortunately slight. However, the two innermost rooms of the sanctuary area (rooms Q and P of the plan published in fig. 61 of *United with Eternity*) seem to have been untouched previously. After experimentation, cotton swabs dipped in a 5% solution of nitric acid in water were gently rolled across the deco-

rated surfaces (the operators wore rubber gloves), dissolving the sooty layers and revealing the brilliant colors of the underlying paint layer. The most spectacular results were achieved in the left innermost room (Q). Completely cleaned this season, this room now gives the appearance of a practically new monument. Photographing the newly exposed decoration will provide a vastly improved base for the facsimile drawings to be made here. This achievement represents a significant advance in the process of recovering the data available from this important temple.

To facilitate the conservation work at Medinet Habu we installed electricity in the Small Temple, which we were then also able to make available to the Antiquities Organization restorers working in one of the nearby chapels of the Saite princesses. Although most erratic in this sector of the Theban necropolis, the electricity itself marked a milestone of sorts. Illumination of these gloomy chambers for the first time meant that the walls and ceilings could be viewed as they never had been. The combination of cleaning and adequate light revealed several ancient graffiti, some written in black ink and others lightly incised, whose existence has never been reported. So far we have six demotic graffiti and two hieroglyphic ones to add to those collected in the temple by William F. Edgerton in 1928–33. One graffito (No. 236) published in his facsimile edition has since fallen to the floor; written on plaster, it apparently was forced out of the wall during some recent shift, and shattered. In a careful examination of the debris on the floor before cleaning was undertaken, some eleven pieces of this graffito were recovered, cleaned, reassembled and prepared for remounting. The fate of this graffito provides the most palpable evidence so far of the danger looming over this monument.

Our ongoing study of the graffiti in the Luxor Colonnade has now revealed the existence of a single demotic graffito (discovered by Richard Jasnow) incised on the east side of the Philip Arrhidaeus gateway, as well as several additional graffiti

*Smoke-blackened wall surface inside the Small Temple at Medinet Habu, before cleaning (photograph from the Chicago House archives).*



written in a form of archaic Greek script atop the roof of the portico of Ramesses II.

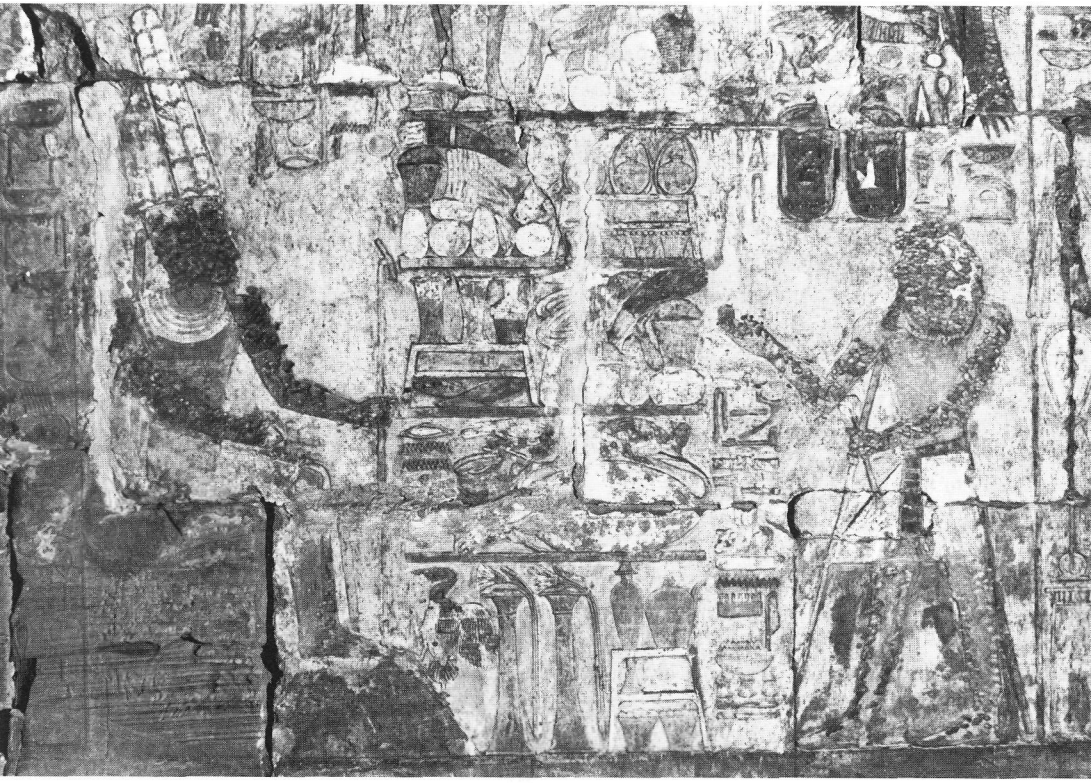
The graffiti in our concession number more than 90, including pharaonic, demotic, ancient Greek and Coptic, modern European and Arabic. We now have modern graffiti firmly dated from 1804 to 1884, bringing us almost up to the time of the removal of the house of Mustafa Agha Ayat from the Colonnade in 1889. Near the so-called Amarna princess' cartouche, at practically the same height on the column, we have also found a European signature, further evidence for the accessibility and popularity of this spot for graffito writers in the last century. With the assistance of information kindly made available to us from the extensive files of Mr. Roger de Keersmaecker of the Belgian Elkab Mission, we have made some progress in the identification of the early visitors to the Colonnade. The most colorful character known to us up to now is the Italian Giovanni Finati, who lived from 1787 to at least 1829. Serving in the army of Mohammed Aly in his youth, this soldier of fortune participated in the capture of Mecca and Medina from the Wahhabis in 1811–13. From 1815 to 1829 he acted as dragoman for several European travelers and antiquities collectors in Egypt, Nubia, Syria and Palestine, including W. J. Bankes, Sir Frederick Henniker, and Lord Prudhoe. He went as far up the Nile as Abu Simbel before returning to Cairo to open a hotel.

The work of the photographer this season was primarily archival, with most of the negatives from our Luxor project being described and registered, prints of each made for our files, and duplicates prepared for sending to the Oriental Institute. In November and December, with the assistance of Ms. Brigit Crowell, we were able to begin solving some long-standing problems, gathering together stacks of dusty prints from various cabinets and file drawers, identifying them, salvaging genuinely valuable records and disposing of the rejects. Among the collections we organized and made available this year are the unpublished photographs of Theban tombs made by Charles F. Nims and Keith C. Seele. As most of these tombs are normally in-

accessible, and many have suffered damage, natural or man-made, since being photographed, these prints represent an important addition to our documentation on the ancient monuments of the Theban area. We continued the duplication of our disintegrating nitrate-based negatives, preserving several more precious images. Able to spread the disease from which they suffer to adjacent negatives, and highly flammable, the brittle originals are burnt after they have been copied satisfactorily.

As our study of the Luxor Temple progresses, we are making increasing use of early photographs (supplemented by the information available from older drawings), not only to confirm details of the history of the latest stages of the modern occupation of the Colonnade, its excavation and consolidation, but also to document its rapid deterioration. Several prints from the Oriental Institute's photographic archive have been made available to us for this purpose by Mr. John Larson. The oldest reasonably reliable drawing of the Colonnade was made in 1799 by Cécile for the Napoleonic Commission in Egypt. A transparency of this unpublished watercolor, now in the Louvre, has generously been made available to us by Dr. Christiane Desroches-Noblecourt. From contemporary accounts it is clear that one column was freed from the encumbering debris at that time, so that measurements could be taken. The earliest photograph we have of the Colonnade was taken in 1850 by Maxime du Camp, traveling in Egypt with his friend Gustave Flaubert. Between this photograph and another taken by Francis Frith no later than 1857, the ground in the Colonnade was leveled, perhaps as the result of an "excavation" attested as having occurred somewhere in Luxor Temple in 1852, or possibly in preparation for the construction of the house of Mustafa Agha Ayat. A photo attributed to Antonio Beato shows the tracks of a Decauville railway running the length of the Colonnade during its final clearance at the end of the nineteenth century. A drawing by Denon, also a staff member of the Napoleonic Commis-

*The wall surface, pictured on page 10, after cleaning. (photograph by L. Bell).*



sion of 1798–1801, shows a Nile channel running past the southwest corner of Luxor Temple, and early plans indicate the remnants of a stone embankment along the river in the same area, possibly part of the Roman waterfront. Neither of these features can be traced after 1888, perhaps buried beneath the dumps of debris removed from Luxor Temple during its excavation. It may be worthwhile to note that trenching for laying sewer pipes under the modern road south of the temple was halted this spring when a stone structure identified as a gate in the Roman enclosure wall was uncovered.

The earliest photographic record of the interior decoration of the walls of the Colonnade was published by

Georges Daressy in 1894. Despite their small scale and the bad quality of their reproduction, these photographs, made shortly after the completion of the excavations, are the only source for many important details of decoration which have vanished from large areas of the Colonnade's walls since that time. So important is this documentation that we intend to search for the negatives, original prints, and any relevant commentary in Daressy's field notes now kept in the Collège de France in Paris. The next series of photographs we have, those taken in 1926 and published in Wreszinsky's *Atlas,* supplemented by close-ups and detail shots made in 1928 by Sir Alan Gardiner (prints of whose unpublished photographs were kindly supplied to us by the Griffith Institute), reveals that the most serious damage associated with the present condition of the Colonnade had already occurred by then. The dramatic loss of surface through salting, the disappearance of detached fragments, and chipping along edges, corners and cracks, probably occurred shortly after excavation and is most likely the result of abrupt ecological changes which the temple suffered through that process. A comparison of the walls with our own photographs, dating from the mid-1930's to the project planning photos taken in 1974–75, completes the testimony to the horror of the continuous degradation of the walls of the Colonnade in the last 90 years. We have so far identified some 30 discrete areas where the stone surfaces have eroded so badly that even the faintest traces of the decoration which are sometimes left are often intelligible only by reference to these old photographs. The most extensive damage is found in the northeast corner of the hall where, ironically, the wall is preserved to its greatest height. Confirmed reconstructions derived from this study will be included in our drawings, clearly distinguished, and with a citation for the source of every lost detail.

Another aspect of our rescue of the original decoration of the Colonnade is our work with the stones which were pried out of the walls when the temple was serving as a

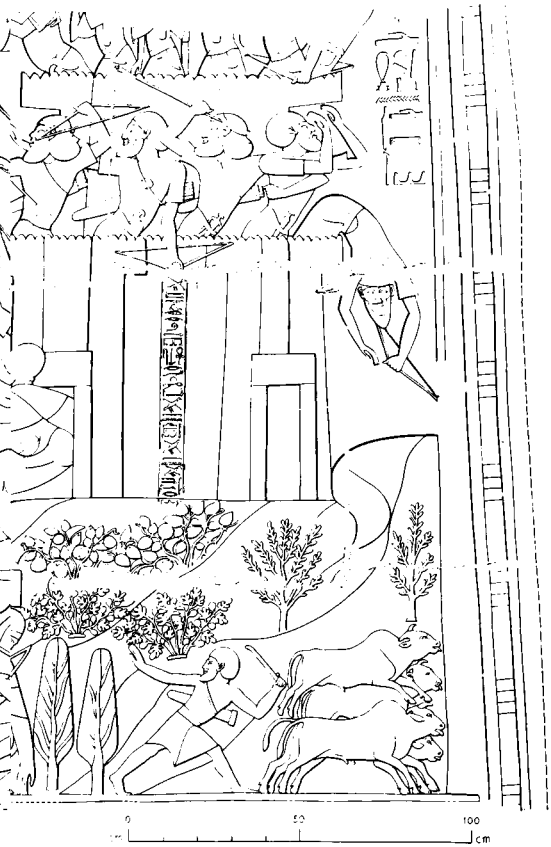
quarry for materials used in building the houses north of the pylon. These stones were discovered in the modern excavation of the Avenue of Sphinxes. We have continued to cooperate with the Antiquities Organization in dismantling the stone stacks around the Luxor Temple and repositioning them on newly constructed brick mastabas with damp courses to protect them from the penetration of ground water. Ray Johnson examined each fragment as it was moved, looking for additional pieces to include in our reconstruction of the upper reaches of the Colonnade's walls. By the end of the season, 93 new fragments had been identified, tentatively placed, and moved to our block yard; these, along with 37 others from our previous work, still await photography and drawing next season. Three of the new fragments actually join the standing walls or may be fitted into them in holes previously filled with modern concrete. The subtlety, ingenuity and imagination required for the recognition of these fragments can be likened to that which would be needed to put together a giant jigsaw puzzle, most of whose pieces are missing, with those which survive having their surfaces abraded and their interlocking edges worn off. By close observation of details and familiarity with the parallels (almost like looking at the picture on the lid of a puzzle box), Ray is able to propose reconstructions of individual scenes to be refined and ordered in subsequent discussions. Significant increases in some of our major groupings of fragments now give us the following new statistics: Min procession (50), Khonsu barge and towboats (26), Amun procession (18), king before Mut with offering list (15).

Inside the Colonnade our Egyptologists and artists were engaged in checking drawings for most of the season, systematizing them, and preparing to make final adjustments for publication. The 159 individual drawings of the 18 episodes in the depiction of the Opet festival (9 in each direction going between Karnak and Luxor) have now been joined together, with 6 scenes containing between 13 and 20 enlargements each. In all, 224

separate enlargements have been prepared, representing all the decoration of the Colonnade, except for the fragments. Of these drawings, 82% were double checked this season; only 21 still need to be checked completely, with 38 more requiring final clearance next season. Among the drawings completed this year are the texts of the marginal inscription running under the Opet festival scenes. First cut by Merneptah, then erased (presumably by his half-brother and short-lived successor, Amenmesse), they were later recut (with different texts, running in directions opposite to the orientation of the original versions) by Ramesses IV. Our drawings show the inscriptions of Ramesses IV surcharged over the Mer-

neptah traces, then reconstruct these for the benefit of our readers. The traces of the erased decoration of the ephemeral King Eye, the successor of Tutankhamun, have now also been reinforced on photographic mosaics of the façade of the Eighteenth Dynasty temple.

The single most vexing historical controversy involving Tutankhamun is that of his parentage. Our publication of the Colonnade will present fully for the first time eight texts in which Tutankhamun names Amenhotep III as "his father." The importance of the evidence from the Colonnade lies in its absolute insistence on this relationship, claimed only one other time on the base of one of a pair of pink granite statues of recumbent lions originally from the Temple of Soleb in Nubia (found at Gebel Barkal and presented to the British Museum by Lord Prudhoe in 1835). In each of these inscriptions, Tutankhamun declares that he is "renewing" or "restoring" his father's monument. Indeed, we know that Tutankhamun was the son of a king, and Amenhotep III is the only ruler he calls father. In renewal texts on the wooden remains of a small astronomical or surveying instrument on display in the Oriental Institute Museum (OIM 12144), Tutankhamun also seems to call Thutmose




*Detail of plate 23 from* The Battle Reliefs of King Sety I *(forthcoming); the Egyptian assault on Kadesh, with a herdsman driving his cattle into the bush (drawing by Martyn Lach).*

IV "his grandfather" (literally, "father's father"). Unfortunately, the matter is not so simple, because of the ambiguity of the designations "father" and "grandfather." Quite apart from the suggestion that "father" could be merely an abbreviation for "(father's) father," both of these terms can also be used in the sense of "forefather," referring to ancestors or predecessors (not even necessarily blood relatives). In addition, writings used for "grandfather" can also represent "great grandfather." Clearly Tutankhamun wanted to be associated with the illustrious Amenhotep III, a fact borne out by the extensive decoration which he did in his name at Luxor, and his frequent representation of him in the Opet festival reliefs and the Min procession. It is understandable that Tutankhamun might wish to suppress Akhenaten in his genealogy, even if he actually were his father, but it must be noted that Akhenaten nowhere acknowledges a son of his own. The question remains so far unresolved. Moreover, if Tutankhamun is regarded as a son of Amenhotep III, then two related problems have to be reconciled: either there must have been a long coregency between Amenhotep III and Akhenaten, or the estimate of the age of the so-called "boy king" Tutankhamun at the time of his death will have to be adjusted upward. Most of these questions have been discussed by Ed Wente in *JNES* 28 (1969), pp. 278–9, and in Harris and Wente, *An X-Ray Atlas of the Royal Mummies* (1980), p. 258.

Broader issues raised by our current research are the significance of the Opet festival itself, the liturgical role of Luxor Temple, and its relationship both to Karnak and to Medinet Habu. An unusual feature at Luxor Temple is the presence of the "birthroom" near the barque sanctuary, depicting the divine conception and birth of Amenhotep III as the physical son of the god Amun-Re. In an inscription on one of the architraves in the court of Amenhotep III, the king describes Luxor as a place "in which he might become young (again)." Two colossal statues of the deified Ramesses II were set up in Luxor Temple; the only other deified statue of him known

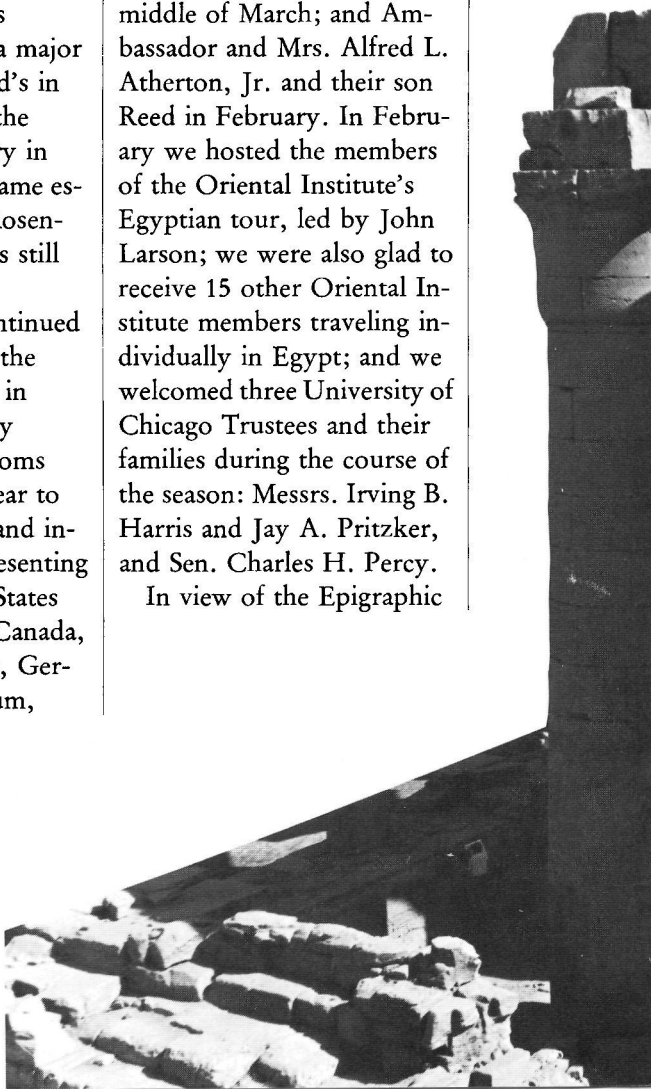
in the Luxor area is found at the Ramesseum, his mortuary temple on the west bank of the Nile, dedicated to his resurrection and eternal life. Perhaps not accidentally, colossal statues of the deified Amenhotep III are found in Thebes only in front of the Tenth Pylon at Karnak (at the north end of the sacred processional way to Luxor) and at his mortuary temple near Medinet Habu. The nature of the importance of Luxor Temple in the Graeco-Roman era is perhaps suggested by the fact that Alexander the Great, who regarded himself as the physical son of Zeus-Ammon, renewed the barque chapel there, and that a Roman shrine set up before this chapel celebrated the cult of the divine emperors. An especially close relationship existed between the Amun of Luxor and the Amun of the Medinet Habu Small Temple—regarded in the Theban cosmogony at the same time as both the birthplace and the burial ground of the oldest of the gods—with Amun of Luxor crossing to Medinet Habu every ten days. Although the significance of much of the above remains speculative, these data, if they are correctly associated, indicate in Luxor Temple specifically a cult place dedicated to the rebirth of the divine king, perhaps celebrated annually during the Opet festival, when the king's barque joined those of Amun, Mut and Khonsu in a great procession from Karnak to Luxor and back again. Bill Murnane has already written about several of these matters in *Lexikon der Ägyptologie* IV (1981), 574–9.

In the library, 130 new monographs on Egyptology were accessioned this season, in addition to the periodicals received. Nearly 24 meters of new shelving were brought into use to ease overcrowding; the journals were rearranged before closing in May, with the assistance of Salvatore and Barbara Garfi. The monographs and series will be respaced before the beginning of the next season, in early October. Additional security locks were also installed on the exterior library doors this season. A further development in regard to the rare Rifaud volumes referred to last year was the discovery in one of our magazines of

the original paper covers in which the original fascicles of plates were distributed. These also seem to be unique, apparently discarded in other libraries around the world; but they contain valuable publication information which does not appear on the plates themselves. Among the many visitors to our library may be mentioned Mr. and Mrs. Lawrence P. Bachman: a biographer of Julius Rosenwald of Sears, a major benefactor of Breasted's in the establishment of the Chicago House library in 1927, Mr. Bachman came especially to see the "Rosenwald Library," as it is still known officially.

Chicago House continued to serve the needs of the scholarly community in Luxor, with its library facilities and guest rooms made available this year to expedition members and individual scholars representing not only the United States and Egypt, but also Canada, Great Britain, France, Germany, Poland, Belgium, Switzerland, the Netherlands, Denmark, Sweden, Italy, Israel, Australia, New Zealand and Japan. Our house guests included Ed Wente as well as President and Mrs. Richard Pedersen of the American University in Cairo at Thanksgiving; Janet Johnson, Donald Whitcomb and Bruce Williams with the Qusier Project staff members during late December and the middle of March; and Ambassador and Mrs. Alfred L. Atherton, Jr. and their son Reed in February. In February we hosted the members of the Oriental Institute's Egyptian tour, led by John Larson; we were also glad to receive 15 other Oriental Institute members traveling individually in Egypt; and we welcomed three University of Chicago Trustees and their families during the course of the season: Messrs. Irving B. Harris and Jay A. Pritzker, and Sen. Charles H. Percy.

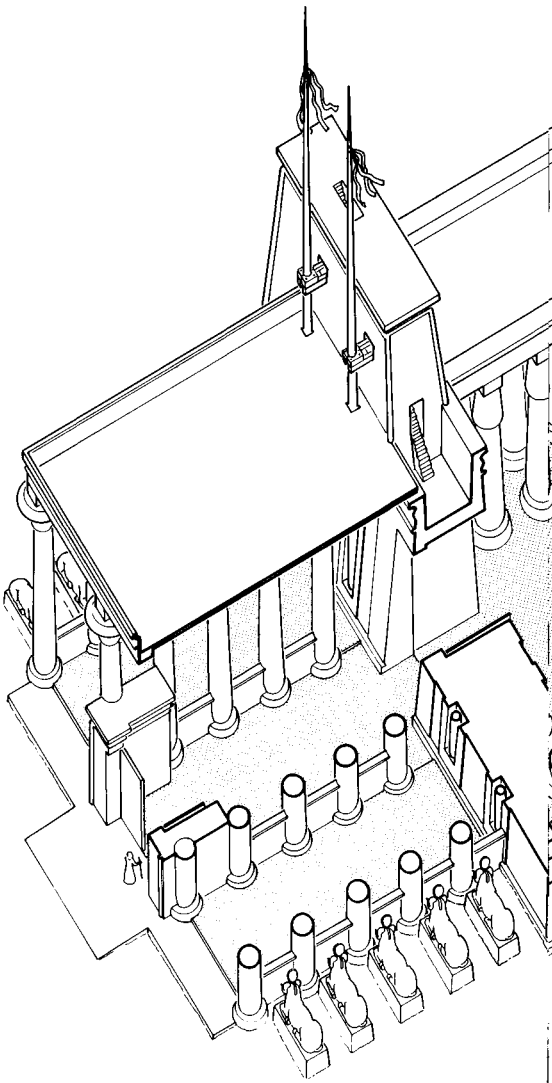
In view of the Epigraphic

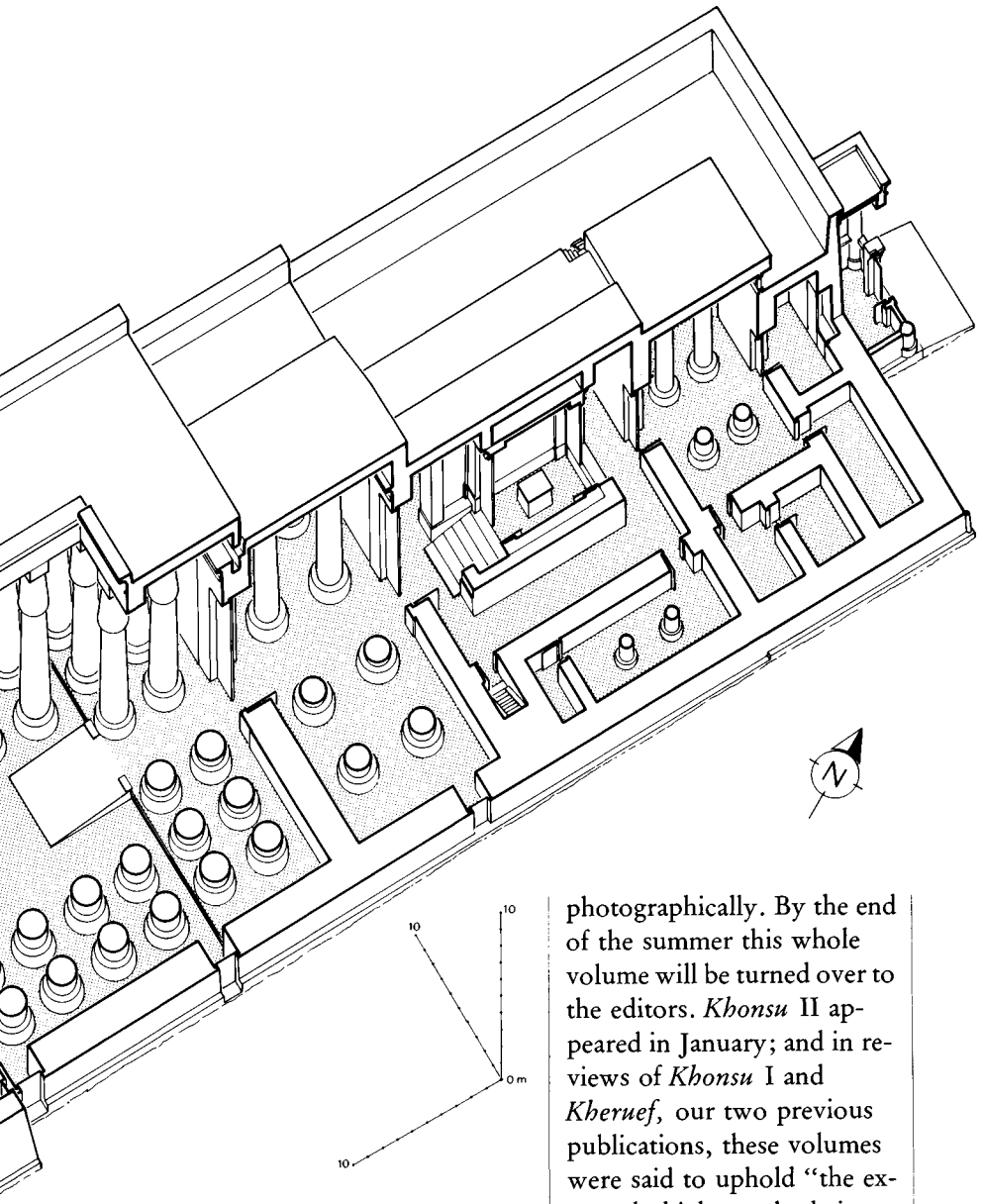


Survey's lifelong association with Medinet Habu, we were happy to prepare, at the request of the local Antiquities Organization officials, a bilingual plan of that site, which will be erected near the High Gate to help orient visitors. The plan was prepared

*The Processional Colonnade at Luxor, seen from the southeast (photograph by L. Bell).*

by Ray Johnson with the assistance of Mr. Rashid Migalla of the Franco-Egyptian Center at Karnak and Chief Architect for Southern Upper Egypt, who also translated the captions into Arabic. The English explanatory text was prepared by Bill Murnane, while Mr. Mohammed el-Sughayyir composed the Arabic version. We are pleased to announce that Bill Murnane's detailed guidebook to Medinet Habu, *United with Eternity*, has recently been released by the American University in Cairo, and that limited quantities are even now available at the Oriental Institute. Bill's edition of volume I of Harold H. Nelson's *Hypostyle Hall* appeared in June, with work on volume II (translations and commentary to the plates) well under way. Further work on the architrave and abaci inscriptions and the fragments will be in collaboration with the Franco-Egyptian Center at Karnak. Bill's study includes 120 fragments fallen from the walls of the Hypostyle Hall, with 41 of these identified this year. While searching through the fragments on the ground to the north of the Hypostyle, Bill was also able to isolate 22 new fragments from the Sety wall. These were all photographed this season, bringing to 36 the total number of fragments to be included in our publication, either in drawings or






*Isometric reconstruction of the Temple of Khonsu (drawing by Françoise Traunecker).*

photographically. By the end of the summer this whole volume will be turned over to the editors. *Khonsu* II appeared in January; and in reviews of *Khonsu* I and *Kheruef,* our two previous publications, these volumes were said to uphold "the extremely high standards in recording and publishing ancient Egyptian monuments so

justly associated with the Chicago epigraphic survey" (Kitchen, *BiOr* 38 [1981], 301–2), and to maintain "the usual high standards of accuracy for which the Oriental Institute's Epigraphic Survey is renowned" (Weinstein, *AJA* 86 [1982], 136). Our next publication after *The Battle Reliefs of King Sety I* will be *Khonsu* III, an architectural study of that temple by Mme. Françoise Traunecker of the Franco-Egyptian Center at Karnak. Françoise's contribution on the architecture of the Luxor Colonnade, with special reference to the Hypostyle Hall at Karnak, is also well advanced.

