

## OI NEWSLETTER - FIRST MONDAY - APRIL 1999

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### **INDIVIDUALS**

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HARRY HOFFNER
CLEMENS REICHEL
MATTHEW W. STOLPER

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### COMPUTER LAB / John Sanders

Thanks to the help of five Docent volunteers (Peggy Grant, Irene Glasner, Karen Terras, Nancy Gould, and Lyla Bradley) the photographic archive called Persepolis and Ancient Iran, 957 photos taken from the 1976 University of Chicago Press microfiche publication of the same name is on-line. Next, we will start the task of tying the appropriate photos into the Achaemenid Royal Inscriptions (ARI) database on our WWW server and processing additional photos of the trilingual inscriptions that form the basis of the ARI searchable database.

Another Docent volunteer, Irv Diamond, has completed the scanning and markup for a similar photographic catalog, the 1905-1907 Breasted Expeditions to Egypt and the Sudan. This catalog of PHOTO CAPTIONS ONLY will include all 1100 images from the 1975

University of Chicago Press microfiche publication of the same name. At some future date still to be determined we will scan these 1100 photos and make the pictures available via the OI website.

We started the preliminary office and storage shuffling that must preced the electrical and network wiring for the new Public Computer Room, Rm. 202, and the new Server Room of the Computer Laboratory. I hope that all will be in place by the end of the spring quarter. Hey hey!!!

We started to perform the Y2K operating system updates on the Institute's 4 unix computers in March. One is done, three to go before Dec. 31.

REINSTALLATION: The Sara Lee Corporation awarded a \$100,000 gift to the Oriental Institute Museum Reinstallation project. A gift of this size from a company of that local stature will go a long way to encouraging other local concerns to support the project.

DEFERRED GIFTS: David and Carlotta Maher have made a major deferred gift in honor of Professor McGuire Gibson. The gift will create an endowment, the income of which will be used for fieldwork, analysis, and publication in Mesopotamian Archaeology at the Oriental Institute. Longtime docent Elizabeth (Betty) Baum has made a major deferred gift to the Oriental Institute, purpose unrestricted. Both the Mahers and Betty chose to establish Charitable Gift Annuities (CGAs), which combine the virtues, for donors, of a charitable contribution (and attendant tax benefits) and an income during their lifetimes, while ensuring that the entire amount of the gift will ultimately come to the Institute. I am always happy to discuss a CGA with donors--please give any interested parties my phone number. Many thanks to David, Carlotta, and Betty.

EGYPTIAN GALLERY OPENING: Plans are continuing for members' and donors' events in connection with the opening of the Egyptian Gallery. Full details will appear in the Summer News & Notes, which will be published a bit early to get that info to people on time.

MEMBERSHIP PROGRAM: Through March 29, 1999, FY99 membership gifts (at the Basic and Associate Levels) were up 6.5% (in number) and 12% (in dollars) over the same period in FY98.

VISITING COMMITTEE MEETING: The Oriental Institute Visiting Committee met on March 11, 1999 at the University Club. Mac Gibson gave a talk on working in Yemen and introduced many members to the wonders of this under-explored area.

VISITING COMMITTEE NEWS: Elizabeth (Betsy) Gebhard will resign from the OI Visiting Committee effective June 30, 1999. Betsy plans to spend most of her time in Scotland and so will not be able to be as active as she has been in the past. We thank Betsy for her decade of service to the Visiting Committee.

Henrietta (Hank) Herbolsheimer, a Visiting Committee member since 1994 and a longtime Institute member, passed away after a brief illness on March 22, 1999. Hank was a remarkable woman, and we will miss her.

UPCOMING EVENTS: Faculty and students and staff are reminded of two lectures in April: On April 7, Mac Gibson will lecture on Yemen, and on April 21, Traianos Gagos will speak on the 6th-century carbonized papyri. Both lectures are at 8:00 in Breasted Hall.

We anticipate the return of first page proofs for Garrison/Root "Persepolis Seals and Sealings" (OIP 117) sometime in April. In the meantime, work continues on the Wente Festschrift (SAOC 58); ten of the forty-two articles are prepared in first page proofs for the editors (Teeter/Larson) to review -- already over 120 pages -- after which the articles will be sent to the authors for final checking. Joan Curry is helping us by reading some of articles.

During the coming weeks we will begin the preliminary steps in the renovation and upgrading of the lighting, electrical, and computer network wiring and cork floor restoration in the Morse Genius

Reading Room. Through the University's Facilities Services
Department we have engaged the architectural firm of Vasilko,
Mackin, Cheng to design and supervise the project. They are
specialists in lighting and restoration work and have extensive
experience on campus, having done the Reynolds Club, Swift Hall, and
Harper Tower renovations. We hope to be able to complete much of
this project by next autumn and expect to have minimal
interruptions of service. I will pass along information on schedules
as soon as I can.

As most of you know, we no longer acquire copies of dissertations from University Microfilms in hard copy. We now have them in electronic form. During the past year we have collected one hundred and nine titles in this form. They are currently available on three CD-ROMs (ask for them in the office). UMI distributes dissertations in electronic form free of charge, and acquiring them in this form has saved us about four thousand dollars and thirteen feet of shelf space in the past year. I will be glad to send a list of titles (by e-mail or printed) to anyone who wants one. I will also advise on the procedure for connecting to UMI if you wish to have copies of your own.

At the end of the month the library staff began the long awaited reorganization of the upper level of the Research Archives. This will proceed during the spring.

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# BIR UMM FAWAKHIR PROJECT / Carol Meyer

Extract from report to the Supreme Council of Antiquities by the Bir Umm Fawakhir Project.

## Introduction

The Bir Umm Fawakhir Project of the Oriental Institute of the University of Chicago is pleased to report the successful completion of its fifth season of field work and the first season of excavations at the site of Bir Umm Fawakhir in the central Eastern Desert near the Wadi Hammamat. Work began on February 6, excavations were

completed on the 28th, and backfilling, documentation, and registration were finished on March 3.

The staff consisted of Carol Meyer, field director; Henry Cowherd, photographer; Richard Jaeschke, conservator; Clare Leader, archaeologist; Mohamed Badr el-Din Omar, geologist; Thomas Roby, architectural conservator; Wail Karam and Ayman Hindawa, inspectors; and Abd el-Jalil Mohamed Samir, driver. construction was carried out by El-Mohandes for Construction by Girges Samwel, Eng. As usual, thanks are due to many people: Dr. Gene Gragg, Director, John Sanders, Michele Wong, and Donald Whitcomb of the Oriental Institute; Dr. Gaballa Ali Gaballa, Dr. Mohammed Sughair, and Mohammed Nasr of the Supreme Council of Antiquities; the Egyptian Geological Survey and Mining Authority; Robert K. Vincent, Cynthia Schartzer, and Jaroslaw Dobrowolski of the Egyptian Antiquities Project; Mark Easton and above all Amira Khattab of the American Research Center in Egypt; Worldwide Chain Store Systems; Dr. W. Raymond Johnson, Ahmad Harfoush, Sue Lezon, Yarko Kobylecky, and especially Tina di Cerbo of Chicago House. Support for the project was provided by the National Geographic Society, the Egyptian Antiquities Project, Catherine Novotny-Brehm, Pennzoil, Mr. and Mrs. H. I. Meyer, Dr. Robert K. Smither, Albert Haas, Diana Grodzins, and Leila Foster.

Previous surveys of the site of Bir Umm Fawakhir in 1992, 1993, 1996, and 1997 completed a detailed map of all 237 buildings in the main settlement and most of the buildings in Outlier 2, identified fourteen outlying clusters of ruins of the same date as the main settlement, produced a pottery corpus, and carried out studies of the background history of the site, local geology, and ancient mining and ore reduction technology. Walking surveys of the vicinity have identified peripheral features such as cemeteries, paths and roads, wells, guardposts, minor granite quarries, and above all ancient mines. The site can now be identified as a 5th - 6th century Coptic/Byzantine gold-mining town and not a Roman caravan station as it was long called (though there is evidence of Roman and pharaonic activity in the area). The population of the main settlement is currently estimated at a little over a thousand, far larger than any modern community in the vicinity.

Work began on February 6, 1999 with an inspection of the site and final selection of areas for excavation, mapping some of the surrounding topography, and sketching some of the buildings in

Outlier 2. In all, the project excavated two houses (Buildings 93 and 177), two dumps adjacent to B93, and a one-room outbuilding (Building 181), and constructed a barricade to prevent vehicles from driving up the main street of the ancient town. These are the first legal excavations ever undertaken at Bir Umm Fawakhir and the first at any ancient Egyptian gold-mining town. The only other excavated towns of this period are Jeme, removed to clear the temple of Medinet Habu, and Oxyrhynchus, from which little but the papyri was recovered. Bir Umm Fawakhir therefore is a rare opportunity to study an entire ancient workmen's town building by building, plus outlying features.

# Building 93

Building 93, consisting of five rooms, a corridor and two enclosures, was selected for excavation because of its fine state of preservation and the presence of two large sherd dumps to the north and south. Since Bir Umm Fawakhir is basically a one-period site whose deposits have not been reworked and redeposited, the material in the dumps most likely originated in the nearest houses. The houses themselves are relatively clean, but the dumps and houses together represent a rather special archaeological opportunity to investigate a given house and its probable former contents.