Our professional staff for the 1981–82 season consisted of my wife Martha, who functioned as librarian this year; Dr. William Murnane and Messrs. Bernard Fishman and Richard Jasnow, epigraphers; Messrs. Thad Rasche and W. Raymond Johnson, artists; Ms. Diana Olson, photographer-artist; Richard and Helena Jaeschke, conservators; Dr. Labib Habachi, consulting Egyptologist; and Mr. Saleh Shehat Suleiman, chief engineer. In addition to those cited above in this report for their assistance in making the past season a success, we would also like to thank MM. Jean-Claude Golvin, Claude Traunecker, and Alain Bellod of the Franco-Egyptian Center at Karnak; Ms. May Trad; Mr. Richard Fazzini of the Brooklyn Museum's Mut Temple Project; and Dr. Ricardo A. Caminos. Special appreciation is due to those members of the Egyptian Antiquities Organization with whom we worked most closely and whose cooperation, support, encouragement and friendship throughout the season have enabled us to achieve the results described above. These include Dr. Ahmed Kadry, Chairman of the Egyptian Antiquities Organization; Mr. Mohammed el-Sughayyir, Director of Antiquities for Southern Upper Egypt; Mr. Sayid Abd el-Hamid, Chief Inspector for Karnak and Luxor; Mr. Mohammed Baha, Inspector at Luxor; and Mr. Mohammed Nasr, Chief Inspector of Qurna. International travel and funds for our operations in Egypt were provided by a counterpart grant from the Foreign Currency Program

of the Smithsonian Institution, administered through the offices of the American Research Center in Egypt. Unfortunately this source of funding will no longer be available after our 1984–85 season. In these times of increasing financial difficulties, we are especially grateful for the generous gifts made to us by several private benefactors concerned about the future of the Epigraphic Survey.

The international publicity resulting from the featuring of the Epigraphic Survey in several newspaper articles and in the National Geographic television special "Egypt: Quest for Eternity" (aired on PBS in February) was most welcome. The television documentary is now being reedited into a 23-minute educational film entitled "Preserving Egypt's Past," to be released in September. These notices brought the Epigraphic Survey to the attention of a whole new audience, many of whom were anxious to find out more about our work and eager to see the inside of Chicago House. We tried to accommodate as many of them as our work would allow. We would like to repeat here once more our invitation to our friends to try to visit us during our season in Luxor. We do request, however, that you let us know your plans as far ahead as you can, so that we will be able to prepare the best possible welcome for you.

# Recording the Graffiti of Western Thebes

*Richard Jasnow*

One of the great attractions of working on the Epigraphic Survey is the ample opportunity thus provided to explore the West Bank, the necropolis of ancient Thebes. Despite the many people who come to Luxor in order to visit its famous sites, one can still walk for long stretches through the valleys and hills without encountering either tourist or native. As the student-epigrapher of the

1981–82 season, I hoped also to do some personal research which would utilize my particular specialty, Demotic Egyptian. When Lanny Bell suggested that I study the Demotic graffiti in the necropolis, I immediately decided to spend as much of my free time as possible locating and copying these ancient texts.

It is the magnificent temples and tombs, of course, which most strikingly demonstrate the great religious importance of the Theban necropolis. However, the Egyptians also expressed their devotion to the gods in more humble ways. The most ubiquitous remains of this personal piety are the thousands of graffiti cut into the rock faces of the limestone cliffs. Many texts are quite short, often being variations on a common votive formula in which the writer declares that his "good name remains in the presence of" some god or goddess for all eternity. Other graffiti are considerably longer and more involved. In any case, the motive for their composition is the same: a desire to associate oneself with a sacred place or to appeal directly to the deities who inhabit it.

The Demotic texts, of Graeco-Roman date, form only a small part of the total number of graffiti. Most are in the hieroglyphic or hieratic scripts, and are from earlier periods of Egyptian history. Greek, Coptic, and, of course, Arabic inscriptions are also abundant.

Several famous Egyptologists have dedicated themselves to the recording of Theban graffiti. Howard Carter, for example, copied many texts, carving "H.C. 1916" above them to let future scholars know that the graffito in question had already been "done." More recently, the great Czech Egyptologist, Jaroslav Czerny, deciphered and published many graffiti. Under his guidance the Egyptian Centre de Documentation initiated an ambitious series of volumes in which all the ancient graffiti are to be published in facsimile. In view of the Centre de Documentation publications, one may wonder why it is still worthwhile to study the Demotic graffiti in the field. The reasons for this have to do both with their state of preservation and the

nature of the Demotic script itself. Usually the graffiti are lightly incised on the rock face, though sometimes earth pigments were used. Due to erosion and the often poor quality of the limestone, it is now sometimes very difficult to distinguish between what is a mere crack and what a true stroke. Many of the inscriptions have also suffered deliberate defacement; innumerable scratches have obliterated the original signs. Moreover, on the oft-traveled paths from Deir el-Medina to the Valley of the Kings, modern graffiti have almost totally covered the ancient, which are now only faintly discernible. When one adds to the problems of preservation those inherent in the reading of the Demotic script because of its cursiveness and complexity, it becomes apparent why further study can recover more of an inscription than is visible in a previously published facsimile.

Out of the roughly thirty Demotic texts in the Centre de Documentation volumes, I selected eight for study with a view towards publication.

The graffiti on which I worked are good examples of the kinds of texts one finds on the West Bank. The simplest is a man's name "Horus son of Eponkh." This individual evidently felt dissatisfied with his first effort and so wrote his name again a few feet away. The man was schooled in both Demotic and Greek; in each case he wrote out his name in Greek letters as well. It is interesting to observe that when he uses Greek he gives himself the good Greek name Didymos in place of the Egyptian Horus. This phenomenon of double names is not uncommon in Graeco-Roman Egypt. I collected two other graffiti from the same place (not far from Deir el-Medina). One is a votive formula mentioning the deified official Amenhotep son of Hapu, who was reputed to be buried in the area. The other is a rather impressive text carved on a large boulder in which the writer expresses the wish that, when he dies, he be buried in the necropolis along with his father and brothers.

There were many graffiti from different periods in a natural bay to the north of Hatshepsut's temple at Deir el-Bahri. The three which I copied there may be the work

of one man, sharing as they do similarities in format and phraseology. The graffito shown is divided into two sections, of which I translate here the upper. This is an invocation to Isis, composed after the writer's return home from a perilous journey:

> So-and-so calls out to Isis, the Great Goddess. She listens all the time. She never abandons in the road the one who calls out to her. I called out to Isis. She heard my voice and (the voice of) my companions. She brought me back to our great house, we being safe at the behest of Isis and the Gods of Djeme (the name of the ancient town on the West Bank).

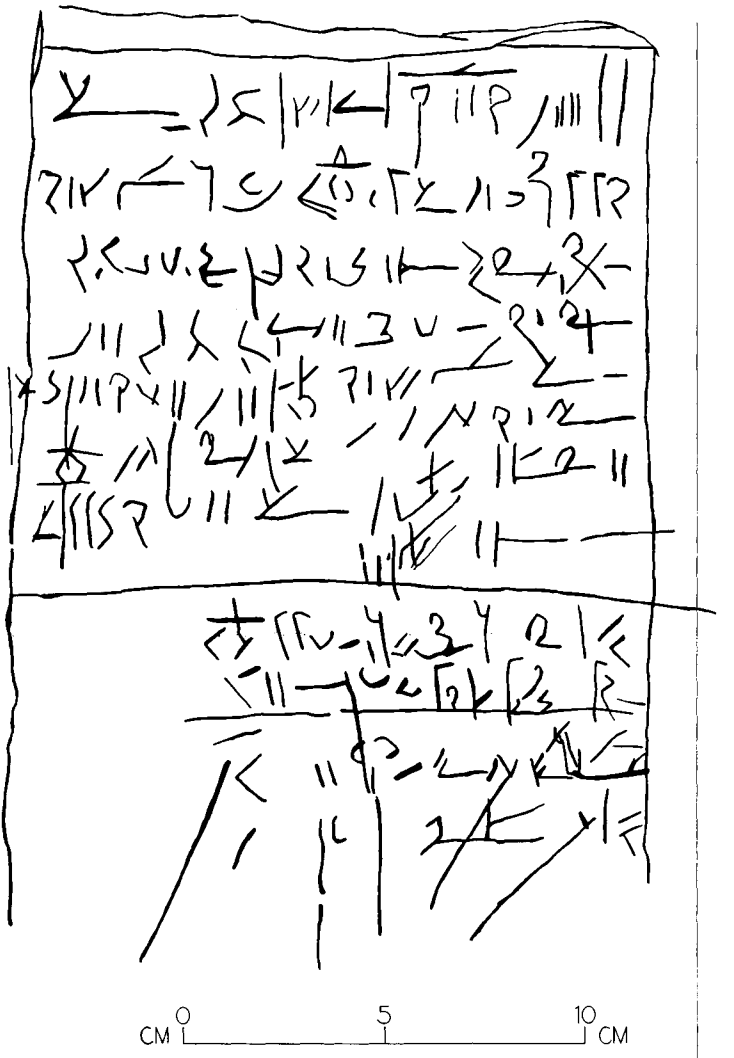
Perhaps the most interesting of the graffiti was also the most difficult to copy. It was located in a desolate wadi not far from the Valley of the Queens. The inscription was very lightly cut and awkwardly close to ground level. Situated beneath a ledge, the light was adequate for study purposes for only about two and a half hours a day. Furthermore, the limestone was in such poor condition that it could not be touched.

The graffito, obviously the work of a practised scribe, is a hymn to Isis. Much of it is cast in the form of a direct address to the goddess, who is repeatedly called upon to appear to the speaker. I quote a few lines to give an idea of this section:

> Come to me, O Isis, Mistress of Awe!
> Come to me, O Isis, Mistress of Love!
> Come to me, O Isis, Mistress of the Uraeus!

In the middle of the text is a narrative passage in which the writer appears to speak of some unhappy experience which befell him. It may well be that, as was the case with the graffito translated above, the scribe wrote this hymn as an expression of gratitude to Isis for delivering him from some evil fate. After this narrative section, the hymn continues:

> Are you not in the sky? Are you not in the earth?
> Are you not in the sea? . . . Are you not in the ground?
> Are you not in the wood? . . . Are you not in the horizon? . . . Are you not in the underworld before Osiris?




*Demotic graffito containing invocations to Isis and Amenhotep, son of Hapu.*

Even from the little that has been translated here it should be clear that this is no banal, formulaic text, but, on the contrary, a spirited and not unoriginal composition. I hope that further study over the summer will remove some of its remaining obscurities, particularly with

regard to the misfortunes of the writer.

As modest as my project was, it could not have been successfully completed without the help of Mr. Thad Rasche, senior artist of the Epigraphic Survey, and Ms. Diana Olson, the Survey's photographer. To them, and to other members of the Epigraphic Survey who provided encouragement and support when it was needed, I give my sincere thanks. I am also grateful to Dr. Abdel Aziz Sadek, who helped me to locate several of the graffiti, and to Professor Ricardo Caminos, who generously loaned me the necessary tracing materials.

# 1982 Season of Excavations at Quseir al-Qadim

*Donald S. Whitcomb and Janet H. Johnson*

The excavations at Quseir al-Qadim were undertaken to explore the international trade of this small port on the Red Sea in Egypt. The third season of excavations (January–March, 1982)[1] was designed specifically to

1. These excavations, which are sponsored by the Oriental Institute and funded by the Smithsonian Institution and the National Geographic Society, encompassed 36 workdays and employed 25 workmen. The field staff of the 1982 season consisted of Gillian Eastwood, Lisa Heidorn, Fredrick Hiebert, Carol Meyer, J. S. Nigam, Hanna B. Tadros, Catherine Valentour, Bruce Williams, and the authors. Salaah Sultan and Mohammed Hagras joined us as representatives of the Egyptian Antiquities Organization. We would like to take this opportunity to thank the Egyptian Antiquities Organization for all of their cooperation and assistance to us, this season and throughout the seasons of work at Quseir al-Qadim. Special thanks for assistance with the 1982 season go to Ahmad Qadry, Mitawi Balboush, Abd el-Raouf Yusef, Mohammed Salah, Mohammed Sogheir, and Husein al-Afyuni.

We would also like to thank Sally Zimmerman, Judy Cottle, David Rosenberg, Lisette Ellis, Fred Hiebert, Carol Meyer, Helen Alten, and Joan Barghusen for their many hours of work sorting, label-

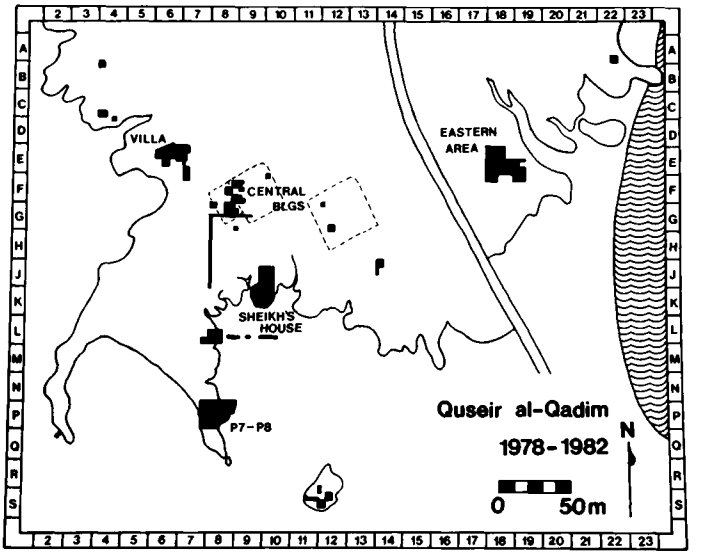
examine the central institutions of this port during the two periods of its occupation—Roman of the first and second centuries of our era and Ayyubid-Mamluk of the 13th and 14th centuries. For the Roman period this involved expansion of previous trenches (F8d–F9c and G8b)[2] in the Roman Central Buildings. Likewise, a 1978 trench which had indicated the importance of the "Islamic knoll" (K9b) as a central feature of the Islamic town was enlarged in 1982. The results of this extremely successful season include an impressive corpus of material for this Roman and Islamic port and permit a conclusion of this research project at Quseir al-Qadim. The determination of the character of the mercantile settlements of the two, very different, cultural periods now depends on the analysis of the immense amount of evidence, both artifactual and architectural, provided by these three seasons of excavations.

The center of the Roman town is dominated by two large buildings, each approximately 30 m. square. The excavations concentrated on the northwest corner of the western Central Building, where a series of rooms faces onto a central courtyard. In the corner of the courtyard was a stone-paved staircase leading to the second floor or roof. Both in techniques of construction and in architectural form there are many points of similarity with structures uncovered at Karanis, in the Fayyum. The northernmost room had a niche in the wall within which was a large cat wrapped in linen. (Subsequent analysis has shown that this cat had consumed five mice shortly before, and perhaps causing, its death.[3])

ling, and preparing objects and proofreading manuscript. Without their help, we would have accomplished much less.

2. Reported in D. S. Whitcomb and J. H. Johnson, *Quseir al-Qadim 1978: preliminary report* (Cairo, ARCE, 1979), and *Quseir al-Qadim 1980: preliminary report* "American Research Center in Egypt Reports" (Malibu, Udena, 1982).

3. We are indebted to Dr. J. Boessneck, Institut für Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin der Universität München; and Dr. Omar el-Arini, Director of Conservation, Egyptian Museum, Cairo, for this analysis.

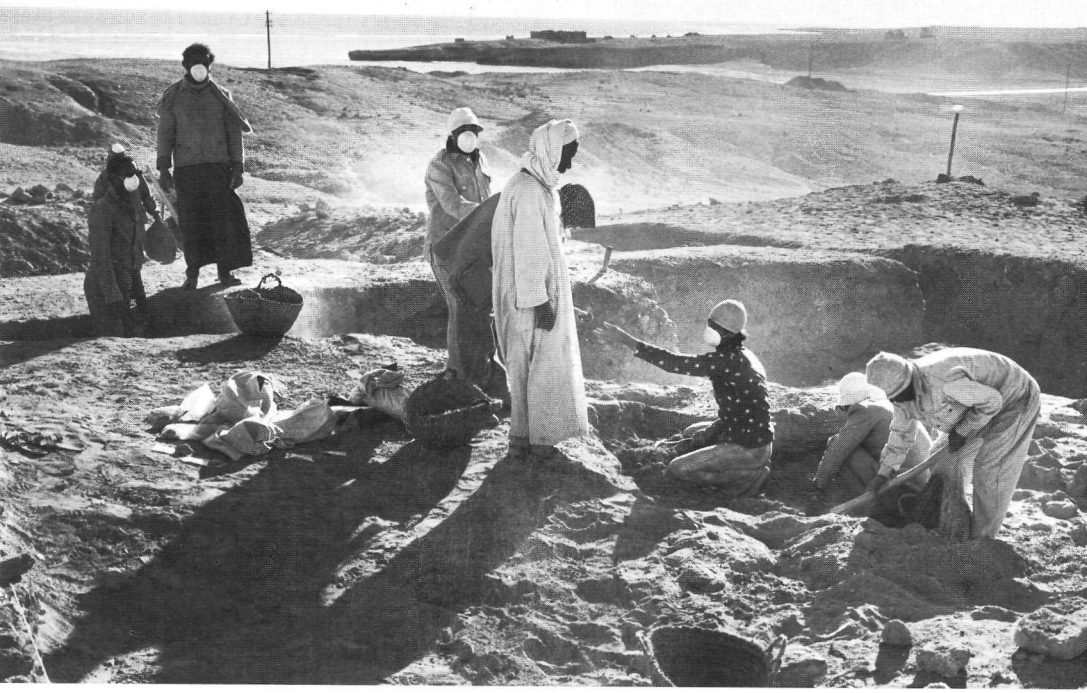



*Sketch map of the site of Quseir al-Qadim*

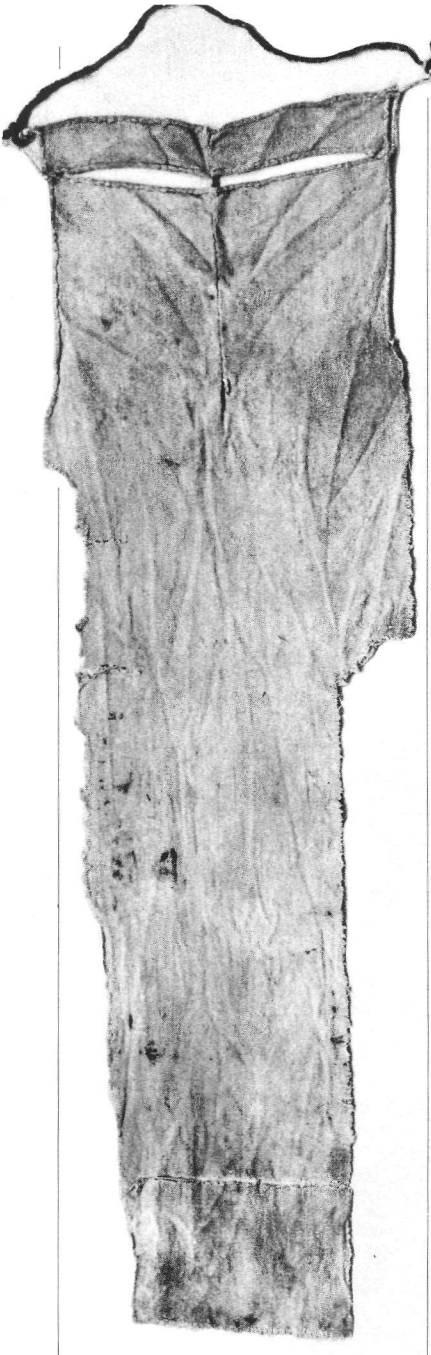
A second Roman building, called the "White Building," was constructed against the west side of this Central Building. This building consisted of a series of at least three long vaulted rooms (9 × 4 m.) with doorways opening west onto the main street connecting the harbor area to the south with the residential section of the town in the northwest. The rooms were paved with mud brick; at least one had a series of large depressions, perhaps for storage vessels or amphorae, of which masses of fragments were found in the fill of these rooms. Placed in

the rubble fall of this building was a Roman burial—the first from this site (the Romans normally used a separate necropolis)—of a young woman buried under curious circumstances. In any case, the Roman town can be seen to be centered on these large official structures.

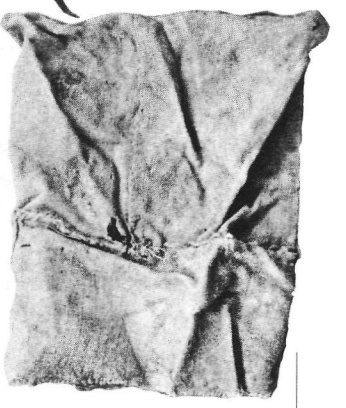
The merchants who returned to Quseir, after 1000 years of abandonment of this port, came with much the same purpose as those of the Roman period. The Ayyubid



*Excavations in progress on central Roman administrative building.*



*Woman's veil, Islamic period.*

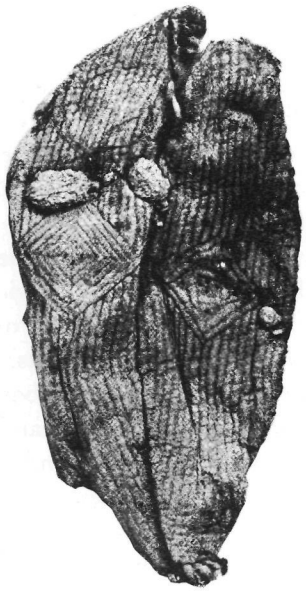


*Islamic textile*

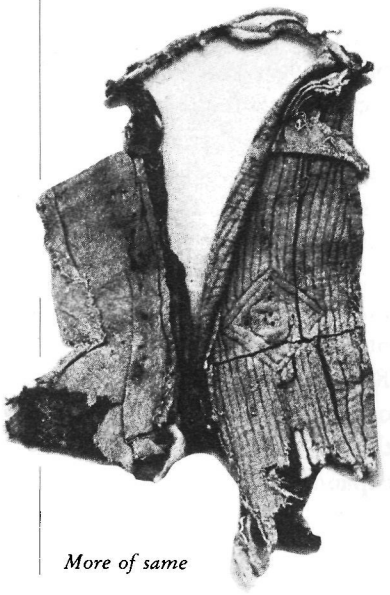
and Mamluk entrepreneurs did not rebuild the massive mud-brick structures of the Central Buildings but organized their town as a collection of independent stone and mud-brick houses. The "Islamic knoll" was completely excavated this season, revealing a well-built house; this was called the "Sheikh's house" due to the numerous letters found in it written in Arabic on paper and mentioning a certain sheikh. The house had a number of storerooms and apartments as well as two stairways leading to the second floor or roof. Although analysis of this structure is not yet complete, it appears that the building

may have been subdivided into a complex of two residential units in the early Mamluk period.

Below the knoll was a wide flat area, the silted fill of the older Roman harbor. Along the edge of this area were structures which continue to be problematic (L7–L8); at present they appear to be workshops, perhaps associated with the suq or market area. One of the more surprising finds in the workshop area was a late Byzantine coin (12th century). The central feature of the workshops was a large circular structure made of mud bricks and burned red on the top. Nearby were small rooms or bins filled with ashes and, on top of the debris, numerous fragments of heat-cracked basalt grinding stones. Northeast was a small yard with a hearth area and, beneath the walls, a flooring of sherds and another circular fired area. No slag, wasters, seeds, or bones were found to give a clue to the identification and function of these structures.



*Islamic hat*



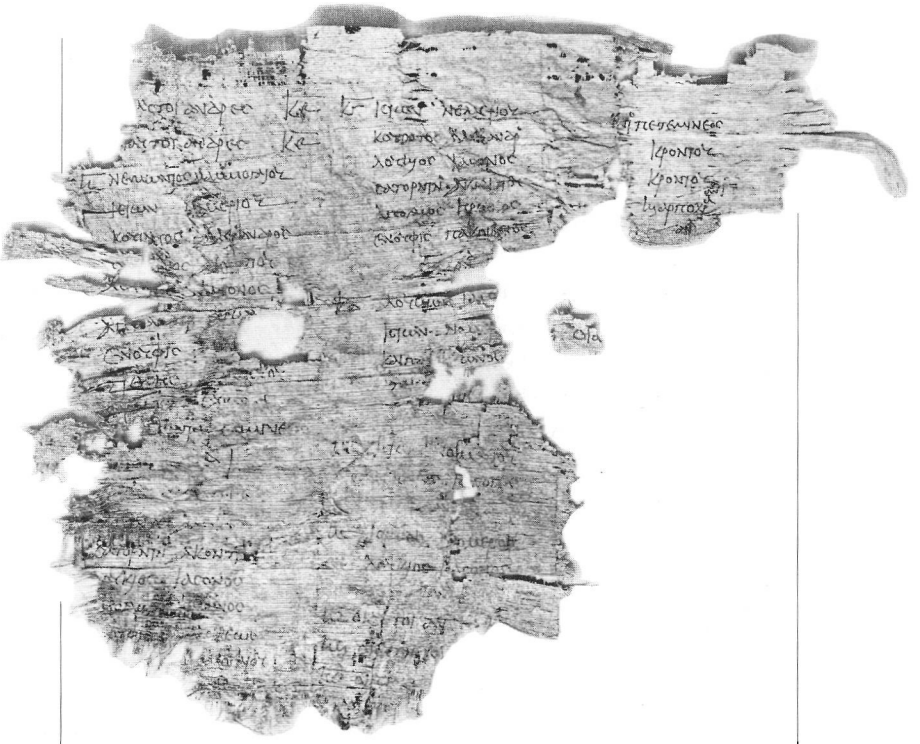
*More of same*

Because of Quseir's function as a port, archaeological interpretation of it requires an examination of data from both an internal, Egyptian perspective and an external perspective based on the en-

tire Indian Ocean. Two members of this season's staff were very directly concerned with the kind and extent of the trade going through the port. Through the courtesy of the Ford Foundation in India, J. S. Nigam, a member of the Archaeological Service of India who is an expert on Indian ceramics, joined us. He was able to identify both actual Indian artifacts (mainly ceramics and textiles) and objects of Indian design testifying to the India trade and suggesting the presence of Indian merchants in Egypt. The quantities of textiles are particularly informative for the Eastern trade, and analysis of thousands of pieces by Gillian Eastwood, our textile specialist, has revealed numerous Indian resist-dyed textiles. Some imitate Chinese silks; indeed, actual pieces of Chinese silks have been recovered this season.

Much of the interpretation of both the Islamic and Roman port will ultimately derive from the documentary evidence recovered in the excavations. This season produced a number of papyrus documents for the first time as well as hundreds of Arabic letters. Many of these letters appear to be merchants' notes and correspondence, including lists of goods and spices together with the prices paid for them. Found mixed with these were fragments of Quranic texts in red and black ink, apparently utilizing block printing. Another series of fragments appears to be parts of an astronomical text.

The documentary evidence derives special importance from its architectural and artifactual context. The ceramics, for instance, range from imported Indian and Chinese wares (celadons and porcelains) to Yemeni and Syrian wares. The 1982 expedition field-tested an artifactual typology which proved very successful, indicating that the organization of this material is approaching a reliable predictive stage. As the evidence for trade through the port has increased, the importance, for the functional interpretation of commerce in both the Roman and Islamic periods, of the Egyptian artifacts and their excavated context has expanded. Thus, while many further details of Quseir al-Qadim might be explored,



*Greek list of names of workmen (?)*

the materials already excavated form a contextual whole which seems relatively complete and ready for the more arduous task of interpretive discovery.

A sample of the utilization of the data assembled so far is a preliminary interpretation of the Islamic glass from Quseir.[4] Comparison of the Eastern Area glass (excavated in 1980) with that of the Sheikh's house and other areas shows a general duplication of forms and decorative features. However, there is a striking absence of marvered wares, enameled glass

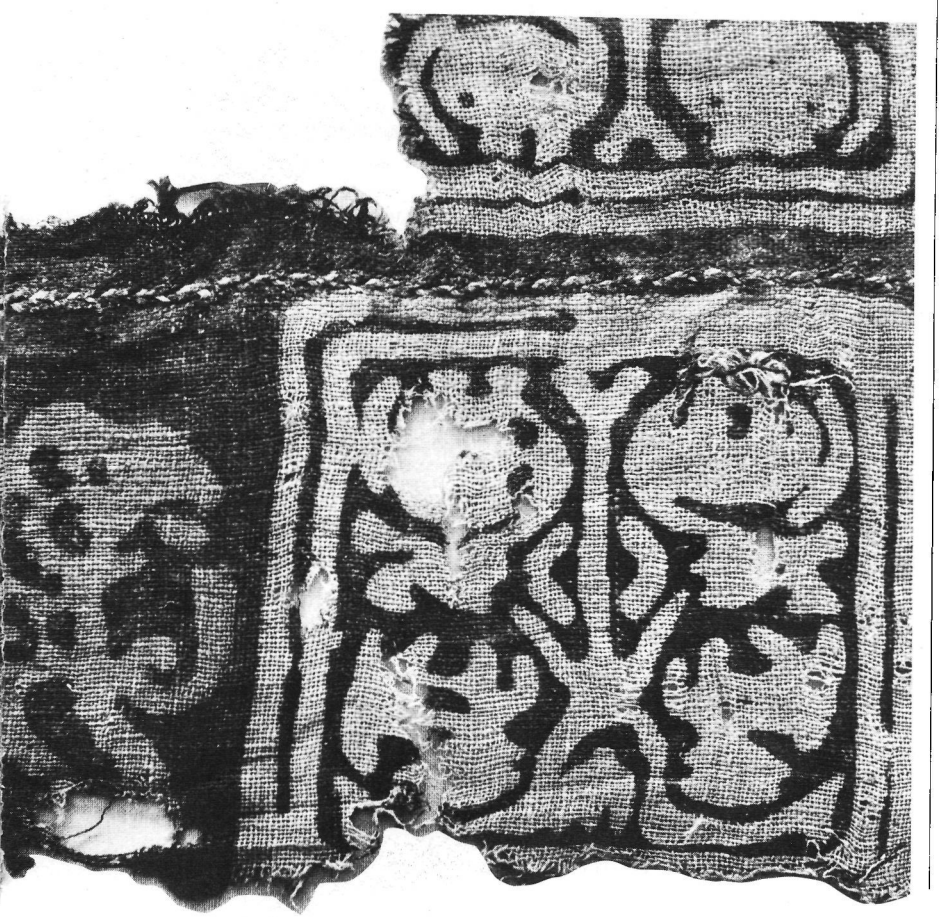
4. D.S. Whitcomb, "Islamic Glass from Quseir al-Qadim, Egypt," *Journal of Glass Studies* (in press).

(with one exception), and bracelets from outside the Eastern Area. While this discrepancy may have been of functional significance, when coupled with other artifacts (especially coins and ceramics) it suggests that the Eastern Area was occupied somewhat later than the remainder of the site. Thus, while the Eastern Area is dated to the 14th century (and perhaps into the early 15th), the remainder of the site dates from the 13th and perhaps early 14th century. Thus, at Quseir al-Qadim, marvered wares and enameled pieces seem datable to 1300–1400, and not earlier. In summary, the Islamic glass from Quseir al-Qadim comprises two overlapping assemblages, one of Ayyubid-Mamluk date and the other from the Bahri Mamluk period. Detailed comparisons with glass from Syria and Palestine (and even Corinth) shows a stylistic unity throughout the eastern Mediterranean. More importantly, the glass from Quseir finds closely parallel assemblages at Aidhab, Aden, and on the East African coast. Perhaps most impressive is the evidence of trade across the Indian Ocean, best illustrated by finds from Pengkalan Bulang, near Penang Island in Malaya. This excavation produced prunted beakers, marvered wares, and vessel forms which exactly duplicate those from Quseir. The excavator recognized the glass as Middle Eastern and dated the collection to the 11th to 14th centuries on the basis of associated Chinese ceramics.[5]

5. A. Lamb, "A Note on Glass Fragments from Pengkalan Bulang, Malaya," *Journal of Glass Studies 7* (1965) 35–40.

Glass is, of course, but one of many articles of commerce testifying to the close interconnection within the medieval Islamic world and between it and its neighbors. By implication such commerce illustrates population mobility, both by desert and sea.

Such interpretations, when combined with further field



*Indian resist-dyed textile, 14th century.*

research on other, related sites, will allow the Quseir al-Qadim excavations to contribute much to our understanding of the history and archaeology of these two historic periods. Ultimately this research project will also contribute toward the modelling of future research problems, including such wide-ranging topics as Indian Ocean trade, for a range of historic periods, from the Pharaonic through to modern times.

# Nippur under Assyrian Domination: 15th Season of Excavation, 1981–82.

*McGuire Gibson*

Nippur, during the seventh century B.C., was controlled by the Assyrians, but was essentially Babylonian in its artifacts and outlook. These were the main conclusions reached after the fifteenth season at the site in southern Iraq.

During the fourteenth season, in the fall of 1976, we had exposed in Area WC some private houses that were rich in glazed pottery and other objects. Lacking any inscribed items to date the houses, we could only estimate from the style of the artifacts that we were dealing with remains from the earlier half of the first millennium, B.C. The location of these houses, at the southernmost corner of the site, implied that the city was surprisingly large at the time. We have a general impression, from the lack of historical information, that the early first millennium was a time of decline in Babylonia. Our evidence seemed to give a different impression.

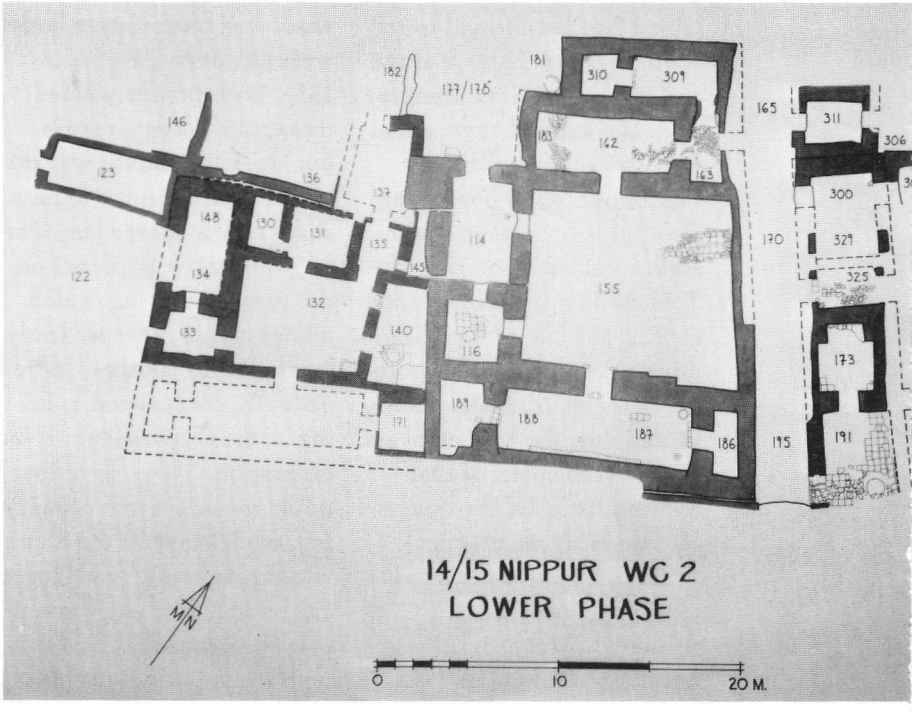
Our return to Nippur, to resume excavation on the houses, was delayed until October, 1981, due to salvage work at Umm al-Hafriyat

east of the city, and the Hamrin Basin Project near Baghdad.

Actual excavation began at the end of November, 1981 and continued to the end of January, 1982. Initially, we planned to expand the area of the houses in WC and to carry out a small investigation on Tablet Hill, a part of the site that has not been touched since the early 1950's. The Tablet Hill operation, a small cut alongside the edge of Trench TA, was intended to check on the stratigraphy of that important area, where a group of tablets had been found to tell of the siege of Nippur at the end of the Assyrian domination. We knew that we could recover pottery related to that in our WC houses, and also put it in sequence with earlier and later material. The Tablet Hill operation was not carried out due to logistical difficulties, mainly the shortage and cost of labor. As it turned out, the WC excavation yielded material that allowed us to fix the houses in time fairly accurately.

The southern corner of the city of Nippur, Area WC, is delimited by a very substantial city wall of Ur III date (c. 2200 B.C.). Lying within this corner, and running over the old wall, are buildings of the Kassite Period (c. 1200 B.C.) and the houses we have referred to as "early first millennium." These houses lie directly under the present mound surface and consist of two levels of construction. About a meter or so down, the lower level was built over earlier constructions as yet undated. Thus far there are exposed two complete houses and parts of two or three others. The house to the west, with a central courtyard (Locus 132), is overshadowed by the larger house with its courtyard (Locus 155). Both houses yielded numerous pottery vessels, but the larger house was the primary location for luxury items such as glazed jars. The larger house is bordered on the east by a street, which allows access not only to the house but to another, more carefully constructed building at the eastern edge of the excavation. There were four doors into the eastern building, while entry to the house was through only one door in Locus 163. The entry room into the house was paved with bricks. It was by this

pavement in Locus 162 that we found a fragmentary tablet with a date in the fourteenth or sixteenth year of the king Shamash-shum-ukin (655 or 653 B.C.). Nearby, was a small clay plaque showing a winged bull, similar in idea to Assyrian bulls, but executed in a more rounded, more delicate manner. From Locus 162, a doorway led to the court. Off this court was a kitchen (Locus 114) and a bath (Locus 116). South of the court was a long room, that we think was a reception




*Plan of buildings in WC, Lower phase.*

room, with small rooms on either end. In these small rooms we found a number of important objects. The threshold of Locus 189, for instance, had buried in it about thirty-five bits of unworked amethyst, apparently either a treasure hoard or a dedication placed there at the building of the house. The plaster on the lower wall of Locus 168 had hidden in it three cylinder seals, of much older date than the house, clearly treasure. One of the seals was a very fine lapis lazuli cylinder of Akkadian date (c. 2300 B.C.).

The building at the eastern edge of the excavation, with its four entry doors, was clearly unusual. A number of doors on a street calls to mind a row of shops or an establishment with a traffic flow very different from that of a house. There are other features that set this building apart from house architecture. Locus 191 was the remnant of a courtyard with a well-laid pavement of baked bricks. In this court was a well that had been later reused as a drain. The court gave access to an oddly shaped room, Locus 173, with a niche on the back wall. The plaster on the walls was especially thick and well applied. At some time in the life of the building, a renovation was carried out and this room was completely filled in with three courses of mud brick laid in mud mortar. Scattered in the mortar we found dozens of objects, including a fragmentary carnelian cylinder with the beginning of an inscription dedicating the object to a god. There were several cylinder seals of various ages, including some of fayence that may be fairly contemporary with the building. There were also a number of copper and iron tools and weapons. Outside, in the courtyard, under one of the baked bricks we found another cylinder seal. We are fairly confident that the small room was a shrine.

There seems to have been a pause in the use of all the buildings in the WC area, if we may judge by an accumulation of sand in the courtyards of the houses. Then, after having knocked down the upper parts of the walls, new houses were constructed on the stubs. Some of the spaces were subdivided, for instance the courtyard of the largest house. The shrine

*Baked clay plaque, winged bull from Locus 162. Actual size c. 7.5 cm. high.*

building underwent some changes as did the street adjacent to it. A well-constructed baked brick drain was laid down the middle of the street to take the water from the courtyards of all the buildings.

The pottery from the upper level of buildings was much the same as that found below, with some differences in types. More glazed wares were found in the upper level than in the lower. The other objects were as interesting or

more interesting than those below. In the debris above the shrine building were found a baked clay plaque of Ishtar stepping on a lion and a baked clay mold for the making of bronze (?) plaques. The mold shows a man wearing a conical helmet and holding a staff. The staff is decorated with six balls and a long tassel. The details and style of the figure seem closest associated with Babylonian kings such as Merodach Baladan, who ruled in the eighth century. The mold may be a relic from this or an earlier Babylonian king, but it might also be a depiction of Shamash-shum-ukin in Babylonian style. This king was an Assyrian, the brother of King Ashurbanipal of Assyria, and had been put on the throne of Babylonia by their father Esarhaddon. Shamash-shum-ukin became the focus for a major revolt against Assyria. After putting down the revolt and eliminating his brother, Ashurbanipal took on the direct rule of Babylonia in 647.

*Baked clay plaque, goddess Ishtar holding bow and arrows, and stepping on a lion's back. Actual size c. 11.5 cm. high.*

At present, we would suggest that the lower level of houses in WC is datable to the reign of Shamash-shum-ukin; the pause marked by sand might reflect the end of his reign; and the reconstruction of the upper phase might be from the reign of Ashurbanipal. A few meters south of the WC houses, we encountered a city wall about five meters wide running along the top of the Ur III city wall. This late city wall is contemporary with the upper level of houses. We have no documentary evidence on the building of this city wall, but I would suggest

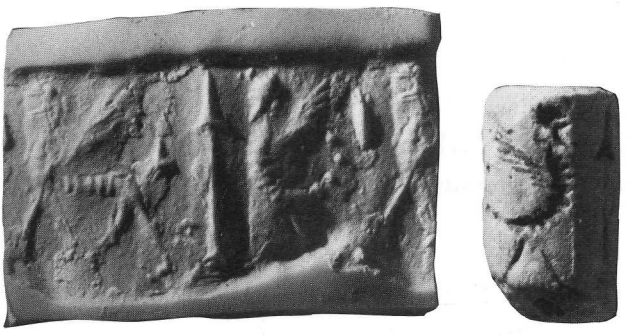
that it was done during the reign of Ashurbanipal, after the revolt, when he carried out major building projects at Nippur such as the refacing of the ziggurat. It was in this time that Nippur became a relatively strong supporter of Assyrian interests in Babylonia and thus was a center of resistance to the Chaldean forces that eventually rose to form the Neo-Babylonian empire. The late city wall may have been part of the defenses during the siege of the city by the Chaldeans. This siege was so intense that people began to sell their children in order to buy food. That particular siege was lifted, but Nippur later joined the Neo-Babylonian camp. The city was never again to stretch as far as it had during the seventh century. Above the ruins of the WC houses there are no Neo-Babylonian remains, only a few stray graves.

The objects from WC show some influence from Assyria, but the style is clearly Babylonian. The fayence cylinder seals will help to fill a gap in knowledge about Babylonian style during the early first millennium. Likewise, the clay plaques add significantly to the group of reliefs that can be called Babylonian from that time. The pottery, especially the glazed items, although related in shape and design elements to Assyrian

*Baked clay mold for making figurines of a king. From debris above building with shrine. Actual size c. 18.5 cm. high.*

pieces, is clearly locally produced. The glazes have already been analyzed and are markedly different in composition from Assyrian examples.

The relationship of Nippur to Babylonia as a whole in the turbulent first millennium and to Assyria in the seventh century is just beginning to be understood by historians. Our archaeological evidence helps to flesh out the picture.



*Frit seal, showing winged lion and scorpian-man. From plaster on wall of Locus 186. Size 2.4 cm. high.*

No account of an archaeological season would be complete without an acknowledgment of the staff who carried out the work and the interested members who supported the research. John Sanders was, as usual, the architect. James A. Armstrong was Assistant Director and chief field supervisor. Peggy May Bruce was photographer and draftsman. John M. Russell was field supervisor and registrar. Janet Russell was assistant registrar. Beverly M. Armstrong was house manager, general assistant, and center of good sense. A great debt is owed to her, Peggy Bruce and Janet Russell, who took on the functions of the cook when he quit and could not be replaced.

We must also acknowledge our debt to Muhammad Yahya, the representative of the Organization of Antiq-

uities, who performed more than normal duties in a time of personal concern. We would also like to express our thanks to Dr. Moayyad Sa'ld, President of the Organization for his permission to do the work, and to Dr. Abd-as-Sittar al-'Azzawi, the Director of the Southern Region, for his interest, enthusiasm, and aid.

Lastly, we should thank the Friends of Nippur for once again donating extra funds to make the work possible. A good part of this funding went to support John Sanders, whose presence on the dig and whose continuing work on plans here in the States makes it possible to publish much more consistently than most expeditions are able to do.

# Turkish Salvage Project

## *Leon Marfoe*

The Turkish Salvage Project now nears the end of its second year and the completion of its first phase. The highlights of our first two seasons have already appeared in the "News and Notes" and need not be repeated here. Instead, I will merely summarize our results, assess our current line of thought, and speculate on where this might lead us.

The project was, of course, never meant to be solely the excavation of a site, but the study of a historical "situation." Viewed within the perspective of contemporary and later historical documents, much of southeastern Turkey seemed to have served as a major thoroughfare or imperial border for a number of neighboring civilizations—Mesopotamia, Anatolia and Syria among them. To what extent could archaeology shed light on this theme?

If our surmises are correct, this portion of the upper Euphrates valley first became a significant link in the network of Near Eastern interconnections shortly after 3500 B.C., although there is plenty of evidence of earlier

interaction. However, prior to this date, Kurban Hoyuk was a small village. The activities of Mesopotamian colonists all along a long stretch of the middle and upper Euphrates River seem to have changed that. In the Late Uruk period, the effects of their wide-ranging efforts, perhaps in search of silver, copper and timber in the eastern Taurus mountains, had a major impact on the site. Shortly afterward, the settlement expanded into a town, possibly as a result of the cross-river traffic. The effects left by this occupation had other results, too. Among them may have been a change in agricultural techniques and herding, which by the turn of the millennium, had transformed the lush vegetation of the riverbanks into the narrow rows of fields seen today on the river terraces.

As the evidence for this intrusion faded in succeeding centuries, so too did the town at Kurban Hoyuk diminish in size and significance. In southeastern Turkey and northern Syria as a whole, a number of regional cultures emerged. A major reorientation did not occur again until about 2500 B.C. The reasons for this are obscure, but it coincides with the transformation of northern Syria and southeastern Turkey into a heavily populated region of large urban centers—an achievement that was not to be reached again until the Roman annexation. Some of these cities have been excavated, and their remains show strong affinities with Early Dynastic and Akkadian Mesopotamia. Vessels of Anatolian origin are also to be found, while there appear lapis from Afghanistan and copper, silver and gold from possibly diverse sources. It is evident from these remains and from both Mesopotamian and Syrian texts that a far-reaching web of communications now interwove the entire ancient Near East.

This web included the upper Euphrates drainage, an area directly and indirectly referred to in texts of a later date. At Kurban Hoyuk, a small town was built, the plan of which is still only partially excavated. A number of domestic dwellings, a series of narrow, cobble-paved streets, clusters of courtyards with work areas, and some well con-

structed mud brick buildings with at least one well-built fortification wall appear, along with quantities of seeds in storage pits, ceramic "wasters" and evidence of sheep herding. Numerous neighboring sites of varying sizes were occupied in this period, and a number of cemeteries, with tombs containing the characteristic pottery and copper implements of the period have been found by other expeditions. At least some of the pottery was locally made—kilns, with vast quantities of "wasters," for instance, have been excavated at the nearby German project on Lidar Hoyuk.

What were the reasons for this apparent florescence? At present, we think that the Karababa basin was the beneficiary of the major trade routes that traversed the northern steppe from Assyria to the bay of Iskenderun. A number of feeders undoubtedly led into and through the mountains, where timber, copper, silver, resins and wine were to be found. This traffic was probably aided by the domestication of the ass some centuries earlier, and pack caravans—so well documented in the Old Assyrian trade around 1900 B.C.—may have been the principal form of transportation. On coming to the river, however, it would have been necessary to obtain facilities and permission to cross, find temporary accommodations, whether for individuals or groups. These conditions, perhaps magnified by local traffic between pastoralists on the plains and settlers in the mountains, may have provided the setting in which local towns grew. Our current work—ably conducted by Tony Wilkinson—suggests that although there was necessarily a local agricultural base for each town, small villages that might have served as rural suppliers are few and far between. Compared to towns of the same proportions in Bronze Age times, the availability of land was somewhat limited. If we make a brief calculation of the sort of local income that might be gained from traffic like the Old Assyrian caravans, even a small percentage of the enroute expenses of these caravans would have made up a significant part of the local economy.

But neither income nor

size are what makes a town a town. A town, after all, is also an organization in which various institutions, facilities, groups—whether administrative, manufacturing or whatever—serve to handle specific functions. How could this have happened? Let us enter into some more speculation. In order to get to a river crossing, and even at the river itself, any caravan would have had a number of choices as to which towns it would pass through. There seem to be few advantages favoring a particular town or route or crossing, so that a degree of chance, momentary friendships or advantages would have been the deciding factor. For the towns, however, the matter of passage was not a minor concern. To be bypassed consistently may have resulted in a serious situation, especially if the rather unreliable harvest was poor that year. How then to cope with the situation? Quite possibly, by trying to make arrangements in advance with neighbors to oversee the safety and passage of a specific route, and by trying to block other neighbors out of this route. These alliances, of course, failed from time to time—they may even have depended on blood ties or contracts—and new neighbors became allied and new routes were arranged. This continual insecurity—the making of temporary alliances with neighbors, the crises from a change in traffic, a shortfall in harvest—all required various degrees of organization and facilities that may have started quite informally. But since a fluctuating economy attempts to maintain stability by being cautious and providing safeguards for times of crisis, a continuation of these insecure conditions may have led to more formal institutions, offices, facilities and personnel that would fulfill these tasks on a permanent basis.

So much for sheer imagination. Is there any way of substantiating this, apart from accidental archaeological discoveries? First of all, detailed study of the excavation results—town layout, for example—can give us an idea of whether Kurban Hoyuk was indeed this sort of town. Is there evidence for strangers, for example? We know that the kings of Akkad claimed to have conquered

regions this far north, and we have recovered an inscribed stone weight that bears the name of an official under their last king, Šu-turul. How did such an inscription get into our area when it is thought that the empire was crumbling by this time? We know that the enigmatic Hurrians were also in this area at this time. Can their presence be detected, and how might they have contributed to a situation like that described above? Second, study of the remains and the surrounding area could tell us what the local economy could or could not produce, and how far the hinterland extended. Was it self-sufficient, was there much local traffic? Finally, survey can trace the settlements in the area, the organization of their territories, and the routes connecting them. There are a number of techniques that we would like to try out in this approach. One is the use of satellite imagery that might help us in the survey. If we can get enough information from survey, then a second analytic technique is simulation. Simulation by computer is frequently used to predict how an operation—a queue at a teller window in a bank for example—would work under different conditions (time of day, number of people in line, etc.). As such, it may be useful to see how settlements might expand or contract in response to elements of chance—a change in traffic or a shortfall in harvest or a combination of both—over a period of time. We don't know where all this might lead us, but if our work proceeds as planned, we'll have a chance to find out, and at the same time, help to rescue the cultural history of a site and an important area and time in history.

# Chogha Mish

*Helene J. Kantor*

This year there has again been no possibility for a season in the field, but in Chicago work has proceeded systematically with the untiring and invaluable assistance of Carolyn Livingood, Guillermo Algaze, and Abbas Alizadeh. For some time the large report on the first five seasons of excavation at Chogha Mish (OIP 101) has hovered, like Penelope's web, on the brink of completion. The documentation of the great amount of material has been a time-consuming process, but the end now seems to be approaching.