Clare Leader supervised the excavation of Building 93. Work began in Room B at the end of Corridor A. The room measures 3 by approximately 2.6 meters; it is irregular like most rooms at Bir Umm Fawakhir. The walls stand as much as 1.6 meters high and are dry stone masonry like all the ancient construction at the site. The north and east walls had built-in niches, a common feature in the houses. Bedrock under Room B lay close to the surface at the eastern side where the house backed up against the cliff but dipped sharply to the west. Floor levels therefore may also have dipped somewhat towards the west. An iron ladle was recovered lying flat and face down in Locus 3, and near it a broken amphora appears to have been set into the floor. The bottom was definitely missing and the top may have been knocked off in antiquity as well in order to make a drain or perhaps a heating installation.

Only the eastern end of Corridor A was excavated in order not to block working access to Room C. A threshold and step down into Room B were cleared, and floor level in the corridor is a thick brown, matted layer with much organic debris. Below the floor a large

number of bones were recovered, some of them articulated. Finds in the corridor include half a gold-copper alloy bracelet and four emeralds. The latter, like the others recovered elsewhere from the excavations, are unworked crystals or lumps of crystals. Only the northern half of Room C (3.3 by approximately 4.6 m) was excavated; the southern half was full of stones tumbled from the walls, which might have collapsed had the tumble been removed. The extreme northwest corner was also not excavated, for similar reasons. partition wall that ran from north to south across Room C was only preserved about two stones high and represents a late addition. most interesting feature was a well-built bin against the north wall with a narrow opening to the east. It was filled with fine sand and silt with a little charcoal and flat-lying stones at the bottom; what it contained therefore remains undetermined. A broken, small amphora appears to have been set upside down into a floor level, and towards the middle of the room on another floor level, an intact, large bowl rested upside down. It proved to have nothing under it but a bit of white powder, which was collected for future analysis. In addition, two coins, an agate bezel or inlay stone, and a possible stone pestle were recovered from Room C. A small bit of copper alloy on cleaning proved to be a Bes amulet, this in a presumably Christian community. Only six coins in all were recovered during excavations, all tiny and badly corroded. Cleaned and conserved by Richard Jaeschke, however, some of them prove to have crosses on them and one, a face of an emperor, but they have not yet been further identified.

Room D was cleared of surface stones and silt, but only the southwest corner, delimited by a partition wall, was excavated. It yielded a deep, circular, stone-lined feature at least 73 cm deep and ca. 50 cm in diameter. This is an improbable location for a well, the feature is too small for a cistern, and no waterproof lining is in evidence, so the circle may be a stand for a washing basin or the like.

Room E (3.5 x 3.64 x 3.5 x 3.33 m) is connected to Room D by a later, added-on wall. Only the northeast quadrant was investigated, and only on the last two days of excavation. The fill consisted of 70 cm of laminated sand and silts with virtually no sherds or other finds, but as the room lies towards the wadi bed, fill can be expected to be much deeper than in, say, Room B, up against the cliff. The lowest level reached was a layer of stone tumble, presumably wall fall, with a considerable amount of charcoal in lenses. The next level down is probably occupation. A pot in the baulk at the level of the fallen

stones was photographed and left in situ. Excavation did demonstrate, however, that rooms in the wadi bed may be better preserved than they appear on the surface, being much more deeply buried by wind- and water-laid sand and silts.

# Building 93, Dump 1

A three by four meter square was laid out north of Building 93 across a large sherd dump spilling downhill. The dump was expected to contain debris from Building 93, but almost immediately heavy ash layers were encountered and then a series of cooking installations.

Tabun 1, preserved to a greater height than the others, is also the largest of the tabuns. It consists of a coarse, thick ceramic truncated cone about 40 cm across at the mouth and about 60 cm diameter at its widest. Conserved and excavated by Richard Jaeschke, it proved to contain only a sandy infill. The tabun rested in a circle of stones about 65 cm high. The packing between the stone circle and the tabun body consisted of almost pure, fine, gray ash. A large upright granite slab connected the east side of Tabun 1 to a probable thick retaining wall running northeast just beyond the limits of the trench but detectable on the surface. The space between the east baulk, Tabun 1, and the upright stone was filled with ca. 60 cm of fine ash with much bone and some sandy lenses and stones. To the south as well, deep ash layers filled the space between Tabun 1 and the south baulk, and at the bottom the rim of the fourth tabun emerged. Excavated only to a depth of a few centimeters, it appears to run up against the corner of Room D, and to have been earlier than Tabun 1. Tabun 2 was another truncated ceramic cone with a maximum diameter of about 55 cm. It was very friable and had partly collapsed into the tabun interior. The broken-off sherds indicate that it had been made from flat slabs of clay set lengthwise atop one another and smoothed down over the joins. To the north of Tabun 2 was a tough rim of hard, sandy clay marking one edge of the tabun; a probable fire hole opens to the west. The back of the tabun is in the baulk and to the south were more stones ringing yet another cooking spot. Called Tabun 3, it actually consists of a small circle of stones ca. 35 cm in diameter. It had no internal ceramic liner. The floor level at this point is a tough layer of packed gray ash.