In addition to objects, much non-artifactual evidence was found at Chogha Mish. Approximately 40,000 animal bones and teeth have been identified in detail by Dr. Jane Wheeler, who has sent her coding cards and sheets to Chicago for computer processing, a project which is being generously supported by Professor R. McC. Adams. The transfer of the records into the computer and the organization of master print-outs of the data and of analytic tables have required much time and many consultations with Mr. James Lichtenstein of the Computer Center of the University. The animal bones were found in prehistoric Susiana, Protoliterate, and Achaemenid Persian contexts and thus provide evidence for the changing economy of the region during thousands of years. Bones belonging to the earlier phases of the Archaic Susiana period are of particular interest because of their pertinence to the problems of the domestication of animals. It is hoped that a report on the faunal materials, based on the computer analysis and prepared in collaboration with Dr. Wheeler, will be finished by the end of the summer. Meanwhile, the programming of this large body of specific data has aroused such interest in the Computer Center that an article on the project appeared in its June Bulletin.

Though the preparation of data for publication at times

constitutes a rather tedious side of archaeological research, once done, the significance of the results becomes apparent. For example, comparisons between individual pottery vessels provide not just interesting facts concerning utensils of everyday life, but significant indications of events which in the protohistoric period must still be traced primarily by archaeological evidence. The tables of parallels for pottery found in the Protoliterate levels at Chogha Mish show that around 3400 B.C. exactly

*Figure 1*
*Two-handled jar Ch.M. IV-142a being drawn by Mr. Abbas Alizadeh. Photograph by Miss Diana Olson.*

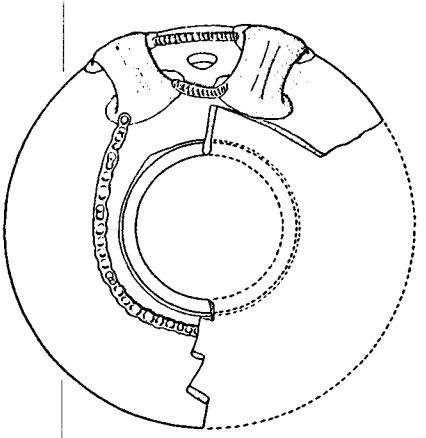
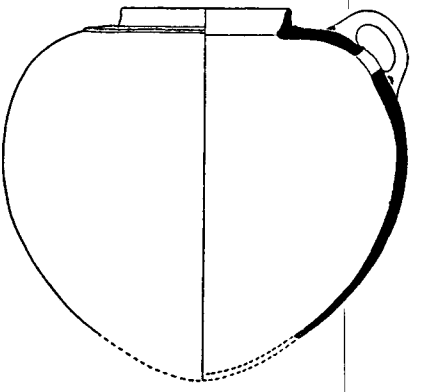


*Figure 2*
*Two-handled jar Ch.M. IV-142a from Chogha Mish. Drawing by Mr. Abbas Alizadeh.*



the same assemblage of vessels occurs at nearby Susa and at such southern Mesopotamian sites as Warka and Nippur. The cultural diversity shown by the late prehistoric pottery of southern Mesopotamia and the Susiana area (the central part of the modern province of Khuzistan) has been replaced by a single ceramic tradition specific for a stratified society in which writing was developing. Particularly remarkable is the appearance of exactly the same ceramic repertory at both Chogha Mish and sites such as Habuba Kabira-South over 600 miles to the west on the Euphrates in Syria. Also significant are the comparable vessels appearing on the Iranian plateau and in Fars, where Malyan provides a parallel for a Chogha Mish four-lugged jar of unusual type. Thus, the distribution of pottery shows that in the earliest period of Mesopotamian urban civilization the cities of the core area at the head of the Persian Gulf were already sufficiently powerful and dynamic to establish colonies and outposts in distant areas. The extent of the diffusion of Protoliterate influence from such outposts, on one side into southern Anatolia and western Syria and on the other into the eastern marches of Iran and beyond, was undreamed of only a few

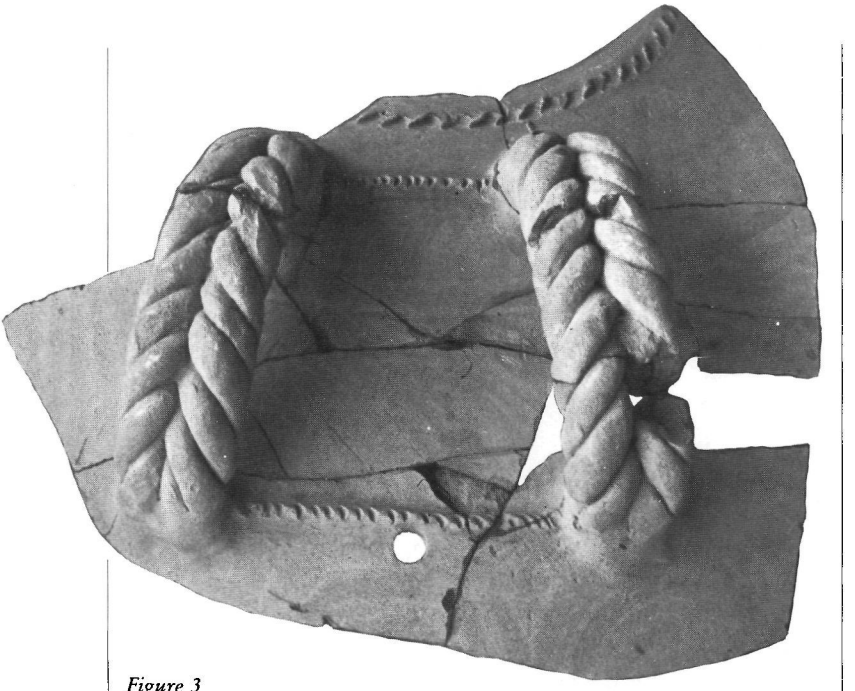


*Figure 3*
*Sherd of large two-handled jar Ag. 36: 565 from the Shara Temple at Tell Agrab. Late Early Dynastic I. Cf. P. P. Delougaz, Pottery from the Diyala Region* (*OIP LXIII*), Pl. 51 *b.*

years ago. Moreover, the recognition of the tremendous expansion of Mesopotamian civilization in its earliest phase makes its dominant role later easier to understand. For over two millennia the diverse peoples of western Asia were to be profoundly influenced by the traditions of Mesopotamia.

The search for parallels for pottery from Chogha Mish sometimes produces surprises, as in the case of a vessel recently mended by Mrs. Theodore D. Tieken. The accompanying figures show the difficulties of recording accurately an outsize vessel and

the resulting drawing (Figs. 1, 2). The absence of Protoliterate parallels either at Chogha Mish itself or elsewhere would leave the jar as a unique, aberrant specimen were it not for fragmentary vessels excavated in the thirties by the Oriental Institute's Iraq Expedition. Although several centuries later than the Chogha Mish example, the sherd illustrated has the same specialized features: a perforation and a pair of large handles linked by clay ridges (Fig. 3). Taken together the vessels establish

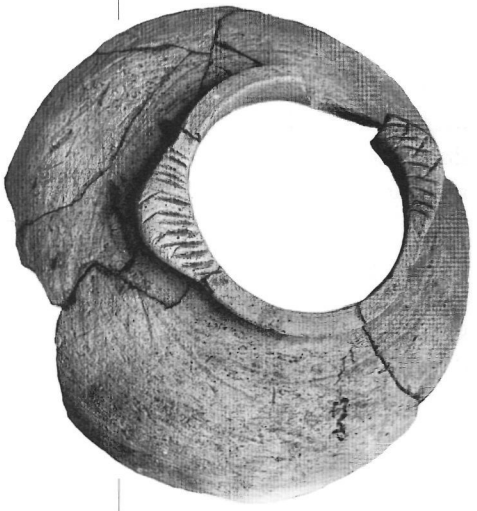


*Figure 4*
*Notched-ledge jar Ch.M. 4.013 from Chogha Mish. Protoliterate.*

*Figure 5*
*Notched-ledge sherd Kh. III 505 from area of robber pits at Khafajah. Early Dynastic I.*

the existence of a specific type that spanned the Protoliterate and Early Dynastic periods. Other examples of the numerous affinities between the pottery of these two periods are provided by the Chogha Mish jars with two notched ledges at the mouth, and the analogous notched ledges of Early Dynastic I pottery from the Diyala region (Figs. 4, 5). In fact, the Diyala pottery of the late fourth and early third millennia B.C. continues the ceramic tradition whose early Protoliterate phase we have come to know so well at Chogha Mish.

On a practical level pottery testifies to the coherence of the Mesopotamian tradition, which can also be traced in more elaborate manifesta-

tions such as the antecedents for later Mesopotamian art to be found in cylinder seal designs from Chogha Mish. The evidence recently excavated there is providing new pertinence for old discoveries and exemplifying how the results of many decades of Oriental Institute excavations combine to reconstruct cultural development in the formative periods of Mesopotamian civilization.

# The Istanbul-Chicago Universities' Joint Prehistoric Project

*Linda S. Braidwood and Robert J. Braidwood*

We suppose that almost everybody must think that archaeological excavation is a fascinating matter, perhaps especially so if the yield pertains to the early stages of one's own cultural tradition. Getting ancient things out of the ground is one thing; interpreting their meanings is another.

Take the example of Çayönü, our early village site at the very threshold of the then new food-producing way of life, some 10,000 years ago. The site lies in the Tigris river hill country of southeastern Turkey. Its original inhabitants had domesticated wheat and certain pulses, such as peas and lentils and also the dog. Wild plants and nuts were also collected, but the only source of animal protein came from hunting until almost the end of the site's duration. Only then did domestic sheep and goats become part of the subsistence economy. In all, the village's succession of rebuildings probably went on over a period of no more than four or five hundred years.

Çayönü's artifacts of daily

use were fairly simple. Çayönü's building foundations of cobblestones, however—while not impressive at first glance—say something very important about the rapidity of cultural change that attended the birth of the village-farming community way of life. In fact, the excavation of these architectural remains keeps a team of seven German architectural historians and geodetic surveyors busy, fascinated, and happy (and these are architects who have also worked at such spectacular later sites as Tiryns, Mycenae, and Boghazköy!). Actually the whole Çayönü field staff is deeply involved in attempting to figure out just what the site's architectural remains are telling us.

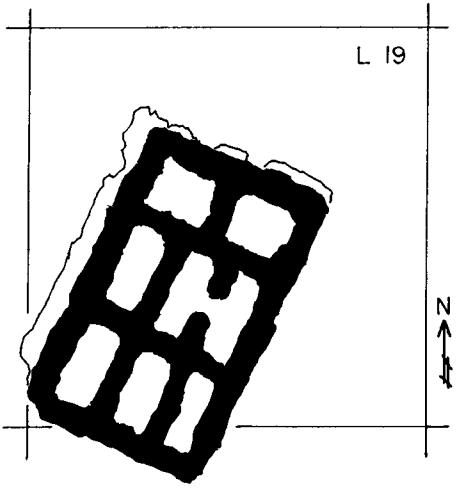
The present contours of the low Çayönü mound suggest an original settlement of about the area of five football grids combined. In eight short seasons of excavation, we have exposed about one tenth of this area in the upper and middle levels of the mound. Our present guess is that the original village may have included about thirty households. Again, at a guess, with about seven persons per household, this would give about two hundred inhabitants.

The Sears catalogue of the site's inventory shows very little change from bottom to top. There are many implements of chipped stone and ground stone, some finer decorative stone objects, bone tools, a scattering of cold-hammered pins and hooks of native copper, some simple clay figurines and objects, but no pottery vessels. Archaeologically, what impresses one overwhelmingly at Çayönü is its building foundation remains.

There is quite a variety of building remains, including at least one plan type of either sacred or secular purpose. We want to concentrate here, however, on what *should* be the most straightforward examples for interpretation. These are two types of foundation plans, quite evidently for house structures. A glance at our illustrations will make clear why we call one plan type the "cell" plan and the other the "grill" plan. Their interpretation *ought* to be simple.

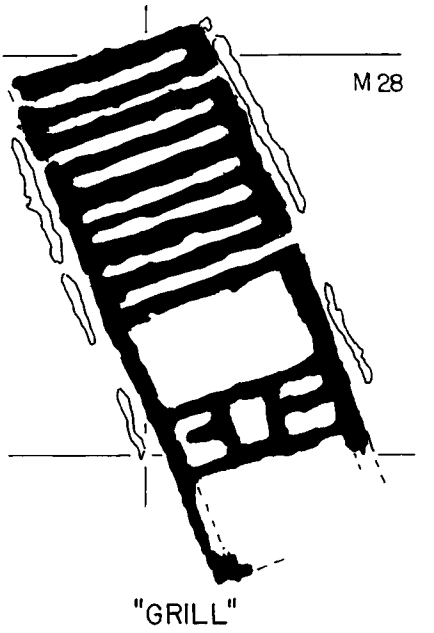
The cobblestone foundation remains of the "cell" plan type are later than those

of the "grill" plan type. "Cells" clearly overbed "grills" in several places, but the time difference between the two types need not have been great. There is a remarkable uniformity in the different examples of the "cell" plan, and the same is true for the "grill" remains. Each of these plan types tends to have its own characteristic orientation. The overall size of the average "cell" plan is about 18 by 24 feet and the size of an individual cell within it is about 4 by 7 feet, or less. The overall size




"CELL"

*The foundations of a "cell" plan house*




"GRILL"

*The foundations of a "grill" plan house*

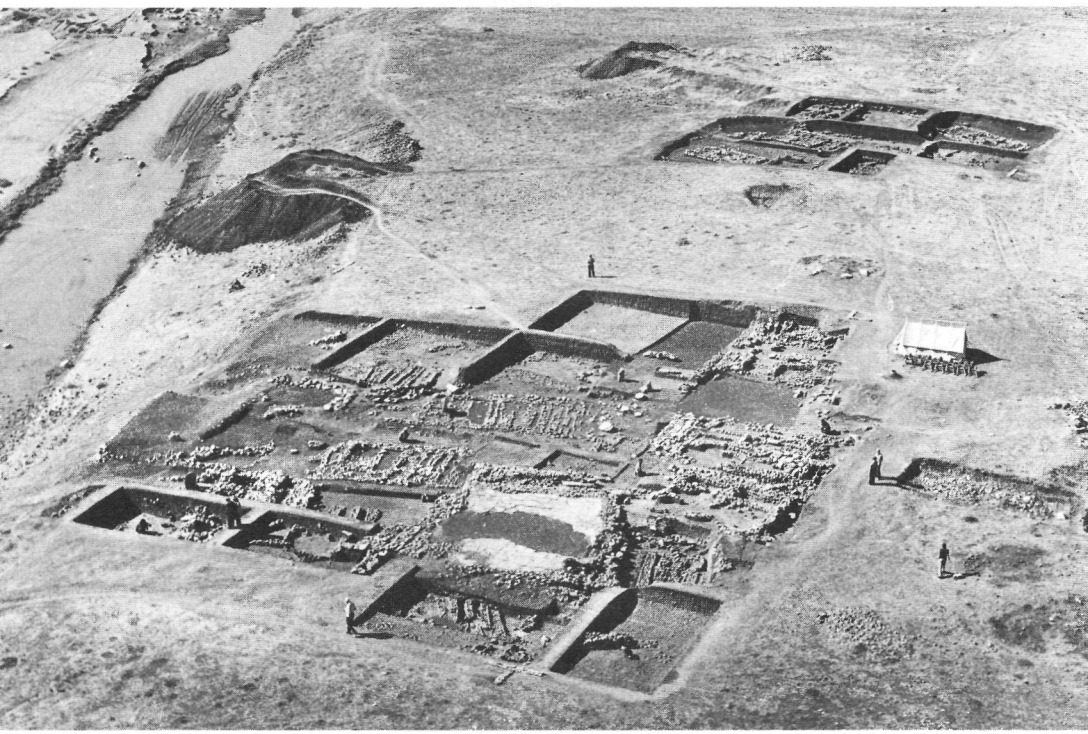
*A view from the photo tower, over a portion of a "cell" plan (foreground) with an earlier "grill" plan (background) and the stream (çay) beyond.*

of the "grill" plan is about 17 by 40 feet.

So far, we have exposed at least ten examples of "cell" plan foundations. Most of these had traces of a second (or even a third) rebuilding: this means that we already have more than twenty examples to deal with. Of the "grill" plan, at least eight more or less complete examples have appeared; most of these also had traces of several (in two cases, as many as five) rebuildings. We assume, for both plan types, that the cobblestone foundations rose

well above their respective ground lines, and that the upper walls of the buildings were of sun-dried mud brick (adobe). Clear traces of mud bricks have been found on top of some of the "cell" foundation cobblestones, but none have yet been found on the "grill" remains. We also think (see below) that the actual living floors were of wood, brush, and mud, framed *above* the cobblestone foundations.

Why should we feel that



*An air view of our main exposure at Çayönü at the end of the 1981 season.*

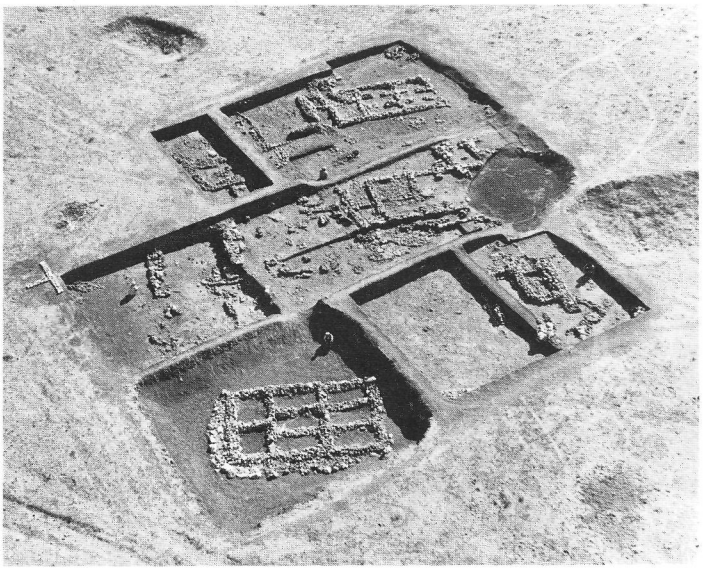
the "cell" and "grill" remains were foundations for structures of domestic purpose? First, we take their very frequency and spacing within the original Çayönü village (that is, as we know it through our present exposures) to suggest that these were actually house plans. Second, we are impressed with the quantity and types of the artifacts recovered, especially with the "objects of daily use" found within and adjacent to the "cell" foundations.

There are considerable problems in the matter, however. For example, neither the "cells" (save in one case) nor the "grills" have exterior door openings at what was evidently ground level. Further, the voids in the "grill" plan remain a problem. The approximately twelve to fifteen inch voids, between the grill-lines in the "grill" plan type suggest that these cobblestone lines probably served simply as joists to support a built floor. Thus the voids (open at the ends in a few cases) could have served to aerate the actual living floors.

But, why aerate the floors, if that is what the voids were really meant to do? We, ourselves, know very well how cold and damp the ground can be in southeastern Turkey in the winter, and we've been told that peasants, to the northeast in the Elburz mountains, still build this way to get their living floors up off the cold damp ground. On the other hand Professor Schirmer, the head of the Karlsruhe architectural team, at present tends to favor the idea that the aeration was necessary for proper grain storage. Our Russian colleagues, digging on a site of about the same time range in northern Iraq, encountered instances of such grills and assure us that their Arab workmen also insisted they were for drying sheaves of grain. (Our own previous site of Jarmo also had a trace of grill-like lines of mud.)

As to the "cell" plan type, the individual cells in a "cell" plan are really far too small to have been proper rooms. Should we then assume that someone who was long used to the older "grill" type of construction, decided to open up the sub-floor voids to the size of cells and take advantage of at least some of them as storage bins?

*An air view of our western exposure at Çayönü at the end of the 1981 season.*



If it weren't for the fact that the general artifactual inventory shows no essential change, we would probably have thought—in the case of the "cell" plan type—that a new group of people, with a different habit of building, took over.

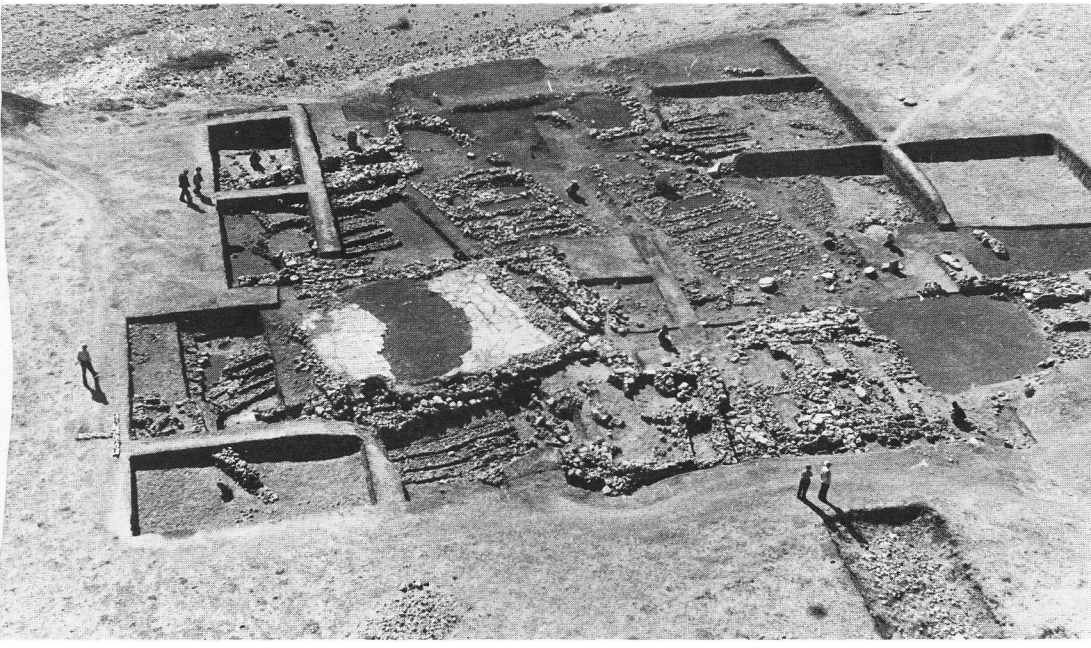
There seems no end to the possible questions. Where are the hearths and oven remains one usually finds in houses of about this time? Were they up on the built living floors we assume were once there? How did the Çayönü people actually store their threshed grain? Why do we occasionally encounter human burials within one or another of the cells of the "cell" plan, or within one of the small cell-like spaces on the southern end of the "grill" plan? Why were coarse lines of cobbles added, bench-like, along some of the outer walls of both "cell" and "grill" foundations? And, if you wanted to rebuild, why do it almost exactly on the same place

without bothering to simply reuse the old foundations? And was space itself becoming a problem, as regards the overall village plan? We ought to learn about that too.

We suppose that our message here is mainly to say that for all the apparent standardization and sophistication of these two common plan types, their detailed interpretation is not easy. This is one of a number of reasons that makes us believe that more excavation at Çayönü is still necessary. We feel that the two plan types *ought* to be simply earlier and later house types, but describing just what went on within each type and proving the case, is not easy.

And why the change from one type to another in so relatively short a time? It must mean something about the pace of change as village-farming community life first developed, but just what?

Any ideas?



*An air view of the remains of the terrazzo-floored building, overbedding the earlier remains of two "grill" plans.*

# Geoarchaeology

## *Karl W. Butzer*

Karl W. Butzer has recently described the nature of cultural and mineral sediment accumulation in settlement mounds, in his volume *Archaeology as Human Ecology*. Such materials include organic-cultural refuse, collapse rubbles of mud brick and the like, as well as water and wind-laid beds. The rate and type of build up differs on living floors, in streets and alleys, or in and around community structures, such as civic buildings, walls, terraces and drainage systems. Furthermore, during times of demographic expansion, construction in a village mound outweighs decay, so that garbage, or collapse rubbles due to accident or selective razing, show little net accumulation because they are cleared away and dumped elsewhere. But during times of progressive demographic decline or catastrophic destruction by natural or human disasters, garbage and collapse rubbles build up and are then affected by running water, by biogenic agents, and by wind. In other words, mound sediments can be used not only to identify the horizontal distribution of activity areas but also the vertical record of demographic processes.

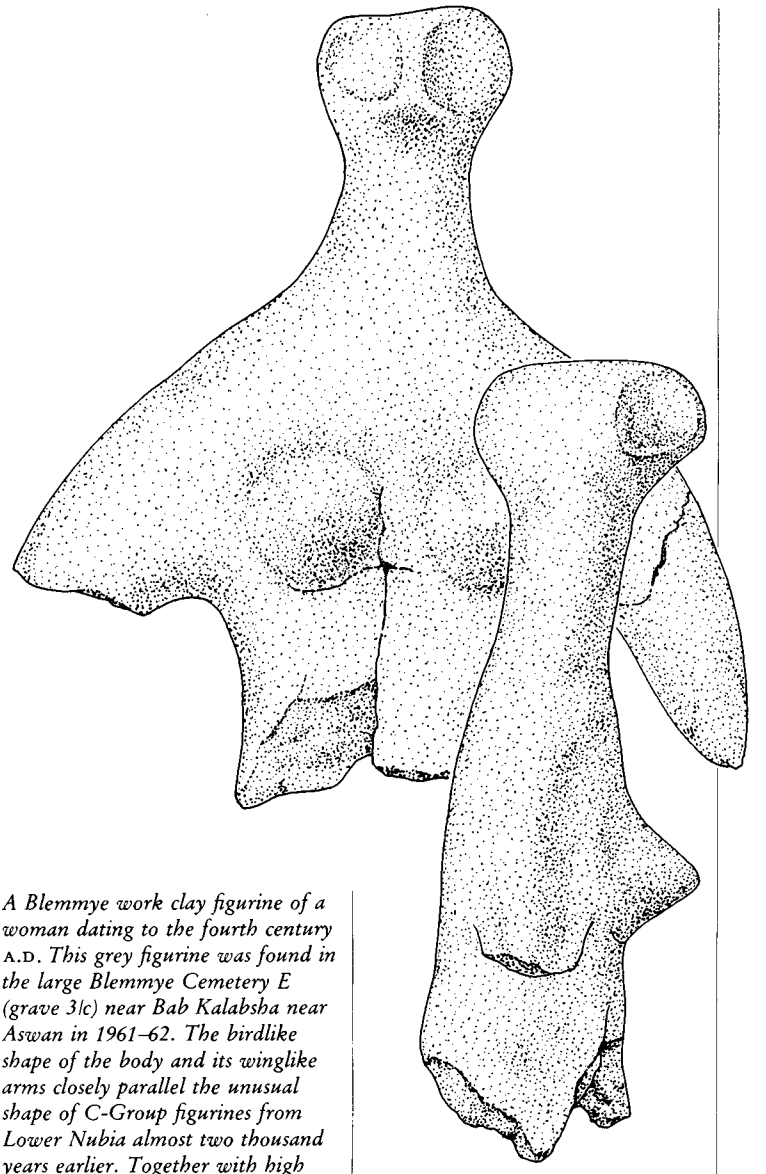
Once abandoned, a mound is slowly lowered by compaction and weathering, as well as by erosion through gravity movements, surface water, and wind; such sites are frequently also used as quarries for rock, mud, pottery temper, and fertilizing compounds; finally, shifting streams may also undermine and erode a mound. As the topographic form is gradually flattened, potsherds move downslope and initially concentrate around the lower periphery of a mound, where trampling reduces them in size; eventually the sherd debris is increasingly buried within waterlaid sediments or turned down into the soil by plowing. Such insights can significantly aid in archaeological surface surveys, in selecting those parts of a mound best suited for informative test excavations, and in interpreting the long-term settlement history recorded within a mound.