A great deal of dung both charred and unburnt was recovered from Tabun 2, and experiments with fresh dung indicate that it burns

quickly to a hot if sooty fire and yields glowing charcoal after the flames die out. The ash is as fine as that from the Dump 1 loci. Fuel in the desert must always have been a problem, so collecting sheep and goat dung is an obvious solution. As to what might have been cooked in the tabuns, everything from bread to meat to vegetables is possible. The large amount of animal bone has not yet been studied, only saved for future research, but a preliminary inspection indicates sheep/goat and a very large animal, presumably camel. Some of the sheep/goat long bone epiphyses are incompletely fused, which suggests lamb or kid was eaten. In addition, numbers of date and olive pits were recovered, and further information about pollens and plant remains may be obtainable from the soil samples.

Since it was desirable to leave the four tabuns intact, a smaller trench 180 x 150 cm was staked out in the northwest corner in an attempt to reach bedrock. Instead, slightly below the Locus 7 floor, several large stones set at an angle was encountered. A fireplace had been set in the corner of the stones. There were a number of cobblesize stones at the same level, and below the fireplace and stones was a thick, fine, sandy fill that contained two intact pots. The larger is a crude jar 29 cm high with five holes punched in the base; the other is a wide-mouth jar 20 cm high. The latter rested on a packed silt surface but the former was in a hole in the silt layer. It has been suggested that the five-hole jar was for making cheese and the widemouth jar for holding milk. Making cheese is a very practical solution to the problem of keeping milk in the desert. Finally, and probably unrelated, a complete skeleton of a rodent larger than a mouse was found near the floor by the north baulk. Fill below this locus was more fine sand, but bedrock was not in fact reached at a depth of 140 cm below surface.

# Building 93, Dump 2

A second three by four meter square was laid out south of Building 93 across another thick sherd dump. Again the expectation was debris from the house, and indeed there were thick organic layers just under the surface, but again, a cooking area was uncovered.

The top layers, Loci 2, 3, and 5, and a deep pocket filled with organic material and sherds, Locus 12, yielded a wide range of materials: bone in quantity, including an articulated lower leg and foot bones of a sheep/goat, seeds, dung, glass, including a piece of an opaque red Roman patella cup and Byzantine knock-off rims, hair, wood, and bits

of cloth, twine, and felt-like fiber. Locus 5 contained thick pockets of ash as well, and in the southwest corner a tabun similar to Tabun 2 in Dump 1 was uncovered. It was a truncated conical ceramic vessel ca. 55 cm in diameter partly ringed with stones. Large sherds were packed around the exterior presumably for extra insulation. southwest tabun proved to be full of bones, sherds, cloth, fiber, and other organic debris, but not ash, though the exterior was packed in Two stone circles north of the tabun held the remains of pottery vessels. The northernmost was the body of an amphora without top or toe, set in a large ring of stones. The middle pot, which was badly smashed, turned out to be the top of an amphora, rim, neck, handles, and shoulder with painted dipinti, set in the ground upside down. Both amphora segments appear to have been small cooking Tough packed clay shoulders partly encircle the south side of the SW Tabun and the north side of the northern small tabun. The east side of Dump 2 thinned out over granite bedrock, but the layers dipped steeply to the west and here neither bedrock nor a floor was reached; it would have been necessary to extend the trench. Thus it appears that a row of two small cooking places and one large tabun was set against the cliff face and could have been approached from the west as a sort of cooking range.

The presence of no less than seven tabuns or cooking emplacements adjacent to one house is remarkable, even if they were not in use simultaneously. It does, however, suggest that cooking took place outdoors but near the houses in somewhat sheltered areas. The Dump 1 tabuns appear to have a retaining wall to the east, and the Dump 2 installations back up to the cliff. It further suggests that the one-room outbuildings, whose function is as yet undetermined, would not have been needed for cooking, at least not as a rule.

Finally, the presence of at least two floor levels in Room C of Building 93 and at least three different levels of use in Dump 1 is the first indication of multiple occupations at Bir Umm Fawakhir. The town could have 1) been inhabited continuously for 150 years or so until the ore played out, or 2) the workers could have come only in one season of the year such as summer when agricultural activity was low, or 3) the site could have been occupied intermittently for years or decades and then abandoned for a period of time, as seems to have been the case at Mons Claudianus. Without floral and faunal analysis and more detailed study of the sherds and other finds we cannot yet chose between possibilities 2) and 3), but 1) may be more unlikely.

Building 177, high on a knob of granite called the Hillock, was chosen for excavation partly for its good preservation and the presence of ancient trash dumps around it, but mainly because previous surveys noted an unusual number of well-made dishes ornamented with stamped designs, dipinti, and bits of glass. Since there is, judging from surface surveys, almost no differentiation between houses or associated sherds from one end of the main settlement to the other, it was suggested that the two buildings on the Hillock, B176 and B177, might represent a difference in date or function, or perhaps a somewhat wealthier household. A large number of a variety of grinding and crushing stones were also noted on the surface inside and near Building 177.

It has unusually thick walls; the northeast side is built against a granite outcrop whereas the southwestern corner approaches a sharp drop down to Buildings 157 and 159 on the wadi floor. Building 177 has four rooms, Room A, a large room stretching across the whole back of the house, and B, C, and D in the front of the house. The doorway between Room A and B/D was blocked in antiquity. In Room D a bowed partition wall consisting of a single width of stones may be a later addition. The niches in Rooms B and C partly utilize natural hollows in the granite outcrop.

Room A, a trapezoid approximately 4 by 3 meters, was partly filled at the southwest by stone tumble believed to cover a bench or On removal, however, it proved to be pure wall fall. Walls at Bir Umm Fawakhir are typically built of large stones on the interior and exterior faces with smaller stones as fill in the middle and chinking. In this case, the interior face has fallen away but the exterior face still stands. The most notable feature in the room was a small hearth in the north corner. It measures roughly 35 cm square and is built of thin, vertically set slabs of granite. It was partly filled with ash and charcoal from twigs or small branches, though there is little evidence of the dung used in the cooking areas in Dumps 1 and One floor level was detected, again a tough brownish layer with much organic debris. Towards the eastern corner, bedrock was only a few centimeters under floor level, though it dipped sharply to the west where subfloor fill was as much as 40 cm deep. Finds include a small bronze plaque or weight inscribed with "NB", two coins, and pieces of two items tentatively called "incense burners" though none

of them bears any sign of burning. The more elaborate of the two has carved arches and little columns.

Rooms B, C, and D, excavated by Leader, all proved to have only shallow fill over bedrock, with the exception of a deep hollow near the Room D/A wall. Finds, however included two coins and four emeralds.

# Building 181

Building 181, a one-room outbuilding on the Hillock, was selected for excavation partly because of its proximity to Buildings 176 and 177, partly because of a desire to sample at least one of the outbuildings, and partly because it is unique. It consists of two huge boulders mostly roofed by others, creating a crawl space a little less than a meter wide. Another massive boulder creates a sort of entrance space, and a rough wall marks the back of the entrance. The small interior space, 180 by 120 at maximum dimensions without the crawl space, yielded no clues as to its use, though it was not a latrine or burning area. The most notable finds in fact were a few glass beads.

#### Finds

In addition to the small finds mentioned with the discussion of the excavations, 64 more dipinti (dockets written in red ink or paint on amphorae) were recovered. Many of them were surface finds, including one of the first legible dipinti, which reads "tetra". No ostraca were found, however. Sixteen more examples of plates with stamped decoration, usually Christian motifs, were collected. In addition to the coins, bracelet, bronze weight, iron ladle, and wedge, a few bits of iron, lead, and copper strips or straps came to light. All were conserved and stored. A few bits of leather came from Dumps 1 and 2 including what look like the stitched rim of a shoe or sandal and a strap. All of the glass was extremely fragmentary but it does include standard Byzantine forms such as knock-off rim vessels, ruffle decoration, looped rims, straw-marked bases, and looped pedestal bases. At least one bit of badly decayed faience was recovered as well as a fragment of a fine Roman opaque red glass. Most of the wood was unworked, except for a peg from the upper levels of Dump 1. Shell was tabulated and preliminary field identifications were made, but charcoal, dung, seeds, insect material, bones, and soil samples could only be tabulated and saved for future

study. Rope, twine, hair, and a felt-like material were also recovered, but mostly in very small shreds. Similarly, cloth was mostly small bits, though several weaves and bits of red, green, and blue were noted. All non-ceramic finds were conserved and photographed as needed and registered.

Sherds constituted by far the most abundant finds. All but some material from the topmost layers was sorted as to ware (marl, silt, etc.) and diagnostics were tabulated based on the typology drawn up from the previous four seasons work. New forms were drawn and described as to ware and Munsell colors and will be incorporated in the pottery corpus. All but a few registered sherds were returned to the site after processing.

### Barricade and Site Protection

A serious concern for any archaeological site is preservation, in the case of Bir Umm Fawakhir, preventing further decay of the walls of the houses and their outbuildings. One danger to the site comes from vehicles driving up the ancient main street, over the sherd dumps and potentially damaging the standing walls, which are only dry stone masonry constructed of sometimes decayed granite cobbles. Therefore the project, with support from the Egyptian Antiquities Project (EAP), undertook to construct a barricade at the entrance to the site. The intention was that visitors could walk in freely and water run out, but access to vehicles would be prohibited. After much discussion, a very simple design of granite boulders dropped at intervals across the mouth of the wadi was adopted. This is the narrowest approach to the site, and it lies just outside the last building in the main settlement and well before any occupied Care was taken to select boulders from locales near modern houses. enough the site that the granite would match the local boulders, and from places that showed no sign of ancient activity, whether quarrying or mining or dwellings. The task of selecting and placing the boulders was carried out by Girges Samwel of El-Mohandes for Construction under the supervision of Thomas Roby, architectural Work was completed on February 25 and inspected by Jaroslaw Dobrowolski of the Egyptian Antiquities Project on the 28th. The barricade will be the subject of a full technical report to the EAP. As a final measure of site protection, all trenches were backfilled on March 1 and 2, 1999.