# Nubian Publication Project

*Bruce Williams*

One of the major problems and opportunities facing the Nubian Publication Project has been that of relating the materials found during Prof. Keith Seele's salvage operations in the 1960s to those previously known. How will the data now being prepared for publication affect what has been believed about the peoples who occupied ancient Nubia and their relations with those in other regions? As before, the project has been dealing with two of the most important aspects of archaeology in Nubia. The first of these is its episodic nature. Long temporal gaps separate major known phases of occupation in each major region. Secondly, in some of the periods, two or more identifiable archaeological groups or cultures are known to have co-existed in the area simultaneously, although at other times cultural differences are not so easily detectable. In these two regards, the archaeological materials of Lower Nubia are not well understood—in the sense that we understand such relatively unified archaeologies as those of Egypt. There, large cultural groups occupied much the same territories for millennia without major interruption and left us intimately interlocked bodies of characteristic documents and artifacts which we can recognize as signatures of their culture.

Because of the distinctive nature of many goods from Nubia, assigning most contexts to one or the other of the major phases is not especially difficult. Distinguishing one tradition from another within some phases, and discerning subphases that would clarify relations among the various traditions are, on the other hand, much more complex tasks. Fortunately, a technique for distinguishing chronological phases and cultural traditions, based on changes in distinctive traits in cemeteries, has been introduced in a study of the C-Group, Pan Grave and Kerma cultures (between about 2250 and 1550 B.C.). Some of the distinctions noted in that study can be extended well into the New



*A Blemmye work clay figurine of a woman dating to the fourth century* A.D. *This grey figurine was found in the large Blemmye Cemetery E (grave 31c) near Bab Kalabsha near Aswan in 1961–62. The birdlike shape of the body and its winglike arms closely parallel the unusual shape of C-Group figurines from Lower Nubia almost two thousand years earlier. Together with high stone circles erected around major Blemmye tombs in the area, this figurine is one of the major links between these two widely spaced periods and it helps to form a major thread of continuity in the archaeology of Nubia. Though mentioned in the report, this figure has never been published. (Drawings by Kathryn Cruz-Uribe)*

Kingdom. For later phases, however, we are hampered by the episodic nature of archaeological chronology in Nubia.

Apparent hiatuses have been partly due to sharp fluctuations in the ancient population, reflecting Nubia's difficult environment and sometimes tumultuous history. However, they are also due to our strong dependence on burial goods for the archaeology of the area. Phases during which large numbers of easily identified goods were deposited are easily detected, but those in which few or undistinguished goods accompanied the dead could even be missed altogether. For example, most burials of the later New Kingdom have far fewer objects and pottery vessels than were deposited with their counterparts of the early Eighteenth Dynasty, and few sites in Lower Nubia have been assigned dates in this period. However, based partly on evidence excavated by the Oriental Institute Nubian Expedition, enough sites can be assigned to this age to close part of the long gap. A second, perhaps even more meaningful, occupation has emerged to fill part of an empty period, again thanks to evidence found among materials excavated by the Oriental Institute at Qustul. This occupation took place during the great Twenty-fifth Dynasty, when Kushite pharaohs ruled both Nubia and Egypt, and the early Napatan period just afterward (ca. 730 to 600 B.C.). Despite the importance of the period, little if any evidence of settlement had been recognized from Lower Nubia. With our data, it now has been possible to identify other coeval remains among those excavated some time ago. It now seems clear that there was a fairly substantial occupation at the time near the Second Cataract. Thus evidence derived from the Oriental Institute Nubian Expedition's rescue effort has helped in the last year to reduce a long chronological gap in the settlement of Lower Nubia.

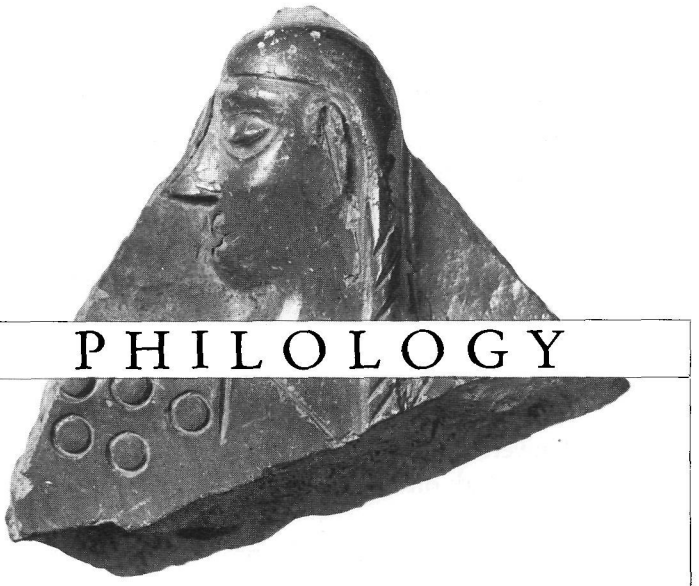
Lower Nubia was resettled under the control of the Meroitic empire about 100 A.D., and it became the most prosperous part of the kingdom. About 350 A.D., the Meroitic province was taken over by peoples from the des-

erts who radically changed the material culture and defended paganism in Upper Egypt until their conversion to Christianity in the sixth century. Reflecting continued doubt about the origins and unity of the culture, this period is still usually referred to as X-Group.

With the help of a two-year grant from the National Endowment for the Humanities awarded this spring, the Nubian Publication Project has begun intensive work on remains of these later periods from Ballana, Qustul and Adindan, the largest bodies of material excavated by the Oriental Institute in Nubia. Since Ballana and Qustul were the sites of the major royal cemeteries of X-Group times, the large concentrations of Meroitic and X-Group remains there offer special opportunities for a detailed study of the relations between these phases.

Despite the large amount of material known from both periods, major archaeological and historical questions remain to be answered. First is the question of whether the Meroitic inhabitants of Lower Nubia were primarily from the Meroitic heartland, or whether they belonged originally to some other group and came under Meroitic influence after settling in the valley. Second, we need to know whether the change between Meroitic and X-Group cultural assemblages is relatively sudden or gradual; if the latter, it could help reinforce the belief that the X-Group did not involve a major replacement of population. Finally, it is still unclear whether different cultural traditions can be identified in the Meroitic and X-Group, or whether instead the material culture was unified in both.

For the end product of this phase of the Oriental Institute Nubian Expedition's publications, we are hoping to distinguish the different peoples active in late antique Nubia and to link the cultures and traditions of the various phases into coherent sequences. It is hoped that these sequences will help us better understand the development of the traditions, and allow scholars to probe the links between Egypt and the Mediterranean world and peoples to the south in a more meaningful and precise manner.



# PHILOLOGY

## Ancient Society and Economy

*I. J. Gelb*

Work in the course of the academic year 1981–82 was concentrated almost entirely on a most urgent task in the field of the social and economic history of ancient times, the preparation for publication of the two-volume manuscript of *The Earliest Systems of Land Tenure in the Near East (Ancient Kudurrus)*. Volume I, Sources, is primarily devoted to transliterations and annotated translations of ancient kudurrus. These are stone documents that date from the beginning of writing in Mesopotamia to the Sargonic period and deal with the transfer (purchase) of family-owned real estate. The volume also will contain photographs and hand copies of ancient kudurrus, together with synoptic charts that show the structure of ancient kudurrus, and sale contracts on clay.

The work of editing the manuscript and plates was done with the part-time as-

sistance of Maureen Gallery, one-time assistant professor of Assyriology and associate on the Assyrian Dictionary Project. We have not quite completed final correcting and editing of the manuscript at this writing, but probably will have done so by the time the *Annual Report* appears. In the meantime, Peter Steinkeller, now on the faculty of Harvard University, and I are continuing to work on the smaller second volume, which should be completed before the end of 1982.

*The Earliest Systems of Land Tenure* has been abrewing for more than ten years. I hope and believe the work will be of fundamental importance for the correct understanding of the systems of land tenure that existed at the dawn of written history. It testifies to the existence of private-familial (not private-individual) ownership of land and thus furnishes the strongest possible evidence against the commonly held theories of the so-called "temple economy" and "state economy," according to which all land was owned either by the temples or the state.

Originally, the work on the project was financed by the National Endowment for the Humanities. At the present time, the project is partially supported by an anonymous benefactor, whose help is gratefully acknowledged.

# Assyrian Dictionary Project

*Erica Reiner*

The major focus of the Assyrian Dictionary Project the past year has been the writing of the manuscripts for what will be the largest volume of the dictionary, Š. Continued support from the National Endowment for the Humanities enabled us to make substantial progress in the preparation of the basic manuscripts for this volume. An estimated two-thirds of the projected total has been

written and over a third edited.

The printing of the Q volume is now complete and it is scheduled to appear in the summer of 1982. Galley proofs for about a third of the Š volume were received from the printer during the past year and were proofread and critically revised by the staff and outside readers. The editing of the R volume by Professor Hans Hirsch continued in Vienna.

Apart from a core staff, partly on the faculty of the Oriental Institute, as Professors Martha T. Roth and Matthew W. Stolper, and partly research associates engaged full time on the project, Drs. Francesca Rochberg-Halton and Jeremy A. Black, we were happy to welcome back on the CAD project such former collaborators as Professor Hermann Hunger of the University of Vienna and Professor Burkhart Kienast of the University of Freiburg who each joined us for a period of four months. Professor Dietz O. Edzard, who was a visiting scholar in 1979–1980, was able to join us for another two months in the fall of 1981, and Professor Simo Parpola, a former faculty member of the Oriental Institute in 1977–1979 who was not at that time affiliated with the Dictionary, returned to Chicago this time solely to contribute to the CAD project. The presence of such distinguished scholars helps to ensure the quality of the Dictionary as well as increasing its output.

# The Demotic Dictionary Project

*Janet H. Johnson*

"There is nothing new under the sun." With this adage in mind we are not surprised to see many of the day to day concerns of modern man reflected in the personal papers of ancient Egyptians. The staff of the Demotic Dictio-

nary Project has spent most of the last year working on just such "minor" documents.

Both "death and taxes" play important roles in the documentation preserved from Egypt in the Late Period (mid-first millennium B.C. to mid-first millennium of our era). Demotic ostraca include receipts for payment of harvest taxes, dyke taxes, bath taxes, poll taxes, crown taxes, beer taxes, wine taxes, salt taxes, oil taxes, palm-tree taxes, pigeon taxes, onion taxes, and taxes on various occupations (including those of singer, barber, weaver, and an induction tax to become a priest). There were what appear to have been property taxes, taxes on the transfer/sale of property, estate taxes, and even a burial tax.[1] Such receipts are usually quite simple: "Regnal year 26, first month of summer, day 26. Pabek, the son of Pa'at, the son of Sus, paid the poll tax of 2 staters." (O. Berlin 5646) But by studying large numbers of these, especially when their provenience is known, one can derive important information on a range of economic and social topics. For example, the amount of poll tax paid in the Roman period by residents in different parts of the country (higher in the Fayum, lower in Upper Egypt) may reflect differences in fertility of the land, but the reduced rates for citizens of the nome capitals and exceptions for Roman citizens, some bureaucrats and priests, and other favored members of society reflect differences in status within the country.

"Mummy labels" are another category of small, repetitive texts which, although often ignored, can provide valuable social and religious information when studied as a corpus. These small tags give the name, often the patronymic and place of birth, and sometimes the age, date of death, or occupation of the deceased, usually in the form of a small prayer on behalf of the *ba* (soul) of the deceased. "Her soul will serve Osiris-Sokar, the great god, lord of Abydos: Senapollonia, the daughter of Apollonios, whose mother is Senhormehef, she being a woman from the village of Bupahe."

1. G. Mattha, in his publication of *Demotic Ostraca* (1945), identified over 80 categories of taxes.

(M. Strasbourg Ho 146 [=Forrer 108])[2] Such tags might also include shipping or burial instructions. "To Tutu, the son of Imhotep, the Overseer of the Mystery: 'Perform burial for Senmenkh, the daughter of Prepito, in year 37, first month of inundation season, day 9, in conformity with this letter!' Pamont, the son of Pamenh the younger, the priest who enters [into the temple or, here, perhaps, the embalming place], of the second phyle, wrote (this)." (M. Wangstedt 3) As with the tax receipts, none of these texts is individually very interesting, but the study of large numbers of them can provide religious and sociological data otherwise unattainable, such as the average age at death, age at marriage, and establishment of genealogical files. From the latter can come studies of inheritance of office, approximate social class of different occupations, and relative status of marriage partners.

2. On the back of this label is the deceased woman's name and patronymic written in Greek. Many mummy labels are bilingual in this fashion; there are also many written entirely in Greek.

Death and taxes may have been inevitable, but "wine, women, and song" diverted the minds of the ancient Egyptians. The wine and song are combined in the Demotic version of the song of the harper, the "portrayal of a dissolute, albeit professional singer and harp player" named Horudja. "As soon as he discovers wine and meat in his field of vision, he goes in, although no one has invited him, and he says to those at the festival, 'I can't sing—I am hungry. I can't perform with the harp without being sated with wine. Command (it)!' He drinks the wine of two, (he eats) the meat of three, the bread of five while (all the others) are amazed, and the harp at his breast becomes a disgusting piece of work. He makes the guests call to him, one after another, three times, 'Sing!' He begins to lift the harp after he has gotten drunk. . . . His words don't suit his work, his voice and his harp don't harmonize." (P. Vienna 3877)[3]

Wine drinking might be-

3. See E. Lüddeckens, "Zum demotischen Gedicht vom Harfner," in *Fragen an die altägyptische Literatur* (1977), pp. 334–37.

come the cause of contention, as in a series of oaths of which we have copies: "Transcript of the oath which (the man named) Horus will make before (the god) Thoth on behalf of Patmin in year 22, second month of summer, day 27: 'As for this ⅓ (measure of) wine about which you are contending with me—you did not bring it out at my behest. I did not drink it.' " (D. O. Strasbourg 1399) Other oaths touch on the relationships between men and women: "[Copy of] the oath which Tay . . . , the daughter of Padjema, shall make in year 9, third month of inundation season, day 17, to Wennefer, the son of Senmin, in the estate of Djeme in the west (Western Thebes): 'As the gods who dwell here together with every god who dwells here live, since I lived with you I did not steal from you. I did not rob you in excess of the thirty (*deben* of) silver.[4] I have nothing secret from you. I did not chase after men while I was living with you.' If she makes the oath, her name is cleared. If she refuses to make it, that which she shall reveal, she shall give it." (D. O. Strasbourg 843)

Graffiti, the "Kilroy was here" of the ancient world, are extremely common throughout Egyptian history. Often they consist of nothing but the name of the scribbler, but the desire to have one's name remain alive is sometimes expressly stated: "The good name of Pakherkhonsu, the son of Djedkhonsefankh, remains before Amoun, Mut, Khonsu, and Min 'high of feathers', the great god. As for the one who shall read these writings and greet me, Amoun shall greet him. Pakherkhonsu, the son of Djedkhonsefankh, wrote (this) in year 5, third month of summer, day 1, of the . . . King Alexander, son of Alexander the god, while he . . . at Djeme (Western Thebes)." (G. Medinet Habu 86) Such graffiti are found not only in the Egyptian Nile Valley but wherever Egyptians went, leaving a record of their travels. "The stonemason of greywacke and galena Hema, the son of Patiharpochrates, who inspects greywacke and galena since the time of King Nec-

4. Probably the dowry which the woman brought with her to the marriage.

tanebo (II), the Medes [the second Persian occupation, immediately preceding Alexander the Great], and the Greeks, without Min having caused that fault be found with him. His name remains here before Min, the Chief of the Mountain [the stone quarry], forever. (It is) written." (G. Wadi Hammamat 1)

Texts such as these are extremely numerous and although we have managed to read and process a large number of such graffiti, mummy labels, and ostraca of all sorts, we still have a large number left to do. However, we are about to turn part of our attention to the task of establishing the meaning of problematic words which have appeared in texts published during the last 25 years, preparatory to writing the actual dictionary supplement on which we are currently working (see Annual Reports, 1976–1981). The staff, which has jelled to form a very efficient and hardworking team, consists of Professor George R. Hughes, consultant and lifesaver, Robert K. Ritner, Senior Research Assistant and Assistant Editor, Adrian Esselström, Eugene Cruz-Uribe, Richard Jasnow, Elizabeth McVey, and Lisa Moore, Research Assistants. Dr. Mark Smith worked with us for one month finishing the difficult passages of several of the literary texts on which we had worked in earlier years.

# The Graeco-Egyptian Magical Papyri

*Robert K. Ritner*

One of the expressed indirect goals of the Demotic Dictionary Project is to make available the raw materials necessary for a thorough study of cultural interaction between Egyptians and Greeks in the Hellenistic period, when

both cultures and languages shared the Nile Valley. The nature and degree of such interaction has long been discussed by scholars familiar with Greek but unable to consult relevant Demotic evidence. One of the most curious products of this selective blindness regarding Hellenistic Egypt has been in the study of the period's magico-religious practices, in which the standard publication of the Greek sources neglects to include Demotic parallels even where they appear on the same papyrus and are written by the same scribe. Greek sections within Demotic spells are lifted from their contexts and presented in isolation—a technique which completely obscures the sociological and religious significance of these bilingual texts.

The importance of these magical spells for insights into Hellenistic religion and early Christianity has been recognized by H. D. Betz of the Divinity School of the University of Chicago, whose Corpus Hellenisticum Project on the Greek Magical Papyri has prepared new English translations of all relevant materials including the Demotic spells as translated by Janet H. Johnson of the Oriental Institute. For the entire corpus of Greek and Egyptian texts I have made extensive annotations on Egyptian elements and influences common to both. The combined study of these documents by Greek and Demotic scholars and historians of religion has been especially fruitful. Perhaps the most striking result of this examination is the recognition of pervasive Egyptian influence. The so-called "Greek" magical texts are frequently Greek only in language, with the gods invoked and the practices described being thoroughly Egyptian with Greek, Mesopotamian, and Hebrew deities and angels in frequent but secondary appearance. Even in spells of seemingly pure Greek character where no Egyptian deity is invoked by name, the construction of the spell may be borrowed from Egyptian prototypes. Thus in a 'slander-spell' to Selene, the moon goddess, a series of blasphemous statements are uttered and then attributed to another in an attempt to bring forth the wrath of the gods. This technique ("It is

not I who said it; it is X who said it.") may be traced to the Pyramid Texts in Egypt, almost three millennia before this fourth century spell. The presentation and analysis of these spells in their complete context allows for the first time a careful investigation of this facet of religious continuity and confrontation in Hellenistic Egypt.

# Hittite Dictionary Project

*Harry A. Hoffner*

We are happy to announce that the National Endowment for the Humanities has awarded a third three-year grant to the Hittite Dictionary, to run from July 1, 1982 to June 30, 1985. $215,189 of this grant is an outright award, while $150,500 is contingent on matching funds. We are grateful to those donors whose generosity has made possible the raising of matching funds for our previous NEH grant and we hope that we will have the same success in raising the necessary amount for this current grant.

Reviews of the first fascicle of the Hittite Dictionary have been most complimentary. One reviewer from Germany called our translations *meisterhaft* ("masterful"). We are gratified by the initially favorable response, but we are not complacent. The task before us to finish such a large project within the foreseeable future is a challenging one.

We continue to operate with two full time staff members, Drs. Berman and Košak, two half time editors, Professors Güterbock and Hoffner, a summer visiting consultant, Dr. Gary Beckman, a consultant by mail, Professor E. Laroche, and our graduate assistants, of whom the most active is Mr. Richard Beal.

The copy for fascicle two of the dictionary, containing articles on Hittite words beginning with M, is ready to be sent to the photocom-

positor. Early drafts of articles on words beginning with N and many P words have already been written. Fascicle three should appear much sooner after fascicle two than the latter followed fascicle one. Our progress is therefore quite satisfactory. It takes time to discuss all of the issues involved in the interpretation of relevant texts, because, although the final decisions are made by the editors, each member of our staff is encouraged to contribute to the discussion. Although this approach is time-consuming, it produces a lexical analysis which is more representative of the divergent approaches in our discipline.

Through the courtesy of the Director General of Antiquities of the Republic of Turkey, Mr. Nuretin Yardımcı, and the directors of the museums in England, Germany and Turkey, editors Güterbock and Hoffner were able again in the summer of 1982 to travel abroad and collate Hittite texts for the project. Once again Hoffner was able to photograph published texts in Turkey to enlarge our photo archive. We are grateful to the NEH for the financial support which enabled us to make these trips.

The editors are currently discussing with the Director of the Oriental Institute, Dr. Adams, plans for insuring the continuance and the high quality of the dictionary over the long term. Such planning is necessary in view of the anticipated length of the project (fifteen to twenty more years) and the uncertainties of the national economy.

# Hittite Studies

## *H. G. Güterbock*

Not all controversies are quickly settled, and not all proposed advances in our understanding of the ancient Near East prove to be useful. Apart from his ongoing work on the *Chicago Hittite Dictionary*, Professor Hans

Güterbock provides two examples of this from his own work during 1981–82.

An invitation to participate in a symposium on East-West contacts in antiquity organized by the Archaeological Institute of America prompted him to look at the so-called Ahhiyawa problem again. This is the question of whether or not the term "land of Ahhiyawa" occurring in some Hittite texts refers to Mycenaean Greeks or Akhaeans. The problem has been debated ever since 1924, when Emil Forrer first claimed to have found "Homeric Greeks" in the Boghazköy texts. Most influential among his critics was Ferdinand Sommer who, in a monumental work of 1932, carefully reinterpreted all the sources with the result that none of Forrer's arguments was conclusive, and that therefore the whole theory had to be rejected. While much was written since then, both *pro* and *contra*, Sommer's philological interpretations have only rarely been challenged. A fresh look at the sources led Professor Güterbock to different interpretations of some passages; the most important point is that a Hittite king of the early thirteenth century B.C. indeed called the king of Ahhiyawa "Great King, my equal," contrary to Sommer's interpretation of the same source. The paper, read before the AIA at its meeting of December, 1981, will be published in the *American Journal of Archaeology*.

Participation in a different kind of controversy was thrust upon Professor Güterbock from the outside. The Hittite rock sanctuary of Yazilikaya near the capital, Boghazköy-Hattusa, was the object of intensive work by the German expedition of which he was a member for many years. This work culminated in a monumental publication of 1975 (K. Bittel *et al.*, *Das hethitische Felsheiligtum Yazilikaya*) in which he wrote the chapter on the hieroglyphic label inscriptions accompanying the individual reliefs of gods and goddesses. In the spring of 1981 there appeared a monograph, published in an official French series, in which the author claims that she read about fifty names instead of the twenty-two which her predecessors had identified (Emilia Masson, *Le panthéon*

*de Yazilikaya: nouvelles lectures.* Recherche sur les grandes civilisations, Synthèse no. 3. Institut Français d'études anatoliennes. Editions ADPF, Paris, 1981). The claim of having added 28 new or improved readings to those known before had to be carefully investigated. For this purpose Güterbock used the occasion of the Turkish History Congress, held in Ankara in September 1981, to revisit the site and to compare all the proposed readings with the originals. The results of his investigation are being published in the same French series. Two or three of the new readings stand the test, but all others turned out to be unusable.

# Babylonia: Recessions, Epidemics, Environmental Crises

*J. A. Brinkman*

The history of independent Babylon (1894–539 B.C.) was not one sustained rise from humble beginnings as a local dynasty to the glorious empire of the biblical Nebuchadnezzar. Rather it may be viewed as a series of peaks and troughs, as political power and economic strength waxed and waned. The two high points—politically and culturally—seem to have been in the Old Babylonian era around and shortly after the time of Hammurabi (1800–1650 B.C.) and in the New Babylonian kingdom under the dynasty founded by Nebuchadnezzar's father (625–539 B.C.) The intervening period is much less well known, but its stretch of more than one thousand years during which cultural and political traditions were transmitted between high points is worth investigating.

This millennium itself,

though not as successful as the absolute peaks, shows a distinctive profile of reduced-scale high and low points. There were times of demonstrable political strength, as when the various rival segments of southern Mesopotamia coalesced for the first time into the unified nation state of Babylonia in the 15th century. There were times of political weakness, as in the 8th century when the king in Babylon was a local tribesman and the old cities of the realm fought civil wars. My researches recently have been concentrating on the mechanisms of crisis in Babylonian society: the periods of economic depression and recession, times of pestilence and depopulation, eras marked by environmental shifts that signalled agricultural and social collapse.

One of the main difficulties in studying economically impoverished eras is that these leave considerably fewer traces than prosperous years, especially in the way of written documents. So one must search for new types of evidence and new methodologies to deal with scanty documentation. The reader may be interested in the types of questions we are beginning to ask.

Recessions, declines in living conditions, and impoverishment are all relative terms and imply a standard against which high, medium, and low points can be measured. One of the tasks I have been engaged in this year was to construct a chart recording relative density of economic activity over a 990-year span from 1595 to 605 B.C. The number of dated economic transactions per year is being plotted on something akin to a graph, yielding figures roughly comparable to the number of sales made annually on a stock exchange. This fluctuating volume of economic activity bears interesting correlations to political ebbs and flows, reflecting military successes and disasters, tribal disruptions, crop failures, and the like. More important it gives an approximate index of relative prosperity in different periods when internal conditions in Babylonia might otherwise be hard to compare to a single standard. The procedure still has many shortcomings, and one must be cautious not to overinterpret movements, espe-

cially for very short time spans or for under-represented locales. But this is a beginning in an attempt to subject long-term economic trends in Babylonia to quantitative analysis.

Declines can also be seen in other ways. There are drops in population size and shifts in population distribution; some of these can be detected archaeologically as well as in documents. Archaeological surveys in some sections of lower Mesopotamia have suggested sharp population declines in Babylonia between 1200 and 625 B.C. I have noted passages in documents from both Assyria and Babylonia during this time range which allude to drought, crop failure, movements of hungry populations, and outbreaks of plague. It may not be pure coincidence that the only known major literary work composed in Babylonia between 1000 and 700 B.C. has as its central actor Erra, the plague god. On another plane, one must also consider whether Babylonia might not have been experiencing part of a broader pattern of (global?) climatic change as evidenced by drought phenomena for the decline of the Mycenean age in Greece and the waning Late Bronze age farther east (c. 1200–1000) and by monsoon failure in northwest India in the same general time range. A major shift westward of the Euphrates channel(s) probably also took place at some point in the late second millennium B.C., though even an approximate date has yet to be satisfactorily determined. These and other environmental changes could have caused severe dislocations in urban and agricultural patterns in Babylonia.

These are fairly wide-ranging observations over a broad spectrum of interrelated and interdisciplinary problems. The study of processes of decline may in the long run turn out to be as significant as the study of classical high phases in illuminating the total career of mankind.

# Research on Ancient Egyptian Religion and History

*Edward F. Wente*

Most Egyptologists would deny the existence of mysticism and mystical initiation until perhaps the Hellenistic age, when foreign influences are believed to have substantially affected certain aspects of indigenous religious practices. But Professor Wente has been considering the question whether the pharaonic Egyptian use of certain mortuary texts not only on the occasion of death but also during life suggests that the history of mysticism began long before the Hellenistic period.

In considering two important "guidebooks" to the underworld, the Book of Amduat and the Book of Gates, Professor Wente has discerned some features that foreshadow the mystical initiation of Lucius into the cult of Isis at Kenchreai, Greece, which is described in *The Golden Ass of Apuleius* of the second century A.D. His basic conclusions are presented in an article, "Mysticism in Pharaonic Egypt?" appearing in the July 1982 issue of the *Journal of Near Eastern Studies*, vol. 41. In a lecture on the problem of mysticism in ancient Egypt, given in June, 1982, at the University of California, Berkeley, Professor Wente suggested that a holistic approach to such matters as magic and religion, symbolism, and the concept of time in ancient Egypt might provide an atmosphere more conducive to the appreciation of the mystical element in Egyptian religion.

In connection with his research into the history of the New Kingdom, Professor Wente collated Ramesside autobiographical inscriptions in the Cairo Museum during the autumn of 1981, making significant improvements upon previously published readings. In particular, his recent collation of the difficult stele of Setau, the viceroy of Kush who served under Ramesses II, has

proved fruitful. During his stay in Cairo Mr. Wente was invited to present a paper at the Institute d'Egypte on "The Evidence of the Royal Mummies in Relation to New Kingdom History," in which he discussed problems presented by the extremely low biologic ages at death of some of the kings, and by the recent analysis of the craniofacial morphology of members of the royal families. It would appear that certain of the royal mummies were misidentified when they were rewrapped during the Twenty-first Dynasty, but with the aid of refined techniques of cluster analysis it may be possible to provide new identifications.

# Linguistic Studies

## *Gene Gragg*

Gene Gragg continues to divide his research activities along two fronts. In the ancient Near East proper, he is studying the languages of the ethnic groups to the north and northeast of Mesopotamia—the Hurrians ("Kurdistan") and the Urartians (in historical Armenia). These two languages, the former known chiefly from a second millennium document, the latter from monumental inscriptions from the ninth to the seventh century, have long been known to be related; and in the last ten years an ever clearer picture of the parent language is emerging. Professor Gragg is currently trying to work out a picture of the syntax of this Hurrian-Urartian parent language, and to see the typological similiarities and contrasts with other languages in the region. He has lectured on this at the University of Michigan in April 1982, and at the Rencontre Assyriologique in London, in July.

On another front, with the publication of his dictionary (August 1982) of the Oromo

language behind him, he is now trying to establish the nature of the genetic relationships within the Cushitic language family (concentrated in the Horn of Africa), of which Oromo is a member, and to work from this back to the relationships among the Afroasiatic "super-family" as a whole, which comprises—in addition to Cushitic—Egyptian, Berber, Chadic, and all of the Semitic languages. The preliminary problem which he is now dealing with is that of organizing a complex data file containing information on a very large number of languages; a complete file would contain information on nearly four hundred languages. It is becoming ever clearer that he will have to rely extensively on the data-handling capacity of the computer to build and maintain even a partial file. A related problem is that of assessing relative similarities and differences in such a vast and complex file. Statistical techniques for similar problems have been worked out in the biological and social sciences, and an initial test of these techniques on Semitic language data has been carried out. Gragg reported on his results at a conference on historical linguistics at the University of Michigan, and in a forthcoming article.

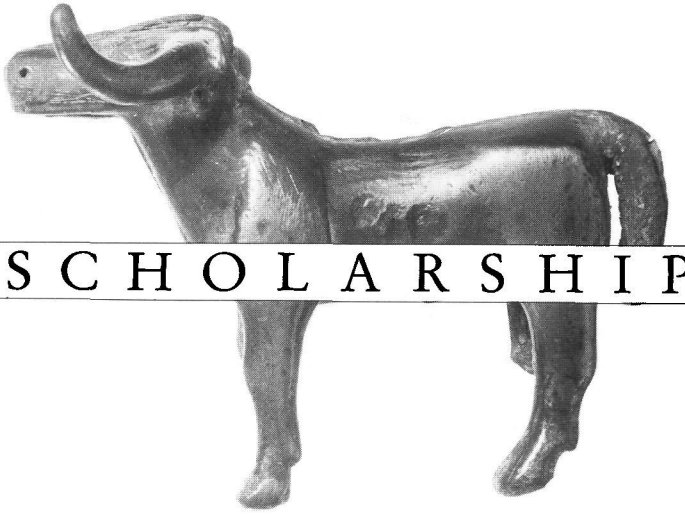
# Materials for the Sumerian Lexicon

## *Miguel Civil*

The long-delayed volume XVI, SIG$_7$.ALAN = Nabnītu, prepared by Irving L. Finkel (formerly of the Oriental Institute and now in the British Museum) and Miguel Civil, became available in April after a long wait caused by printing problems. By the time this report is published, the XVIIth volume with the lexical series Erimhuš and Antagal, prepared by Antoine Cavig-

neaux and Martha T. Roth, respectively, will be in printing. It is hoped that that process will be much faster than for the preceding volume. One of the editors of the series stopped in Rome in April to discuss means of speeding up the printing with the management of the publications office of the Pontifical Biblical Institute, publishers of the series. Volume XV with the series Diri = watru, prepared by M. Civil, will follow immediately.

The new *Materials for the Sumerian Lexicon–Supplementary Series,* of which two fascicles are in preparation with part of them in camera ready form, will have to be expanded to include the rapidly growing field of Early Dynastic lexicography.



SCHOLARSHIP

# Other Research Activities of Oriental Institute Faculty, Staff and Students

ROBERT MCC. ADAMS read a paper on "Early Urban Evolution" at a symposium on "Frontiers of the Social Sciences" at the Washington, D.C. meetings of the American Association for the Advancement of Science in January. In February he discussed the origins of Mesopotamian civilization with an inter-institutional colloquium of psychologists organized by Professor Leon Festinger at the New School for Social Research in New York City. In March he participated in a week-long colloquium on the "Collapse of Ancient Civilizations" at the School of American Research in Santa Fe. Also to be published in a symposium volume is a lecture he delivered in May on "Mesopotamian social evolution: old outlooks, new goals" at the University of California in Los Angeles. Additionally during April and May, he served for

a month as a Visiting Professor in the department of Anthropology at the University of California, San Diego. In June the results of a two-year study that he had chaired, on behalf of the National Science Foundation and under the auspices of the National Research Council, were published under the title of *Behavioral and Social Science Research: A National Resource* (Washington, D.C.: National Academy Press, 2 vols.).

LANNY BELL's research this season took him from the eastern desert north of the Wadi Hammamat road to the Red Sea, to the Theban Necropolis, the Cairo Museum, and the Fitzwilliam Museum in Cambridge. After a search which began nearly two years earlier, an expedition from Chicago House in March finally relocated some Pharaonic rock inscriptions discovered in 1897–98 more than 20 km. into the Wadi Atolla. Improvements now possible in the readings of these texts will be incorporated into the published version of his Ph.D. dissertation. For his study of the priesthood of Karnak during the Ramesside period, Lanny went to the tomb of Imiseba, No. 65 on the west bank of the Nile at Luxor. There he managed to read some previously indecipherable hieroglyphic texts containing the names of the Prophets of Amun, Mut, and Khonsu during the reign of Ramesses IX. In the Cairo Museum he collated a stele of Amenhotep III, describing his constructions at Luxor Temple, and in the Fitzwilliam, he helped copy the hieroglyphs on the unpublished red granite sarcophagus of the Theban Mayor Hunefer, who served under Ramesses II.

Over the past summer Lanny gave two slide lectures in the Oriental Institute, one on the tombs of the Ramesside high priests of Amun at Dira Abu el-Naga, and one on the discoveries of the Epigraphic Survey at Luxor Temple. A version of the second talk was presented in May to the membership of the Egypt Exploration Society in London. In addition, an illustrated article on the Epigraphic survey, coauthored with William Murnane and Bernard Fishman, appeared in the *Newsletter* of the American

Research Center in Egypt, no. 118 (Summer 1982), pp. 3–23. Finally, while working in the Cairo Museum he also served on the Trustees' Visiting Committee on Egyptology at the American University in Cairo.

Since 1970, MARTHA BELL's first season in Egypt, she has been documenting all the known examples of Late Bronze Age Greek (Late Helladic or Mycenaean) pottery imported into Egypt. Prized for the elegance of their form and decoration or for the excellence of the perfumed unguents that some of them probably contained, these ornamental vases have been found in New Kingdom settlements and cemeteries from the Delta to the Sudan. The stirrup jar, one of the commonest shapes, was so popular with Egyptians at one time that it was imitated in clay, faience, and stone.

This season, Martha was able to complete her study of Mycenaean pottery in the Cairo Museum. This includes full photographic documentation and thorough technical description of all the vases, many never before published. In Europe, her work has recently centered on British collections and she was able to continue in the Petrie Collection, and to finish the photographic documentation of all relevant pieces in the Museum of Classical Archaeology, University College, London. She also finished her work at the Fitzwilliam Museum, Cambridge, and continued her study of the pieces in the Ashmolean Museum, Oxford.

JOHN CARSWELL continued his study of the Dome of the Rock tiles in Jerusalem, and also started to catalogue the collection of inscribed and dated late medieval copper in the Armenian Cathedral of St. James in Jerusalem. He made a survey in south-east India of ancient ports, mentioned in Arabic and Chinese sources, and rediscovered Kayal, visited by Marco Polo. He directed the first season of excavations at Mantai in northern Sri Lanka, an important emporium for international trade, from the Roman to the Chola periods, with earlier, prehistoric levels on the same site. The excavations were supported by The Met-

ropolitan Museum in New York, The British Museum in London, and the Ford Foundation in India. His study of old and new Djulfa was published in the *Encyclopaedia of Islam Supplement,* and an article on the Safavid image of the Armenians in a collection of essays published by the Von Grunebaum Center at UCLA.

MIGUEL CIVIL has several articles in press in *Oriens Antiquus, Orientalia,* etc. Two short contributions about "Daily Chores in Nippur" and Sumerian fragments which include a piece of the elusive long version of Gilagames and Huwawa, have recently appeared in the *Journal of Cuneiform Studies.* He gave a lecture, by invitation, in the second *Convegno Internazionale* of Eblaitic Studies (Naples, April 1982) on "Bilingualism in Logographically Written Languages: the Ebla Sumerian," and, shortly afterwards, he was able to prove that a group of until now undeciphered lexical lists from Ebla were in fact syllabic versions of known Early Dynastic lexical lists. The understanding of the archaic lexical works and the phonology of early stages of Sumerian will progress considerably from this discovery. The first part of a study of these new texts is already in press.

GERTRUD FARBER has prepared a new full transliteration of the Sumerian 'Hymn to the Hoe', using all unpublished fragments presently known. During summer '81 she had the opportunity to collate several of these texts in the British Museum, and to copy a few Ur III economic texts in Munich for a joint publication with Walter Farber. At the moment, she is editing the manuscript of the lexical series *erim.ḫuš = anantu*, to appear as part of 'Materials for the Sumerian Dictionary' vol. 17.

WALTER FARBER spent most of last summer in the museums of London, East Berlin, and Istanbul, copying further material of the 'Lamashtu' incantation series and of related magical texts used for the benefit of sick children. His work on editions of both text groups continues. In June 1981, he gave an invited lecture in

West Berlin, on the interrelation of textual and archaeological evidence for the demon Lamashtu. He was also able to locate, and copy, a few more unpublished cuneiform texts from private collections in Germany, which eventually shall be included in a publication of all these scattered texts and fragments by him and Gertrud Farber. He attended the Rencontre Assyriologique Internationale in Vienna, and joined the O.I. delegation to the 3rd International Symposium on Assur, Babylon, and Haditha, in Baghdad in November 1981.

I. J. GELB published two articles in the field of social and economic history of the ancient Near East: "Terms for Slaves in Ancient Mesopotamia" in the Diakonoff Festschrift; "Sumerian and Akkadian Words for String of Fruit", Festschrift Kraus (Leiden, 1982), pp. 67–83. The article, "Measures of Dry and Liquid Capacity" has just been sent to press. In the field of Eblaic studies, a long article, "Ebla and the Kish Civilization" was published in *La lingua di Ebla,* Atti del Convegno Internazionale, Napoli, 21–23 April 1980, edited by Luigi Cagni (Napoli, 1981) pp. 9–73.

During 1981–82, MCGUIRE GIBSON spent much time reworking and expanding a paper on the stratigraphy of the Diyala region of Iraq in the late Early Dynastic and Akkadian periods. This paper, given initially as a presentation for the Columbia seminars in December 1980, was a direct outgrowth of his findings at Uch Tepe. The paper calls for a major revision in the Diyala levels and has implications for the comparative stratigraphy of Iraq and Iran, Iraq and Syria, in a critical span of time. The article will be published in the *American Journal of Archaeology* during the coming year.

He is also still involved in the American Institute for Yemeni Studies as the University's trustee, and as an adjunct to this, has spent some time in committees for the Council of American Overseas Research Centers. On June 17–18 he served as conference chairman of "Changing Alignments in the Middle East," a two-day

symposium on political and economic relations, co-sponsored by the Universities of Chicago and Illinois, Chicago Circle.

Apart from devoting most of his research time to editorial work on the Hittite Dictionary and the preparation of budgets and applications for the National Endowment for the Humanities, HARRY A. HOFFNER, JR. traveled to Turkey during June 1982 where he made collations and photographed tablets in the museums in Ankara and Istanbul. For two weeks he visited Southeastern Turkey, inspecting areas where Hittite and Hurrian population groups resided in antiquity. In February he lectured on the Milawata text and its implications for the so-called Ahhiyawa problem at the annual meeting of the Midwest section of the American Oriental Society. He prepared several manuscripts for publication including an edition of the Prayer of King Muršili II regarding the Tawannanna for the *Journal of the American Oriental Society*. Another of his articles dealt with the Old Hittite verb *šuwaye-* and its significance in laws and legal proclamation. Since much of his work utilizes the computer, he spent many hours at the University Computation Center. He has accepted a commission to write the article on Hittite religion for the new MacMillan Encyclopedia of Religion edited by Mircea Eliade.

Most of JANET H. JOHNSON's energies have been concentrated on the two major projects in which she is involved, the excavations at Quseir al-Qadim (Egypt), and the Demotic Dictionary Project (see separate reports). In addition, however, she finished the translation and commentary of the Demotic magical texts from the third century of our era which will appear in the corpus of the contemporary Greek magical texts (from Egypt) being published by the Greek Magical Texts Project (directed by H. D. Betz in the Divinity School). She is currently working on a reedition of the so-called Demotic Chronicle, a Ptolemaic text dealing with the history of dynasties Twenty-eight through Thirty, which was presented at the International

Congress of Egyptologists at Toronto in September, and on a study of the syntax of certain particles in Middle Egyptian grammar.

WILLIAM J. MURNANE spent part of the season in Egypt checking and augmenting the documentation of the battle reliefs of King Sety I at Karnak; the finished manuscript will soon be submitted for publication, to appear as the Epigraphic Survey's fourth volume in the series *Reliefs and Inscriptions at Karnak*. In addition to participating in the Survey's work in the Luxor Temple, Mr. Murnane collated the incomplete earlier copies of scenes in the two-room "suite of the divine birth" at the back of the temple. Analysis of this material will contribute to an understanding of the temple's function and of its most important religious ritual, the Opet Feast: preliminary results have already appeared in an article, "Opetfest," contributed to the *Lexikon der Ägyptologie* (IV, 574–79). Working side-trips in Egypt took Mr. Murnane to the Egypt Exploration Society's epigraphic survey of Gebel Silsila and to the Oriental Institute's excavation at Quseir. Additional field work at Karnak has brought to an advanced stage the composition of the companion volume to the late H. H. Nelson's *The Great Hypostyle Hall in the Temple of Karnak (O.I.P.* 106), edited by Mr. Murnane, which appeared this summer. The first part of 1982 also saw the publication of *United with Eternity: a Concise Guide to the Monuments of Medinet Habu* (published jointly by the Oriental Institute and the American University Press in Cairo) and of several articles: "In Defense of the Middle Kingdom Double Dates," in *Bulletin of the Egyptological Seminar* 3 (New York, 1981): 73–82; "The Sed Festival: a Problem in Historical Method," in *Festschrift Labib Habachi = Mitteilungen des Deutschen Archäologischen Instituts, Kairo* 37 (1981): 369–76; and "The Bark of Amun on the Third Pylon at Karnak," in *Journal of the American Research Center in Egypt* 16 (1979): 11–27.

ERICA REINER lectured at the University of California at Los Angeles in January on Babylonian Birth Prognoses

and Pregnancy Testing, under the title "Before Hippocrates," a topic on which she has also submitted an article to *Zeitschrift für Assyriologie*.

FRANCESCA ROCHBERG-HALTON presented two papers to the American Oriental Society, one on stellar distances in early Babylonian astronomy (Boston, March 1981), and one on celestial divination and its historical context (Midwest branch meeting, Evanston, February 1982). She attended the Rencontre Assyriologique Internationale in Vienna in July 1981, reading a paper on "Fate and Divination in Ancient Mesopotamia." Her dissertation, on the treatment of lunar eclipses in Babylonian celestial omina, with a critical edition of the lunar eclipse texts Enūma Anu Enlil tablets 15–22 is forthcoming in *Texts from Cuneiform Sources* (Augustin publisher). In July 1981 she spent some time collating tablets at the British Museum for a critical edition of the lunar texts of Enūma Anu Enlil (tablets 1–14), on which she is currently working. An article on stellar distances and early Babylonian astronomy will appear in a forthcoming volume of the *Journal of Near Eastern Studies*. In July 1982 she received notification of her selection as a MacArthur Prize Fellow, a no-strings-attached award of the John D. and Catherine T. MacArthur Foundation that will allow her essentially complete latitude in the pursuit of her research interests for a five-year period.

LAWRENCE E. STAGER is seeing through proof the second archaeological report on the excavations at Idalion, Cyprus. He is completing a monograph on the highland villages of Premonarchic Israel and preparing (with the Carthage staff) the final report on the excavations in the "Tophet" at Carthage.

Mr. Stager gave the keynote address at a symposium on Carthage, sponsored by the "Ex Oriente Lux" Society (Amsterdam), to be published in the Society's journal. He continued his tour with lectures on the excavations at Carthage at the Biological-Archaeological Institute (Rijksuniversiteit, Gröningen) and before the "Phoenician-Punic Society"

(Katholieke Universiteit, Leuven, Belgium). Mr. Stager also lectured on the "Rise of Horticulture in the Levant" at the Symposium on Palestinian Archaeology held at the University of Aleppo, Syria. He proposed a correlation between the domestication of the vine and the olive tree and the rise of cities and states in the Levant.

In *JNES* 41 (1982) Mr. Stager disputes Kathleen Kenyon's identification of the stone structures on the east slope of Jerusalem with the *millo'* of the Bible and prefers to interpret these as the "terraces of the Kidron" (*šadmôt qidrôn*). In *BASOR* 243 he (with Samuel Wolff) interprets the "water libation" installation in the sacred precinct at Tel Dan as an olive press, and then educes evidence from other sites in the Levant for production and commerce in temple courtyards.

SAMUEL WOLFF, Museum Assistant and Ph.D. candidate in Syro-Palestinian archaeology, delivered papers at the Archaeological Institute of America and the Society of Biblical Literature/American Schools of Oriental Research annual conventions. The papers related to his dissertation-in-progress, "Maritime Trade at Punic Carthage." He gave a lecture at the Third Annual Colloquium on Sardinian Archaeology in Boston in which he identified a putative Punic period smelter as a bread oven.

# Research Archive

## *Alice Schneider*

Since the beginning of this fiscal year, the Archive has acquired the private library of Mr. John Hadley through his most generous gift. His older volumes enabled us to substantially add to our holdings in areas where volumes are out of print and/or hard to buy. We also acquired full rights to the William F. Edgerton library through his bequest and are presently going through this primarily Egyptological collection accessioning what is needed in Chicago. The bulk of it then will likely go to Chicago House in Luxor. This has helped us to add 457 books and monographs to the archives this year.

In addition, we have added 490 journal volumes, including such new journals as *Historical Metallurgy Society Journal, Hokhma, Karthage, Anthropological Literature, Bibbia e Oriente,* and many more. A number of journals also are being received on an exchange basis through the good offices of Prof. Biggs, in his capacity as editor of the *Journal of Near Eastern Studies.* These journals include *Prace Archeologiczne* (Poland), *Drevni Vostok* (from Moscow and Erevan via Poland), *Recherches Archéologiques* (Cracow), *Arab Gulf Studies, Dilmun* (Bahrain Historical Society), *the Society for Libyan Studies Annual* (London), and several exchanges still being arranged. Because of a generous donation by Mr. Haas, we were able to purchase the back issues of *Zeitschrift des Deutschen Palästina-Vereins* and *Zeitschrift der Deutsche Morganland Gesellschaft.* His gift has also helped to make possible the installation of a magnetic security system.

The Archive has also acquired more than a thousand Near Eastern maps from the Museum Office. These have been filed, indexed and cross-referenced. Additional maps will be transferred to our permanent collections when arrangements have been made to store them properly.

Our serial holdings increased by 138 volumes, with several volumes of a new series (for us) *Memoirs of the Archaeological Survey of India* from Mr. Hadley's library. These are very rarely to be found in the used book market. We are also lucky in being able to purchase the first six volumes of the *Catalogue of Cuneiform Tablets in the Kouyunjik Collection of the British Museum* from a dealer. A new Egyptological series received in December is *Aegyptiaca Treverensia.*

As one might expect from these extensive acquisitions, the Archive is rapidly outgrowing the space available for it. In two years' time, space will be a critical problem.

Thanks must go to Professors Biggs, Adams, Brinkman, Baer, Kantor, Gibson, Nims and Stager; and Mrs. Swift and Mr. Haas and to Mr. Carswell and the Museum Staff, for help and donations through the year.

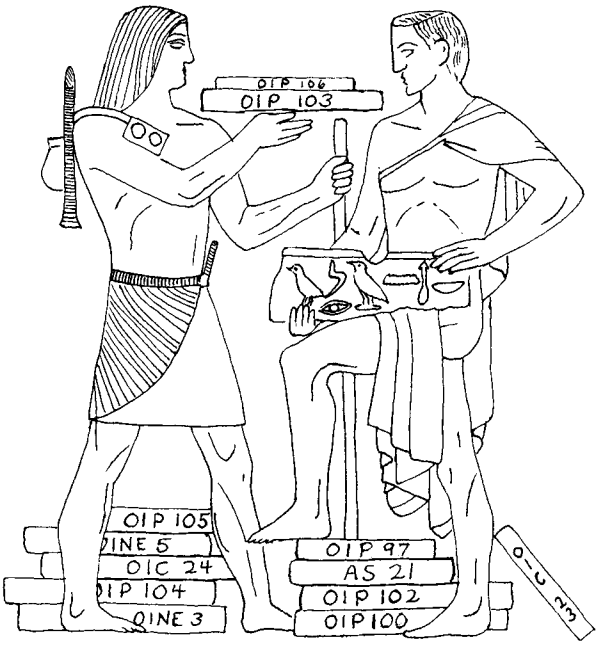
Staff for the past year included Nina Bruhns, David Baird and Steve Boozer. David Testen, who worked a few years ago, will be here this summer while I have a baby and recoup.

# Publication Office

## *Jean Luther*

The tympanum relief above the main door to the Oriental Institute shows an Egyptian scribe with a palette and writing outfit over his left shoulder. He has just handed a wall fragment from the temple of Sahure (Fifth Dynasty, 2473 B.C. to 2459 B.C.) to Western man. We have taken liberties with this relief to bring you the 1982 A.D. greetings and report from the publications office; the figures are no longer standing among ruins but among Oriental Institute publications, published and unpublished.

This year two Epigraphic Survey volumes were completed. *The Temple of Khonsu,* volume 2 (Oriental Institute Publication 103),




*Drawing by Sue Howe*

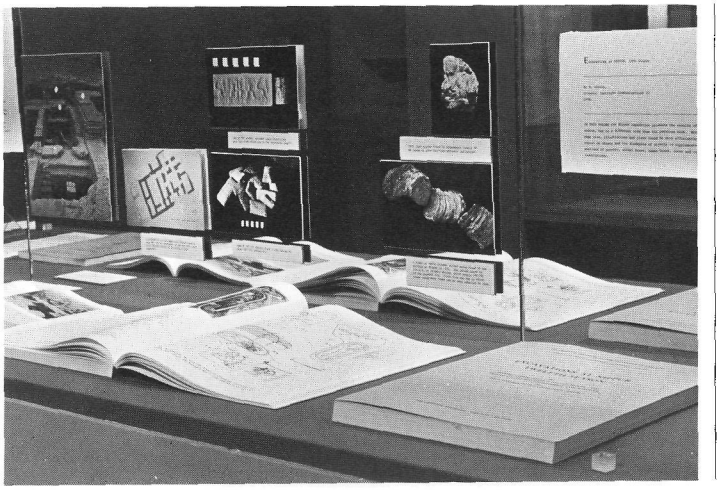
records the reliefs in the courtyard and in the First Hypostyle Hall of the Khonsu Temple at Karnak. The volume includes translations of the texts and a glossary for volumes 1 and 2. *The Great Hypostyle Hall at Karnak,* volume 1, part 1 (Oriental Institute Publication 106, *The Wall Reliefs*), records the reliefs in the Great Hypostyle Hall of the Temple of Amun-Rē at Karnak. The plates include all of the reliefs on the walls of the Great Hypostyle Hall, scene by scene, along with schematic drawings of each complete surface, showing the relative position of the scenes and their role in the decorative program.

While the Egyptian scribe is holding 1982 publications offerings, the unpublished works of other Oriental Institute scribes are in a pile behind him. In the future this office will be picking up these works one by one to transfer them as carefully and as expeditiously as possible to the pile at the right.