# CHICAGO HITTITE DICTIONARY PROJECT / Harry Hoffner

[n.b. Representation of some of the Hittite in the following article has ben simplified to accommodate ASCII]

The dictionary staff is currently engaged in putting into final form the manuscript of the first installment of the S volume. It remains to be seen how much of the entire corpus of S words will be included in the forthcoming fascicle. Since words beginning with SA comprise the largest group of S words, with SE, SI and SU words constituting smaller groups, it is quite likely that the present fascicle will not go beyond the SA words. Nevertheless, this range includes some very important lemmata, and at the same time posed for us some of the most difficult work we have performed to date. There is a class of particles in Hittite which, for want of a better, mutually agreed-upon term, are called "local particles". In the earliest attested written phase of Hittite (c. 1700-1500), called "Old Hittite", there are five known members of this group: -asta, -apa, -san, -kan, and -an. As the language developed, some members were dropped and their functions assumed by remaining members. This means, of course, that the original distinctive functions of those members taking over the functions of others became blurred. And since the vast majority of our text corpus is from the latest period of the language, it is often impossible to determine the distinctive "meanings" of particles which survived into the late period. In the SA corpus we had to tackle the first of these five, the particle -san. With this article we have set the parameters of our procedure in handling the rest of these particles. Hopefully, the results will be well-received by our colleagues, and basic changes in procedure for the remaining members will be unnecessary.

Just to give you a general idea of the nature of some of the other important terms that will be covered in the new fascicle, here are a few with their English translational equivalents: sa- "to be angry," sahhan (a fundamental obligation or impost entailed by holding land, similar to Akkadian ilku), sai- "to seal (a clay tablet or a clay lock on the entrance to a building)," sak- "to know," sagai- "sign, portent, omen," sagan "oil," sakkar "excrement," saklai- "law, custom, rite," saknuwant- "impure, defiled," saktai- "to provide sick-maintence," sakui- "eye," sakuni- "spring, fountain," sallakardatar "arrogance, negligence," sallanu- "to raise, rear (children)," salhiant- "proliferation, abundant growth," salli- "large, great," salk- "to knead (dough)," salwina- "mud plaster, mud brick," samalu "apple (tree)

(equivalent of Sumerian HA\$HUR)," samana- "foundation stone," sami- "incense," samnai- "to create," -san (the above-mentioned "local particle"), sanh- "to seek," sanezzi- "fine, sweet," etc. This truncated list is only intended to give non-specialists a general idea of the words and concepts that we had to treat in the forthcoming fascicle. Since our articles give translations of all important passages, even non-Hittitologists interested for comparative purposes in any of the above-mentioned objects or concepts may wish to consult the articles I have named.

As co-editor of the dictionary, Hans Guterbock continues to offer us valuable comments on dictionary drafts that are read to him by Rich Beal.

As you all know, the Hittite Dictionary has been generously supported for almost 25 years by successive grants from the National Endowment for the Humanities. With each new grant we hold our breath, not knowing whether the Endowment will be willing and able to extend this very important support. As this is written, we await word on the Endowment's decision on whether it will support us for another period beginning July 1, 1999. We are hopeful. In the event that we should lose that support, our record of solid production of a universally recognized indispensible lexical resource for Hittite should ensure that funding for the project's continuance will be found. We appreciate the Institute's commitment to our project, which is now about 25-30% complete in terms of published output. With my own impending retirement on July 1, 2000, and my hopedfor replacement by a new professor of Hittitology and administrative director of the dictionary, the project will enter a new phase of its development. I plan to stay on in Chicago to function as a co-editor much as Professor Guterbock has done over the past 25 years. But it is vital for the future of the project that a capable successor for me be acquired by July 1, 2000, who will finish what Professor Güterbock and I have begun.