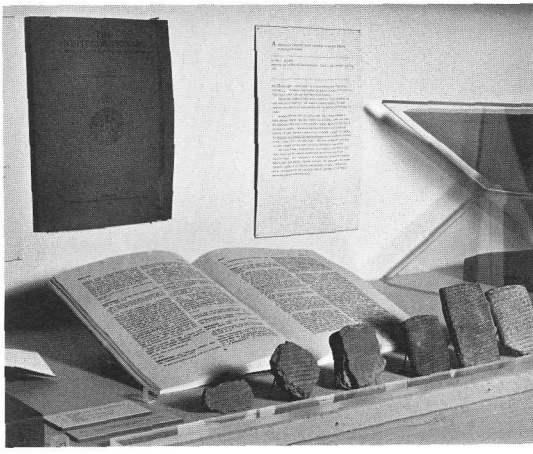

# The Museum

*John Carswell*

The past year has been an unusual, indeed exceptional, one for the Museum, faced with a greatly expanding public program and a severely limited budget, exacerbated by the fact that government support from the Institute for Museum Services was not forthcoming. At the beginning of the year, a detailed analysis of past expenditure revealed how much money was needed for general operating support, and how much would be necessary for special projects, such as exhibitions. At the same time as drawing up long-range plans to alleviate the



*Archaeological Investigations*,
Publishing The Past



*Ancient Near Eastern Languages*,
Publishing The Past

Museum's financial situation, a solution had to be sought to the immediate problem, in order not to lose the momentum of steadily increasing public interest built up during the previous years. Museum attendance, for instance, continued to rise,

with 56,928 visitors in 1980–81—an increase of over 12% on the previous year. Here it should be stressed that the Museum is ultimately dependent on funds for general maintenance from the University; it makes no charge to the general public, and, apart from voluntary donations, has no direct revenue from visitors.

Thanks to Peggy Grant, our Volunteer Chairman, a remedy was at hand. She suggested we approach the Women's Board of the University, and what started as a request for funding our Education Program was expanded into a general appeal for the Museum as a whole. The Women's Board, under the Chairmanship of Mrs. Keith I. Parsons, responded swiftly and generously, and agreed to make the Oriental Institute Museum their major funding of University activities for the coming year. A grant of $50,000 has allowed us to finance the Education Program for a further year, to mount a major exhibition, to improve the display of our permanent collection, and most important of all, to publish an illustrated guide to the Museum collections. We are most grateful for this timely support.

The manuscript for a guide already existed, for the previous year Leon Marfoe had been commissioned to write just such a text, while waiting for permission to excavate in Turkey. The new guide is, incidentally, based on a little-known early work by the novelist E. M. Forster, his *Guide to Alexandria* published in 1922. In Forster's guide, each chapter is divided into two parts, the first being a historical narrative and the second a description of objects in the Alexandria Museum relating to his theme. This seemed an ideal format for our own guide, and each chapter focuses on one of the five galleries in the Museum, again with a historical background followed by a case-by-case description of the objects.

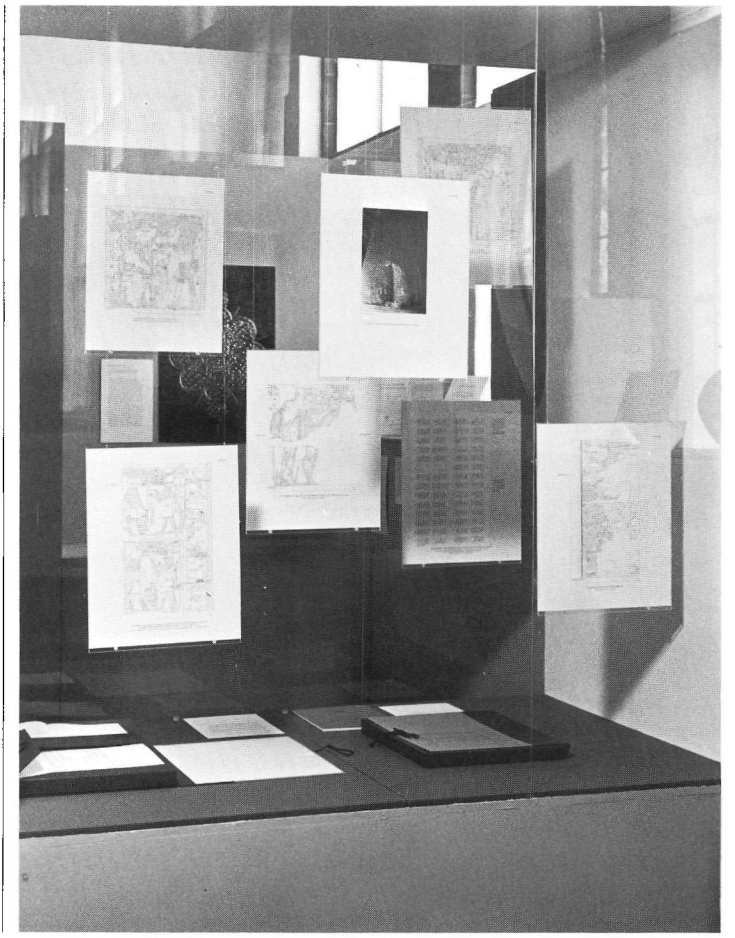
The Women's Board grant was made in January, and the target of May 17 was optimistically set for publication of the guide. This was the occasion of the annual meeting of the Board, and they had requested that it be held in the Museum. The production of the guide at

such short notice meant the necessity of a highly-organized effort on the part of all the Museum staff, and practically a minute-by-minute schedule in the Printing Department of the University. Photographs had to be specially taken, maps and charts compiled, plans drawn, and the copy checked many times. We made the deadline by exactly twenty minutes, the first two hundred copies arriving just before the Women's Board arrived. The May 17th meeting started with a lecture by the Curator in Breasted Hall, followed by refreshments in the garden (which was looking particularly resplendent), and lunch in the Museum. Afterwards the 120 or so members of the board had the opportunity to see how the Museum operates behind the scenes, watch a rerun of the 1932 Breasted movie, *The Human Adventure,* or simply try out the new guide on the spot. Mrs. Parsons wrote later that "many members of The Women's Board said the meeting at the Oriental Institute was the best they had ever attended." We were happy to be able to express our thanks so directly.

Our first exhibition of the year was *Publishing the Past,* a review of the past ten years of Oriental Institute scholarly publications. Apart from the books themselves, there were also on exhibit artifacts and materials concerned with the research leading to publication, so that some idea might be gained of the complex processes involved. The sense of reality was heightened by an automatic slide show, showing scholars hard at it in their respective offices. After that exhibition closed, we began to prepare for our major exhibit this year: tracing the continuity of man's development, from a million years or so ago to our own times, concentrating on the period immediately after the end of the last Ice Age, c. 10,000 B.C. This colossal theme draws heavily on the Oriental Institute's own contribution to the subject and particularly the pioneer surveys and excavations of Robert and Linda Braidwood. A secondary topic is the link between the University's scientific community and the archaeologists, through the development of the Carbon 14 process as a dating tool, itself a by-

*Archaeological Investigations*, Publishing The Past

*Ancient Egypt*, Publishing The Past



product of the first controlled nuclear reaction on campus in the 1940's.

Behind the scenes, a major step forward in the basement has been the creation of a new working space for archaeologists, made possible by the removal of a large quantity of cases and other material to storage. The vacuum created was quickly filled by scholars thirsty for space and the area is now fully operational.

Another major effort has been the reorganization of the storage of Megiddo and related materials, under the supervision of Anita Ghaemi, Registrar, aided by Bruce Verhaaren and other volunteer helpers. Gifts were registered from James H. Breasted Jr. of a wooden Egyptian statuette, and a scarab from Mrs. Charles Potter and Mrs. James Honniwell. A special display of the statuette was arranged at the time of the annual Institute dinner. Loans were prepared for four outside institutions, and no less than 42 scholars accommodated, working on subjects as diverse as Arabic papyri, hieratic literary ostraca, and all kinds of pottery and other

*The new basement work space.*

*Wooden Egyptian statuette, gift of James H. Breasted, Jr.*
(O.I. 1981.2)

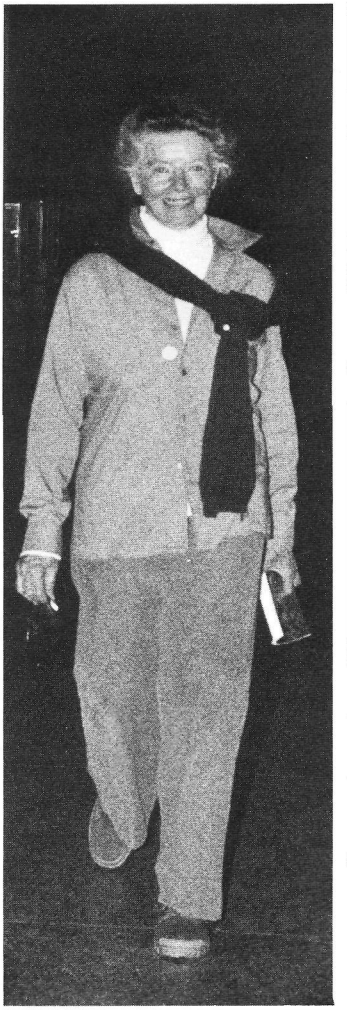
material. An internship program was also established in which students from Grinnell College and the School of the Art Institute participated. Volunteers continued to make an impressive contribution to registration work. One volunteer—Lillian Cropsey—actually has three volunteers of her own, an impressive subdivision of labor!

The preparatorial staff, Honorio Torres and Jim Richerson, helped by Calvin Gray, have worked very hard at a great variety of projects. Apart from exhibition preparation, they built the new workspace, a new Publications and Suq Office, new storage for OI Publications and Suq merchandise, and redecorated a number of offices. They also turned the Suq into a much more practical L-shaped area by eliminating the storeroom at the back and integrating the space into the whole. A great deal of painting and general tidying up was also carried out in the public galleries.

Jean Grant continued to cope with the enormous demands made on photographic services, and was aided by the invaluable Joseph Denov, who continues to help with his wide experience in all facets of photographic work. The photography of material for the new guidebook was highly successful, as witnessed by the handsome plates in that publication. Upstairs, the Archivist, John Larson, kept the delay in filling photographic orders down to less than six weeks, and answered innumerable

queries, accessioned new photographs, and continued refiling old negatives in acid-free containers. He was also assisted by willing volunteers. The two Museum Assistants, Joseph Greene and Samuel Wolff, at present share the same position, so both may have time for their own academic work. They have actively promoted the Museum's activities in the press and other media, supervised security and the student guards, and assisted in innumerable ways. Our Secretary, Myrna Simon, continues to perform a wide variety of tasks with humor and good sense. She has become specially skilled at fielding the unexpected, now almost a daily occurrence in the museum office.

We have had a number of distinguished visitors, of whom the most distinguished—and certainly most attractive—was Katharine Hepburn. On tour in Chicago with a new play, she was spotted walking around the Museum by Eleanor Swift. She told us she had learned about the Museum years ago, from Douglas Fairbanks, and always made a point of coming to see it when in Chicago. She was particularly excited about the newly-revived Breasted film, *The Human Adventure,* which she saw no less than three times during her stay. On several visits,



*Miss Katharine Hepburn, Spring, 1982*

everyone was impressed by her charm, intelligence and friendly nature. Presented with a copy of the new guide, she came back next day and bought ten more! She also gave us the best publicity we have had in the press for a long while; after seeing *The Human Adventure,* she was quoted in the press as saying, "It was the experience of my life. It's a marvellous museum, and an incredible film." She ended up by bringing the entire cast of her play to see both.

Besides Miss Hepburn, we have had a number of other important visitors during the past year including Crown Prince Hassan of Jordan (particularly interested in our Bab edh-Dhra pottery); the Syrian Ambassador, H. H. Rafic Jouejati; Carlos Ponce Sangines, Director of the National Institute of Archaeology in Bolivia; Edmund Buchner, the President of the German Archaeological Institute, Berlin; and a delegation of scholars from the USSR Academy of Sciences, as well as many more visitors from far and wide.

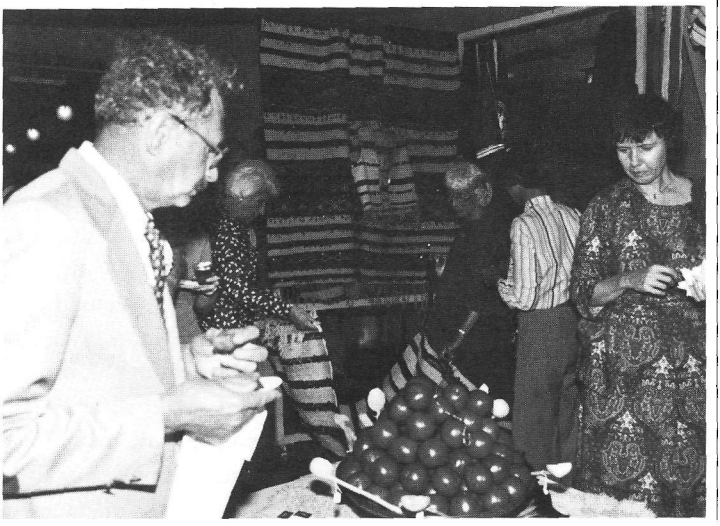
In May, we held a four-day sale of craft goods from Morocco, *From a Moroccan Market*, specially purchased for the occasion. This was a complete sell-out, most of it being bought on the opening night. This opening also coincided with a visit by the members of the Museum Stores Association, who were holding their annual meeting in Chicago, to see our own shop and museum. The past year also saw the publication of a new National Geographic publication, *Splendors of the Past,* to which many members of the Institute contributed. The Curator wrote the general introduction to the book, and many objects from the Museum collection were used to illustrate the work. The first printing was 350,000 and it should do much to publicize the Museum throughout the country. We also participated in *Art Chicago* on Navy Pier for the first time this year, in collaboration with Gretel Braidwood and the Membership office.

A continuing success has been our two Summer Lectures. Last summer, Lanny Bell talked about recent discoveries in Egypt, to a packed and enthralled audience, and Peter Daniels gave a fascinating and meticu-

lously researched lecture on the *other* Moritz collection—those objects purchased from Dr. Moritz in 1929 besides the more well-known bookbindings. This summer, William Murnane lectured on the work of the Epigraphic Survey, and Joseph Greene on his adventures surveying in Tunisia. All these lectures have been extremely well attended, demonstrating that there is an audience for this type of activity even in the heat of summer. Receptions held afterwards in the Museum garden helped to cool everyone down.

The major social event of the year was the Annual Oriental Institute Dinner held this year in support of the Museum. Thanks to the impeccable and tasteful arrangements by Gretel Braidwood, the dinner was sold out long before the event. Mayor Jane Byrne honored the event by issuing a special proclamation declaring May 10, 1982 Oriental Institute Museum Day in Chicago. For all those who attended, it was a memorable occasion at which the spirit of our founder, James Henry Breasted, was evoked, and his great achievement in creating the present Museum just fifty years ago given the credit it justly deserves.

*From a Moroccan Market.*



# The Conservation Laboratory: Technology and Conservation

*Barbara Hall*

This year's series of Members' Lectures on ancient technology, covering topics such as glassmaking, the coming of iron, mining and metallurgy, and pyrotechnology brought those in attendance up to date on the current extent of our knowledge in these areas. Although scientists and historians are able to reconstruct much in the methods and in the sequence of developments of early manufacturing processes in ancient Mesopotamia and Egypt, there are still many gaps to fill in. The information that we do have has been gathered from archaeological excavations: it is based on the study of those few objects and structures that have survived the vicissitudes of time, on Egyptian wall paintings and tomb models showing craftsmen and laborers at work, and on the few literary references to trade and manufacturing processes found in cunieform tablets and Egyptian papyrii—texts which cannot always be fully translated, and thus not completely understood.

Through the careful examination of objects prior to treatment and the choice of an appropriate conservation treatment that preserves for future study all evidence of a technological nature, the conservator can play an important role in contributing basic information to the history of technology. Before conservation, an object is examined not only to ascertain its condition but also to determine the material from which it is made and the method used to fabricate it. We want to know the wood from which a bowl or chair leg was carved, the fiber—wool or linen—from which a textile was woven, the identity of an orange residue left in a ceramic jar, the identification of an inlay—is it ivory or bone?, or the fabrication technique and composition of a bronze

*X-RAY OF A DAGGER EXCAVATED AT KHAFAJE, IRAQ, DATED TO 2700 B.C. The blade and handle are both covered with green copper corrosion products and appear to be of the same metal. The x-ray reveals large cracks within the body made of the blade and complete corrosion of the metal. The handle (also completely corroded) appears as a darker image on the x-ray and is made of silver.*

bowl—was it cast or hammered into shape? is it made from a tin bronze or an arsenical bronze? In addition, we examine the object for such things as tool or wear marks, ancient repairs, surface coatings, and traces of pigment or resin.

Identification of materials, composition, and method of fabrication frequently involves the removal of a small sample. The wood, fiber, bone and ivory, and leather samples can be examined under the microscope, and the type of tree, plant, or animal from which it comes can be identified by its structure. Metal, too, has a microstructure revealed by mounting, polishing and etching a small piece; through this structure one can tell if the metal is relatively pure or alloyed and the method used to form the artifact. In addition, a sample of both organic

and inorganic materials may be submitted for chemical analysis to determine qualitatively and quantitatively which elements are present.

There are other examination techniques used that are non-destructive and do not require removal of a sample: Ultra-violet light, infrared radiation, and x-rays penetrate in varying degrees into an object and are often indispensable for a thorough examination. X-rays are used chiefly on metal artifacts to penetrate deep into the interior through the dense layers of dirt and corrosion that obscure shape and any detail that may be present. Revealed are ancient repairs, joins between various pieces, the presence of different metals, inlays, and the extent of corrosion within the metal.

Infrared photography is useful for revealing faded markings that may remain on materials but are no longer visible to the naked eye. The photograph can record faint traces of ink or pigment that remain just below the object's surface and has been helpful in bringing out inscriptions and drawings no longer visible on papyri and stone reliefs. Ultraviolet light works on the surface of an object causing different substances to fluoresce different colors. Patches, resinous surface coatings, and the use of different materials in construction can often be seen under ultraviolet illumination.

The information gathered from the examination of objects is recorded and photographed and the objects conserved in a manner that does not alter this information. For these objects provide a record not only of man's artistic expression, but his technical achievements as well.

# The Museum Education Program

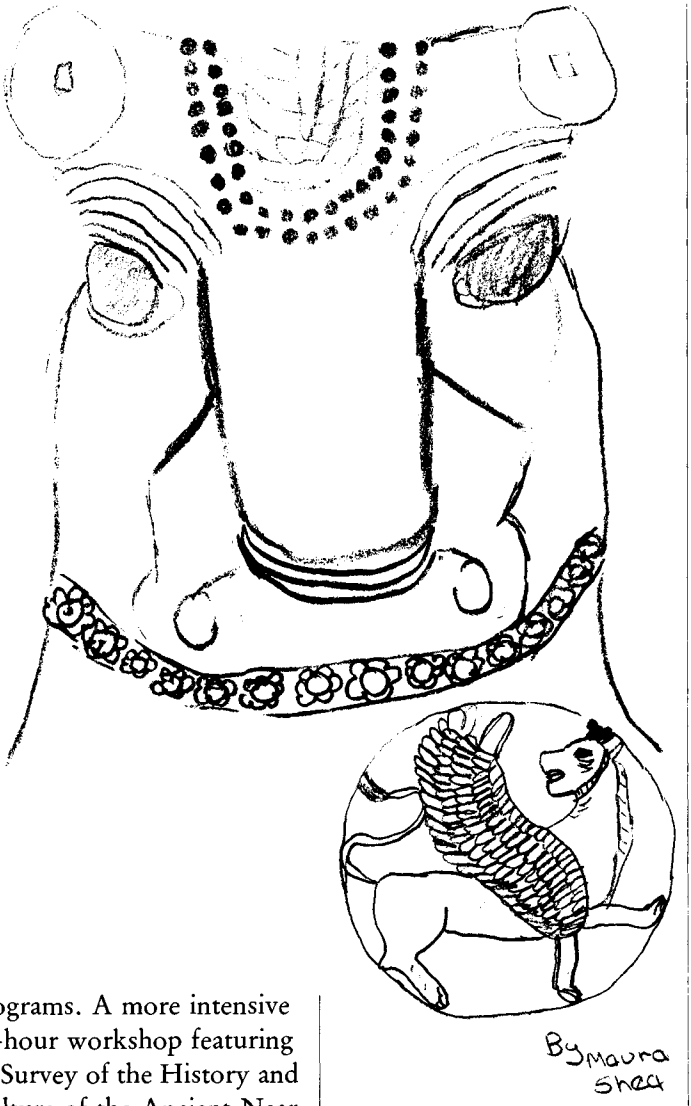
*Joan Barghusen*

The 1981–82 academic year marked the second full year of the Museum Education program, funded in part by a gift from the Women's Board of the University. It was a year of continuation and expansion of programs directed toward our primary educational goal: helping teachers and students to a finer appreciation of the Museum collection and a fuller understanding of the civilizations it represents.

With the support of a grant from the Illinois Arts Council the Advanced Level Teacher's Kit was completed in November, 1981. This manual of educational materials, designed specifically for high school teachers and students, is a companion to the Elementary Teacher's Kit developed during the previous year. Both Kits contain materials to be used at school in preparation for a visit as well as gallery guide sheets students can use at the Museum. Over 300 of these Kits have been purchased by teachers, and during the past year more than 1200 students used guide sheets from the Kits as a supplementary educational activity after their gallery tour.

Another kind of educational material piloted this year is a collection of slides with accompanying narrative that teachers can borrow to use in their classrooms. "Introduction to Mesopotamia" is the first of a series which will include cultures and topics related to the Oriental Institute collection. These will be an important resource adaptable to classes of various ages and interests and will be useful either as preparation for a visit or as an alternative for classes unable to make a Museum trip.

Workshops for teachers constitute an important part of the work of the Education Coordinator. Over the past year several workshops were given to acquaint teachers with the Museum and its educational potential and




*Drawings from a children's workshop.*

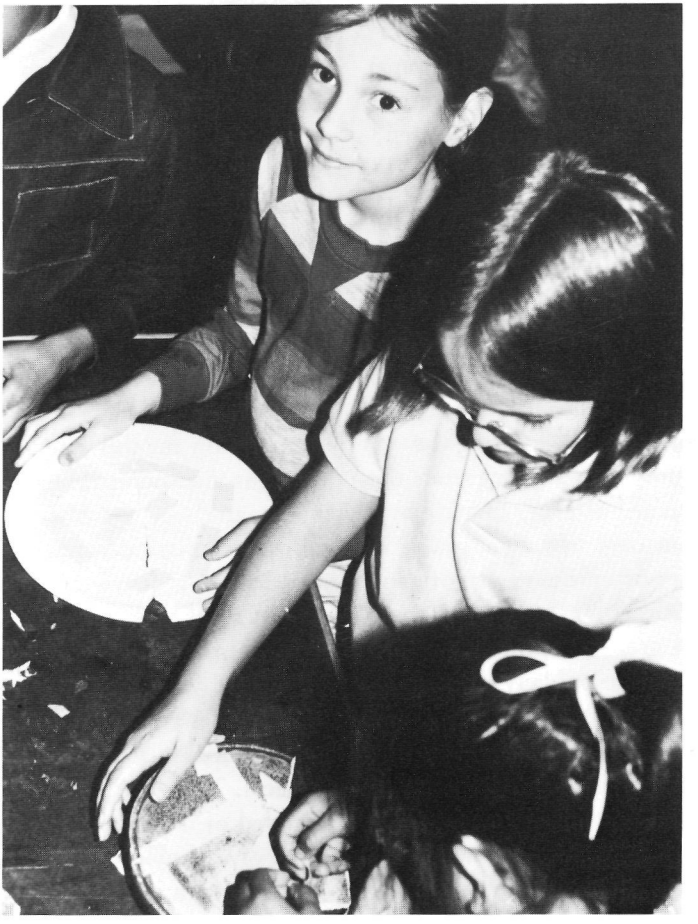
programs. A more intensive 32-hour workshop featuring a "Survey of the History and Culture of the Ancient Near East" was offered in conjunction with the Members Course of the same title, which consisted of eight 2-hour lectures by Professors Gibson, Brinkman, Kantor,

*Children's Workshop on Archaeology. This boy samples an archaeological task as he pieces together the sherds of a plate.*

Baer, Wente, and Stager. In each afternoon workshop session, open to teachers only, we discussed any questions arising from the morning lectures, surveyed the history of the culture or time period involved, and spent an hour in related gallery study. Workshop attendees included elementary school teachers,

high school art, humanities and history teachers, and two college teachers, reflecting the range of educators who use the Museum as a resource for professional growth.

The popular Saturday morning Children's Workshops were offered again in January, with the introduction of new topics in this



*Archaeology workshop. A smile of satisfaction attends completion.*

series. Each workshop includes gallery work related to the topic and student participation in a project or activity that reinforces some aspect of the gallery work. These sessions are not just educational experiences for the children who participate; they are testing grounds for the development of new educational ideas and programs for our work with teachers.

Another proving ground for new ideas is the summer program of Special Interest Gallery Tours for children, pioneered by Thursday morning docents led by captain Kitty Picken. These half-hour gallery talks focus on a topic of special interest to children and attract both occasional and regular attendees. The less fully scheduled calendar during the summer months permits the luxury of programming at our own initiative, giving us opportunities to explore with visitors a more limited topic in greater depth. The success of these publicly announced tours for children led to the scheduling of similar special interest tours for adults. Both programs, begun in Summer, 1981 are being repeated and expanded for Summer, 1982.

Educational service to the public means making the Museum available to the widest possible range of visitors, including those who are handicapped. Among the disabled, the visually handicapped are perhaps the most difficult to integrate at the Oriental Institute where none of the artifacts can be touched. As a result of two interviews taped with CRIS (Chicagoland Radio Information Services, which broadcasts on a special wave-length to handicapped persons), a blind visitor requested a tour. The visitor was offered a number of reproductions to handle at appropriate times during the tour to help him understand the descriptions and comments of the guide. While our preparation for this visit had concentrated on enabling the visitor to "see" the Museum objects through description and handling of reproductions, docent Terry Friedman reported that he was equally or more interested in her commentary on the cultures related to the objects. Thus we are reminded of the value to visitors of the well-informed volunteer teacher, whose

interpretive remarks put into historical and cultural context the objects displayed in the Museum.

As the preceding paragraph attests, the educational programs developed and instituted by the Education Coordinator are, in large part, carried out by the docents, who are the primary gallery educators. To all of them for their cooperation, invaluable ideas and perceptive comments, this office offers not only its thanks but its admiration. Special acknowledgment is extended to Jackie Bagley, Joan Bessey, Georgie Maynard, and Kitty Picken, docents who have helped with Children's and Teacher's Workshops in addition to their regular gallery duties. It is only with the continued cooperation of the docents and the Volunteer Chairman, Peggy Grant, that the work of the Education Coordinator expands and develops in its outreach to students and teachers.

# The Chicago Museum Security Seminar

*The panel for the first session of the Chicago Museum Security Seminar; our own Anita Ghaemi, special agents from the FBI and IDLE and a museum security director.*

## *Anita Ghaemi, Registrar*

Little more than a year ago I never would have imagined that my role as Registrar would include compiling in-

formation and organizing a seminar on security in museums. However, my interest in the topic was piqued late in 1980 when some objects from our collection out on loan to another institution were stolen. Circumstances dictated that I should take on the task of attempting to recover them. This pointed out all too clearly my uncertainty about how to achieve this. I began to learn something about procedures, and consequently became interested in ways to prevent theft and other security problems.