March was noteworthy for an unusual amount of activity on all fronts. The epigraphic work continued apace in the small Amun temple at Medinet Habu as temperatures began their slow climb. Artist Carol Abraczinskas and epigrapher Brett McClain finished their four-month training stints in the field and returned to the US in mid-

The small Amun temple rooftop restoration supervised by stone cutter Dany Roy saw the replacement of two thirds of the missing Ptolemaic roofblocks on the north side with new stone blocks which will further protect the painted reliefs below. Each block was cut and shaped by Dany who used archival photographs of the intact roof section as a guide. Egyptologist/artist Tina Di Cerbo continued to plan the small temple rooftop complex, concentrating on the eastern end. On March 15 conservator Lotfi Hassan returned to clean the salt from the south wall of the king's chamber, and to do condition surveys of the painted chapels and other parts of the small temple complex with an eye toward future conservation work. He also did an emergency condition survey of the southern well of Ramesses III after Staff Photographer Yarko Kobylecky and Ellie Smith finished the photography of the decorated inner corridors. Lotfi found that beneath the crust of bubbled salt in some areas the stone is perfectly preserved, in other areas the stone is only partially preserved, and elsewhere the stone is completely gone and only the salt remains, sometimes preserving a ghost impression of the carving. It is also clear that the doorway to the descending corridors will collapse if stabilisation work is not done soon. Discussions have been initiated with the local Supreme Council of Antiquities officials to discuss what must be done.

At Luxor temple the landscaping of the expanded Epigraphic Survey blockyard storage and treatment area continued in earnest. Four new damp-coursed storage platforms/mastabas were constructed in the south area behind the conservation lab, while the retaining wall and stairways were begun in the northern area which will allow access between the upper and lower levels. Six fifteen-meter storage and treatment mastabas will be constructed in the lower area during the next two weeks, and next season as many more will be built in the upper area.

Back at the house Photo Archivist Sue Lezon coordinated the scanning of the Chicago House smaller-format 4x5 and 5x7 negatives for burning onto CD-ROM. Some of this is being done in-house, but the bulk of our material is being worked on at the Karnak Franco-Egyptian Center, where Director Francois Larche has graciously lent us the use of their scanning facilities and staff. Duplicate CDs are being produced, one for permanent storage here in Luxor, and one for Chicago. By the end of the summer it is expected that the entire 5x7 holdings of the ES will be scanned; while the wholesale

scanning of our 8x10 negative archive will begin next year. This year the only 8x10 negatives to be scanned were of the Ramesses III southern well, for computer joining and analysis this summer.

Volunteer Mary Grimshaw returned to Chicago after a month of assisting Carlotta, Debbie, Sue Lezon and myself in the library/archives, and keeping Dr. Henri in line at the dominos table; we appreciated her help very much, and miss her. Engineer Jamie Riley supervised the completion of the roof-sealing, insulation, and finishing work over the library, both on the south side and upper halls, and the replastering and repainting in the library wing. He also coordinated the laying of a new telephone cable through the garden, encased in an insulated pipe for protection and buried a meter deep. CPA Financial Director Moataz Abo Shady assumed his duties in mid-month, and is a most welcome addition to the team. I regret to report that Administrator Ahmed Harfoush has left Chicago House to work in Cairo at Western Union; we owe him a great debt for shouldering the accounting burden during a very difficult two years, and will miss him very much.

This month was noteworthy for friends and guests who dropped by. Mark Lehner and his family were in Luxor during the first two weeks of the month shooting a second obelisk documentary. Jason Ur spent a good week with us working on our Photo Archives database. Carol Meyer and her Bir Umm Fawakir crew finished up their fieldwork, and we bid them all farewell with a good-bye dinner. Former epigrapher Lorelei Corcoran stopped by on a tour, as well as Barbara Porter. Kaylin Goldstein and her parents Iris and Paul Goldstein (OI Visiting Committee) spent a very pleasant afternoon with us last week seeing our facility and the work at hand.

But a most illustrious guest this month was the First Lady of the United States, Hillary Rodham-Clinton, who visited Egypt with daughter Chelsea week before last, and spent a total of two full days in Luxor. Preparations for this trip began in February, and continued all through March, as "pre-advance" and "advance" teams of White House and US Embassy staff descended on us for a seemingly endless round of itinerary planning and site walk-throughs. Right up to the day she arrived the itinerary was in flux, but after the hair-raising preparations the visit itself was surprisingly pleasant. The First Lady and Chelsea arrived midday on Tuesday, March 23, and I was among the official "greeters" at the airport, along with the Governor

of Luxor General Selmy Selim, the American Ambassador to Egypt Daniel Kurtzer, and the head of the Supreme Council of Antiquities, Dr. Gaballa Ali Gaballa. Dr. Gaballa and I were her official "guides" during her Luxor stay, and that first afternoon we squired her, the US Ambassador, the Egyptian Minister of the Environment, and the head of USAID Egypt through the Luxor Museum of Art and Luxor temple. Debbie Darnell led the White House staff on a separate tour behind us, while our friend the General Director for the west bank, Sabry Abdel Aziz led the press corps.

Mrs. Clinton was clearly impressed with the extent, and scale, of Luxor's ancient remains. An avid preservationist herself, she was distressed by the signs of accelerating decay which are now visible everywhere, particularly in the Colonnade Hall. While there I was able to do some serious consciousness-raising regarding Egypt's wetter climate, the high groundwater problem, and the resultant migration of salts trapped in the stone which is causing the bases of massive walls and columns to disintegrate. But I was also pleased to be able to announce that Ambassador Kurtzer has set up a meeting on April 16 of Cairo Ambassadors, USAID, EAP and ARCE reps, the French Institute, and myself to discuss the problem and to recommend collaborative solutions before it's too late. After visiting the Luxor temple sanctuary, we paused beside the Epigraphic Survey blockyard with its thousands of decorated stone fragments, where I talked about our EAP/USAID funded documentation and conservation projects.