Thus when I was approached by a special agent of the Illinois Dept. of Law Enforcement specializing in art thefts to develop a network between museums and law enforcement agencies, I realized that this would be a perfect vehicle for me and other museum personnel in the same boat to find answers to specific questions, and to develop an awareness of security basics. Tim Bradley of IDLE and I arranged to have a trial meeting to test the idea and enlisted the help of Robert Spiel of the FBI. The meeting, open to all interested museum personnel in the Chicago area, was held at the Field Museum in June of 1981. Tim and Bob talked a little about their work as art theft specialists and made some suggestions on procedures. The meeting was attended by over 45 people from as far away as Milwaukee, and the discussion period indicated great enthusiasm for the idea of ongoing meetings. Thus the Chicago Museum Security Seminar was born.

The Seminar is an informal organization of museum personnel, law enforcement officials, and other interested professionals. It has the active support of at least 15 area institutions and is coordinated by myself and Tim Bradley. The group operates without a budget, but depends on alternating host institutions and volunteer time from local experts to present the programs. The topics are chosen based on requests from the local museum community and cover a wide area of broadly defined security concerns.

Six sessions, arranged for last year, were devoted to art thefts, legal questions for museum administrators (reward policies, questioning of

suspects, etc.), emergency planning, alarms, and security considerations for exhibit design. Sessions on guard training, conservation of collections, security considerations for loans and collections policies are being scheduled for the coming year. We also maintain a list of resource people and institutions in the area, and have made contacts with various civil service and government departments for advice and information. Even at this early date we have been able to make referrals and provide information on specific problems, and the cooperation between the various institutions, including universities, museums, historical societies, rare book libraries and other non-profit organizations with valuable collections has become a reality. Our law enforcement people have been able to go to the appropriate curatorial staff to help identify stolen art and have learned more about the special problems of museum security.

The Chicago Museum Security Seminar was listed as a resource group on a recent list done by the Training Office of Protection Services of the Smithsonian Institution, which has been most cooperative in providing us with bibliographies and materials. Our work also generated sufficient interest for a representative from the International Foundation for Art Research to come from New York to discuss the way we organized our group, with the idea of beginning a similar group in New York City. She also requested that we write an article for *Stolen Art Alert.* This will probably be completed early in the fall. Also partly through our efforts, interest has been generated in a new program of the Art Institute to train museum guards for which the Dept. of Protection Services there has just recently received certification from the state. This training will be made available to area museums.

# Photographic Laboratory

## *Jean Grant*

A long-awaited item is on sale right now! For only $3.75 plus $1.45 to cover the cost of shipping, the Suq will send you the new Oriental Institute Guidebook. It contains but a small representation of the work done in the past year in the Photo Lab. The pictures that were published, you see, are only the visible portion of the large amount of photography done for the guidebook. Although the guidebook was a proportionally larger part of the year's work in the Photo Lab, it was by no means all.

During the past year the Museum required several large photography projects: the costumes which went on loan to Tulsa (we did about 35-4x5 B&W negs, 175 prints, and hundreds of 35mm slides), Peter Daniels' membership lecture on the Moritz collection (thanks to Joe Denov and Barbara Hall all the necessary slides got to Breasted Hall on time), The Heritage of Islam loan (6 bookbindings required 77-8x10 prints, 12 B&W negs, and 37-4x5 transparencies, and this work does not include the foundation stone that was requested and photographed, but finally not sent), three items loaned to the Jewish Museum and all the Islamic bookbindings (in 35mm color slides) after they came from display (which was certainly a major job in itself).

On short notice (no time to clean their desks), we had to ask the scholars who were represented in the "Publishing the Past" exhibit to pose for pictures to be used in the exhibit's audio/visual unit.

Now is a good time (as is any time) to give my volunteers a public mention of gratitude. Joe Denov—thank you very much for your inspiration and your perspiration! The guidebook photography was a project which couldn't have been done without you, or at least the amount of the work completed would have been much less. Together we sweated over the "needed" list, it seemed that either the list was

too long or too little time was allotted to do it.

Major photography such as the above certainly benefits the museum and its archives, but when *the* one person in the photo lab is doing museum photography work, the outside photo requests get delayed—often for weeks and sometimes months. To those people I can only apologize. My thanks to John Larson, our museum archivist, who did his best to fill print needs from our files. He and Sam Wolff (Museum Assistant) delivered and picked up photo orders at an outside lab. Thanks to you both and to John Carswell, Museum Curator, who suggested that they do it; this kept the load off our backs while we worked on the guidebook.

But museum photography often requires many people—sometimes all the staff gets involved because objects are involved. I need the Registrar, Anita Ghaemi, who has to keep track of the object. Along with one of the preparators we set a time when the museum is closed, then they gather up gloves, padding, cart, props, cards, etc., and we all can then proceed to get an object out of the museum. The Conservator, Barbara Hall, may discover that something needs her attention, or Anita or I may notice something and ask her about it. All of this can increase the time the object is out of the case in the museum. Meanwhile, the docents are counting almost every minute it is missing for their lectures. (Naturally most, if not all, of the objects chosen by the Curator, John Carswell, were those which should be of interest to many.) The Archivist, John Larson, has also often helped at these times. Being a small organization with very few extra helpers, the available staff has to be willing to help when a job calls for several hands and the proper hands are busy. So you can say the photography was a team effort even if just Joe Denov and I took the pictures, and Joe delivered the film to the processor.

And did we take pictures! In 4x5 format we took B&W and color transparencies (not only one view of an object but as many as we thought needed) and were aided by previewing some of them on a Polaroid. A single view is

very seldom a good record photographically of an object. We also want to show the condition of the artifact. It is easier on the object to do all the photography at once because the more often it gets moved the more likely it is that something will happen. At the time, it is more work for the Photo Lab, but, we hope, easier on the object in the long run. Besides, Murphy's Law says that the angle that doesn't get photographed will very shortly be requested by someone.

We also moved a lot of lighting equipment around the museum—mostly on Mondays when the museum is closed. Unfortunately, our equipment is of limited quality and we are not equipped for such heavy work. So we panicked a little when two main lamps burned up in short succession, when the Polaroid holder broke a screw, and when our film order was long overdue—to mention a few of the "frantic" moments. Does anyone know where we can get any Hollywood studio donations?

There was only one easy photograph in the guidebook that I can recall, the fish palettes on page 22, figure 10. (Horus on the opposite page still needs his picture redone!) The photo that gave us the most trouble isn't even an artifact—it's a painting (page 72). We had to shoot it three times. The first time we tried, the canvas was wrinkled and the wrinkles showed. After being cleaned, conserved and revarnished by Barbara Hall, the canvas picked up a glare on our second try. The third time was OK! One photo we thought would be easy to shoot was the Megiddo capital (page 122, figure 56), but the simple light necessary for shooting it to best advantage made it the same color as the wall, so we had to put up a lot of cardboard to shade the wall and make it darker. Then they went and outlined it in the guidebook anyway. You can't win!

Well, I could go on about the guidebook photography (we hope to, as there is still more on the list to do), but I'll give you "the bottom line" (it *really* is because I added them up). The Museum Archive will get, as of today, new photography of 55 objects (plus a group of Persepolis sherds) and 12

Museum installations. This adds up to approximately 206 views on 420 B&W 4x5 negs and 325 color transparencies, also in 4x5 format. The burden of what to do with them in the Museum office will then be on John Larson (his next year's report?). We hope to make 35mm duplicates from those transparencies (watch this space for our report next year).

The Photo Lab was also fortunate to have other willing and talented hands this past year. We had our first intern; Sally Teisman spent the fall term with us on a work-study program from Calvin College in Grand Rapids, Michigan. Chris Bragg, a second-year student, had his work-study time cut back to nine hours a week, but he still made good progress on collating hundreds of tablet photos. He left for us this summer a master list to check everything by and a large portion of the completed prints put into notebooks.

We'd like to leave you this year with another mention of the guidebook. The boat, page 37, figure 24, is a good example of what the Photo Lab wants to do in the year to come. Make small waves, but mostly model photography!

# Courtyard Garden

## *Jean Grant*

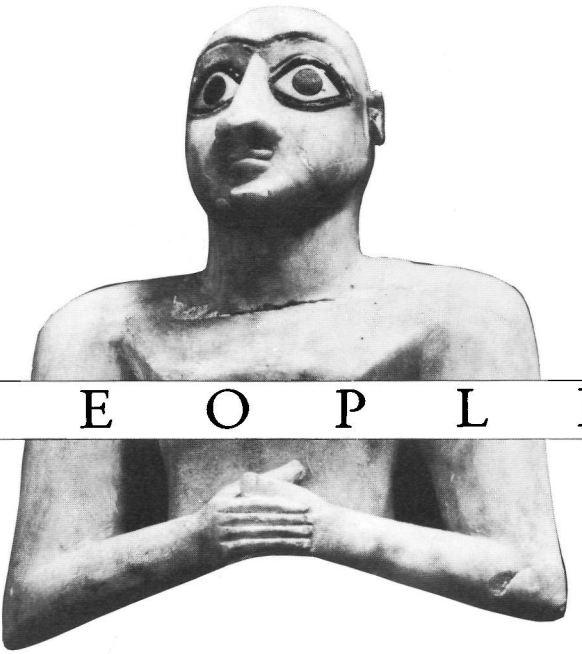
*Paradise is a beautiful garden*—The word paradise is of Persian origin (enclosure plus wall) and has come to have the meaning of heaven, happiness, and a beautiful garden, among others. And you know where the first home in the Bible was located. Perhaps we are justified in thinking of the Oriental Institute's courtyard garden as a living artifact.

Increasingly, the garden is being pressed into service as a gracious reception area. Many saw it at the membership dinner in May (behaving its best), or on the Hyde Park Garden Walk, or at the many other functions for which it has been open. A picture of it


*View of the courtyard garden, ankh made by Calvin Gray.*

appeared in February in the Talman Savings calendar.

We should like to thank Mr. Clem Studebaker for his encouragement and financial support of the improvement of the garden, in memory of his wife, Frances (an Oriental Institute Volunteer from 1966 to 1979). Two new benches have been made and two more are planned, thanks to Mr. Studebaker. Stoop-labor has been contributed by a volunteer corps consisting of Jean Luther, Pam Bruton, Liz Garner, Cathy Chilewski, and Chris Bragg.



P E O P L E

# Membership Program

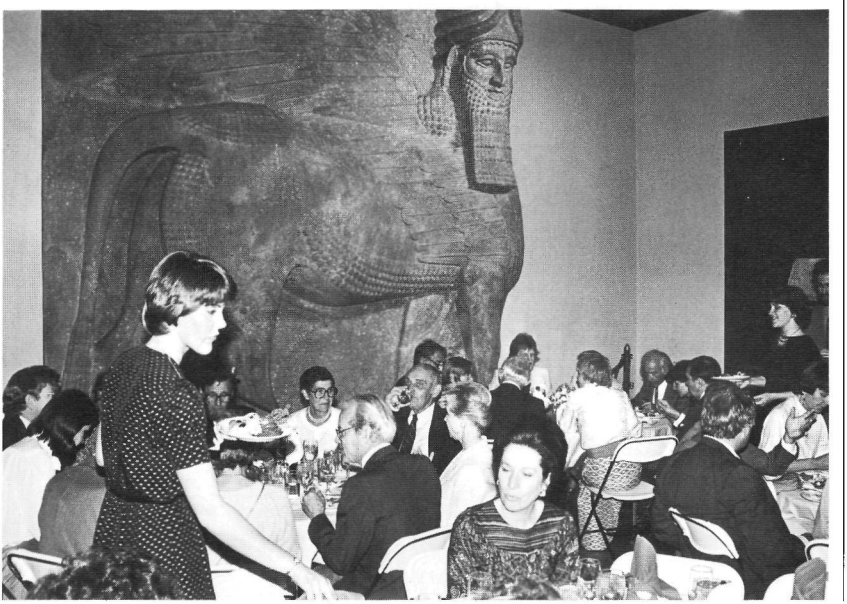
*Gretel Braidwood*

The Membership program at the Oriental Institute has several functions. It provides members with information about the growth of human civilization in the ancient Near East through our newsletter, educational programs, lecture series, and tour programs. In addition, members are kept informed of the latest discoveries on our excavations in the field and the activities of our research, publication, and museum programs here at the Institute. The Membership Office also receives contributions from members and friends and funnels them on to assist in the support of the Institute and the wide diversity of programs it sponsors.

The Membership Office went through many changes this year. Eugene Cruz-Uribe went back to his graduate studies full time. Susan Smith took over the post of Membership Secretary in the summer only to

find her husband had obtained a faculty position in Texas. In December I became the new Membership Secretary. Throughout this period we had the stabilizing influence of Malinda Winans, as well as the invaluable input of Albert Haas. I am grateful, also, to my new volunteer, Helen Glennon. At the beginning of 1982 we were finally, and unfortunately, forced by a doubling of our postage costs into increasing the annual membership gift from $15 to $20. Not unexpectedly, there seems to have been no increase in the speed of delivery concomitant with the postal increase.

*Two views of the May dinner to celebrate the 50th anniversary of the museum.*



The *News and Notes* continued, due to the fine editorship of Elda Maynard, to make a monthly appearance. A new feature is a monthly Suq offering.

The Saturday morning education program for members was active and varied this year. In the fall we had a course on Cyprus and one on Nubia and the Sudan. In winter quarter people studied Biblical Hebrew, Mesopotamian Narrative Poetry, and Introductory Hieroglyphs. The spring quarter saw our classroom facilities overloaded with continuations of Biblical Hebrew, Egyptian Hieroglyphs, and Nubia and the Sudan. In addition we offered a combination Members' course, Docent training course and teacher training course on the History and Culture of the Ancient Near East which had an overwhelming response. The Summer of 1982 brought courses on the Life of Common People in Egypt, The Sea Peoples, and Introductory Hieroglyphs. An innovation in courses this year was a hieroglyphs-by-mail course which proved so popular we had to run several sections. I am working now on ways to offer more courses by mail.

The theme of this year's lecture series was the Technology of the Near East.

The opening lecture in October, "Managing Uncertainties in the Control of Water—the Case of Mesopotamia" was presented in Mandel Hall by the Institute's new director, Robert McCormick Adams. This talk was preceded by a dinner at the Quadrangle Club and followed by a festive reception in the Museum. The nine other lectures in the Members' series touched on ancient glassmaking, the coming of iron, pyrotechnology, pottery and porcelain, the development of mining and metallurgy, and preserving evidence of ancient technology; as well as archaeological talks on Marlik, Afghanistan, and Nippur. A simple reception followed each of these lectures in the Museum's Egyptian hall to allow students, faculty, and members a chance to chat with the speakers.

Eighteen people went on a three week tour to Egypt in February, led by John Larson. A nice mix of the young and not quite so young, it even included three generations of one family—and a good time was had by all.

We were given the opportunity this year to have a booth at ART 1982 CHICAGO, a major international art fair held on Navy Pier in May. A joint effort with the Museum and the Volunteer Program, it was enjoyed by all and offered us the opportunity to present information about the Institute and its programs to the approximately 50,000 people attending.

The spring was culminated by the annual dinner, this year celebrating the 50th anniversary of the opening of the Museum in this building. A record number of people enjoyed cocktails in the garden, dinner with the Egyptians and Assyrians, and a delightful program dealing with the history of the Museum and featuring segments of James Breasted's 1932 film "The Human Adventure."

# The Volunteer Guide Program

## *Peggy Grant*

The Volunteer Guide Program is responsible for the recruiting, training and scheduling of docents, all of whom are Oriental Institute members, who lead tours through the galleries or who act as sales people in the Suq on weekdays. The Suq Docents and the Museum Docents meet monthly for Docent Day programs to increase their knowledge of the ancient Near East, to broaden their understanding of the objects in our galleries and to learn how better to interpret these objects to our public.

Our Docent Day speakers have included Professor William Pattison, Professor Larry Stager, Ph.D. candidates Peter Piccione and Elizabeth Bloch; Joan Barghusen, Education Coordinator; Gerda Frank at the Field Museum; John Larson, Museum Archivist; Lilian Cropsey, docent; Carolyn Livingood and Peggy Grant.

Each month a newsletter is xeroxed and circulated with articles relevant to our work. Elda Maynard, *News and Notes* editor and guiding light of the Docent Digest, wrote three articles on Canaan (which won first prize in the special articles category at the Illinois Women's Press Association) as well as a review of *The Sea Peoples* by N. K. Sanders; Joan Barghusen discussed "Technology in the Ancient Near East"; Docent Lilian Cropsey wrote on cylinder seals; Frank Yurco interpreted an Egyptian depiction of the Israelites; Docent Dianne Haines contributed an article on "The Nomads of Palestine"; Docent Joan Rosenberg reviewed *Ancient Egyptian Magic* by Briar; and the final issues of the academic year contained a four-part invaluable series by our founder, Carolyn Livingood, on "A Chronological Discussion of Egyptian History with New Interpretations in Light of Recent Archaeological Discoveries."

The Docent Captains are the backbone of the Docent program. Their guidance and suggestions keep the program

functioning smoothly. We thank them:

Tuesday morning
Marsha Holden
Tuesday afternoon
Terry Friedman
Wednesday morning
Jane Imberman
Wednesday afternoon
Muriel Nerad
Thursday morning
Kitty Picken
Thursday afternoon
Elizabeth Spiegel
Friday morning
Gloria Orwin
Friday afternoon
Milton Droege
Saturday
Calla Burhoe
Sunday
Teresa Hintzke
Bud Haas
Jim Bailey

At the Docent December holiday buffet, the following docents were given pins, a very small token of the great gratitude of the Museum for five years of service:
Mary Jo Khuri
Georgie Maynard
Rochelle Rossin
Mary Schulman
Shirley Jean Anderson
Teddy Buddington
Mary d'Ouville
Milton Droege

The Spring Training Program for new docents was held on 8 Saturdays. A Members' course, *The History and Culture of the Ancient Near East,* featured lectures by Oriental Institute Professors McGuire Gibson, John Brinkman, Helene Kantor, Klaus Baer, Edward Wente and Larry Stager and was the basis of the docents' training. The lectures were supplemented by reading, gallery study and gallery workshops to which Jill Maher, former Docent Chairman, contributed her expertise. A new docent kit was assembled based on the recently published Advanced Level Teacher's Kit by Joan Barghusen. We welcome the spring class to the ranks of the regular docents:

Elaine Antoniuk
Alice Brookner
Cathy Dombrowski
Margaret Foorman
Helen Glennon
Cora Graessle
Charles Graham
Peter Hancon
Dennis Kopaz
James Meany
Lisa Mims
Joan Mitchell
Beverly Pollock
Stephen Ritzel

Daila Shefner
Fred Swanson
Lynn Taylor
Christina Vernor

In addition to all the people mentioned above, we want to thank all the docents for their contributions of time and talent. A special vote of thanks to Myrna Simon, Museum Secretary, who makes all the tour appointments and notifies captains of last minute changes. We are grateful for the support and encouragement of the Director of the Oriental Institute, Robert McC. Adams and of our Curator, John Carswell, and of the entire Museum staff.

The year's activities ended with a June picnic in Docent Debbie Aliber's garden.

*Regularly Scheduled Museum Docents*
Shirley Jean Anderson
Deborah Aliber
Jacqueline Bagley
Jim Bailey
Joan Bessey
Dorothy Blindt
Ann Blomstrom
Teddy Buddington
Calla Burhoe
Catherine Chilewski
Anne Conway
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Sylvia Easton
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Terry Friedman
Anita Greenberg
Sally Grunsfeld
Dianne Haines
Bud Haas
Janet Helman
Teresa Hintzke
Marsha Holden
Jane Imberman
Mary Jo Khuri
Katherine Kimball
Brian Kiniry
Erhard Loewinsohn
Georgie Maynard
Dorothy Mozinski
Gloria Orwin
Muriel Nerad
Kitty Picken
Rita Picken
Jo Ann Putz
Jean Robertson
Joan Rosenberg
Janet Russell
Mary Shea
Elizabeth Spiegel
Lexie Spurlock
Oliver Szilagyi
Rosalinde Vorne
Mary Walton

*Part Time Museum Docents*
Betty Baum
Ida dePencier
Barbara Frey
Mimi Futransky
Lita Gaber
Nancy Gerson
Carol Green
Cissy Haas
Janet Hurwich
Jill Maher
Alice Mulberry
Bettee Miller

*Regularly Scheduled Suq Docents*
Maria Ahlstrom
Muriel Brauer
Leonard Byman
Evelyn Dyba
Andrea Freedman
Carol Goldstein
Diane Grodzins
Peggy Kovacs
Beverly Pollock
Rochelle Rossin
Mary Schulman
Daila Shefner
Eleanor Swift
Florence Teegarden
Mardi Trosman
Norma van der Meulen
Barbara Watson

*Part Time Suq Docents*
Patricia Hellman
Barbara Frey
Carol Green
Jo Jackson
Mary Schloerb

*Suq Volunteers in Office and Stockroom*
Eleanor Swift
Kay Ginther
Andrea Freedman

*Volunteers in the Museum Registrar's Office*
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Diane Grodzins
Georgie Maynard
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Daila Shefner
Oliver Szilagyi
Marsha Watt
Peggy Wick

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*Assistant to Professor Helene Kantor*
Carolyn Livingood

*Ceramic Restoration*
Betty Tieken

# The Suq

## *Denise Browning*

This has been a very successful and eventful year for the Suq. Our total receipts this year were $139,100.66 with our busiest month being December. Our net sales for the month of December were $21,567.62, almost $6,000 more than last year.

May, however, was our most eventful month. At that time we undertook a small renovation which incorporated the closet area into the Suq, increasing our square footage by almost 36 square feet, giving us a total of 346 square feet. The same month we were joint hosts for the annual meeting of the Museum Store Association which was held for the first time in Chicago. There were 381 delegates, from almost every state, including Hawaii, involved in a week full of meetings and seminars on such topics as sales analysis, museum codes of ethics, and merchandising. All of the delegates were invited to the opening of our Moroccan Suq, which opened the day after our membership dinner. John and Peggy Carswell had shopped the markets of Morocco to bring back all sorts of handmade items from brass mirrors to Moroccan rugs. We created our own Moroccan Suq in the lobby of the Museum. It was a great success! Everyone was in the spirit, and when a price tag occasionally was misplaced, bargaining could be heard at the cash register. But you had to be quick for almost everything was sold within a

*Ready for the opening of the Moroccan Suq.*

few hours. It must have been a record for the number of sales in the shortest amount of time. Throughout all this, I had the invaluable help of my employees Jack Kish, Florence Ovadia, Barbara Storms, and Rita Joyce. Everyone had so much fun that we are trying to convince Mr. Carswell to buy out the suqs of Turkey when he is there this fall so that we can have our own Turkish Suq.

There were several new

items developed for the Suq this year. One was a delicious chocolate mint in the shape of the Achaemenid roundel, made especially for the Oriental Institute by Harbor Sweets of Marblehead, Massachusetts. The first mold was carved by hand from wood, then a plastic mold was made from the wooden one. The mint is made of dark-sweet chocolate, to rival the best of Europe, and oil of peppermint.

Also developed this year was a Middle Egyptian necklace, the original of which is on display in the Museum. It is a simple strand of carnelian, garnet, and amethyst. Leslie Meyer is currently working on a necklace to be made from one of our cylinder seals, of solid silver, which hopefully will be ready in time for Christmas.

The success of the Suq is due to the volunteers. It is their informative and courteous attitude to our customers which actually makes all of those sales. They give of their time and what occasionally seems unlimited energy and patience to deal with what at times is a very unappreciative customer. There are few places left that still offer the services to the customer we do.

My hat goes off to Rochelle Rossin, Carol Goldstein, Andrea Freedman, Mardi Trosman, Florence Teegarden, Muriel Brauer, Beverly Pollock, Eleanor Swift, Evelyn Dyba, Diane Grodzins, Daila Shefner, Carol Green, Mary Schulman, Barbara Watson, Leonard Byman, Peggy Kovacs, Norma van der Meulen, Ria Ahlstrom, and Jo Jackson; with an extra special thanks to Eleanor Swift and Peggy Grant for their extra help far beyond the call of duty.

# The Chester D. Tripp Endowment Fund

Under the terms of the will of Mr. Tripp, who died in 1974, an endowment fund was established to support the programs of the Oriental Institute. During 1981–82, income from the fund helped support the following activities and projects:

- creation of a research laboratory space in the basement for the study and processing of artifacts by both faculty and students
- payment of wages for the Nippur site guard
- erection of a 23′ long wire mesh partition for the basement, part of increased building security
- installation of the new electronic security system for the Research Archive
- painting and remodeling of the student lounge

# The Maurice D. and Lois B. Schwartz Endowment Fund

This past year the income from the Schwartz Endowment underwrote:

- the erection of Museum directory-signboards outside the front door of the Institute at 58th and University Avenue and at the corner of 58th and Woodlawn
- travel and housing expenses for participants in the Islamic Bookbinding Symposium and exhibit opening
- preparation of the manuscript for the Oromo Dictionary

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*Deceased: March 27, 1982

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We are very grateful, also, to our 2000 annual members, a loyal following from every state in the Union and many countries abroad. Because of their great number and the ballooning cost of printing, we are not listing their names this year. However, we are deeply indebted to them for their contributions.

# Oriental Institute Staff 1981–82

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# Oriental Institute Membership Fund for Unrestricted Purposes

| | | |
|---|---|---|
| Balance July 1, 1981 | $5,469.59 | $5,469.59 |
| *Income:* July 1, 1981–June 30, 1982 | | |
| Members' dues | $69,830.50 | |
| Members' course fees | $12,208.27 | |
| Opening dinner receipts | $1,240.00 | |
| Total | $83,278.77 | $88,748.36 |
| *Expenditures:* July 1, 1981–June 30, 1982 | | |
| Salaries | $31,100.94 | |
| Publications: *Annual Report, News & Notes,* etc. | $22,350.55 | |
| Publicity and promotion | $581.35 | |
| Opening lecture, dinner and reception | $4,967.88 | |
| Lecture program | $7,079.66 | |
| Members' courses | $8,739.57 | |
| Postage | $6,414.24 | |
| Office supplies, equipment and operational expenses | $2,631.05 | |
| TOTAL | $83,865.24 | $83,865.24 |
| Balance June 30, 1982 | | $4,883.12 |

The contributions of its members help the Oriental Institute to maintain expeditions in the field and to continue its research, publication and museum programs here at home. Apart from a sense of sharing in a significant enterprise, membership offers certain privileges. Members are invited to a series of lectures by prominent scholars in the field of the ancient Near East. They may also enroll in any of a number of special Saturday morning classes offered by the Institute on the culture, language, history and archaeology of the Near East. The monthly *News and Notes* describing the work of the staff and events of related interest, is distributed confidentially to members along with the yearly *Annual Report*. Members receive a 10% discount in the Institute's Museum shop, *The Suq*, and may purchase official Oriental Institute publications at discount through the Publication Sales Office. During their travels in the Near East members are welcome, with prior notice, to visit the sites of Oriental Institute excavations, and they may also take archaeological tours sponsored by the Oriental Institute.

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| Annual Membership | $20 |
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