That evening I was invited by the First Lady to join her, Dr. Gaballa, Ambassador and Mrs. Kurtzer, several USAID officials, and the assembled White House Press Corps for an al fresco dinner and round-table discussion about Luxor and its heritage. Dr. Gaballa opened with a talk about the significance of ancient Luxor, after which I spoke about the documentation work of the Oriental Institute at Chicago House, our history, present programs, and future plans. This led to an open discussion of the conservation problems facing Luxor and all of Egypt, and what steps have been taken to alleviate some of those problems elsewhere, such as the USAID Old Cairo drainage project, which by lowering the water table has slowed down the deterioration process. Mrs. Clinton obviously enjoys debate, and it was such a stimulating discussion, the party only grudgingly broke up at midnight!

The next day we took the First Lady and Chelsea to the Valley of the Kings where Egyptian Antiquities Project Director Chip Vincent, Antiquities Development Project Director Michael Jones, Dr. Gaballa and I showed them the tomb of Sety I and discussed its history and Then Dr. Gaballa and I took them to conservation problems. Tutankhamun's tomb, followed by the mortuary temple of Hatshepsut, and Nefertari's tomb in the Valley of the Queens. a motorcade 40 cars long, mind you! At about 1:30 the entire motorcade arrived at Chicago House, where we hosted a "private," sit-down buffet lunch for the First Lady, Chelsea, and forty assembled guests: the entire Chicago House staff, Dr. Gaballa, the Governor of Luxor, the Kurtzers, the Minister of the Environment, USAID officials, Kent and Susan Weeks, ARCE Director Mark Easton, Chip Vincent, Michael Jones, and Sabry Abdel Aziz. Credit must be given to the entire CH staff for making the place shine, and the luncheon table glorious; everyone pitched in. Our kitchen staff, headed by chief cook Tayib, truly outdid themselves, and Mrs. Clinton endeared herslf to them forever by having her photo taken with them afterward in the courtyard.

The First Lady said in a short speech at lunch that the Luxor trip was one revelation after another, chief among which was the University of Chicago's efforts out here. She told us that she was tremendously moved by our dedication, enthusiasm, and passion for this preservation work, and was extremely proud that Americans were at the forefront of such work. After a group photo of the entire luncheon party, Carlotta and I led the First Lady, her entourage, and the press into the library for a half-hour briefing of our documentation work, projects, and goals, which was very well received. I owe a tremendous debt to Carlotta for returning to assist with this event; we could not have done it so well without her. After signing the guest book, picking up a "Chicago House: 75 Years" button, and accepting a 'Lost Egypt' print as a momento of her visit from Carlotta and Sue Lezon (also t-shirts), we departed with Mrs. Clinton and entourage for Karnak up the street. There we had a very pleasant, late-afternoon, hour-length walk.

But that was not the end of the day. Later that evening at Luxor temple, the Minister of Culture Farouk Hosny hosted a lavish banquet for the First Lady in the first court of Ramesses II. While a string quartet played in the SW corner, and brilliantly lit 35-foot statues of Ramesses II gazed down on the assembled Egyptologists and dignitaries, Mrs. Clinton, Chelsea, and the Minister of Culture greeted

each guest in a receiving line on the east side. Ten tables were set up along the west side of the court, and I had the pleasure of being seated at table #1 with the First Lady, the Ministers of Culture, Health, and the Environment, Mark Easton, Ambassador Kurtzer, Dr. Gaballa and the Governor of Luxor. The next day, while her mother was giving speeches at the El-Karnak Clinic and the AUEED School, I escorted Chelsea and White House Social Director Capricia Marshall to the west bank for a tour of Medinet Habu, where Ted Castle, Margaret DeJong, and Lotfi Hassan showed her our epigraphic and conservation work. We then took in some private tombs, after which we drove back to the Luxor airport for their departure to Tunisia. Later that afternoon I returned to MH with USAID Egypt Director Dick Brown for another site visit before he returned to Cairo. No rest for the weary!

All in all it was a very stimulating visit, and the good will it generated was far-reaching and across the board. I truly believe that it was time well spent, and that we were a credit to the Oriental Institute and University of Chicago.

Now, back to reality, the last two weeks of the season, and the tying up of a LOT of loose ends! Best wishes from us all, and see you very, very soon...

On Friday 12th March at noon in Breasted Hall Traianos Gagos presented a demonstration and discussion of the APIS [Advanced Papyrological Information System] project. You can view the publications of the project at:

HTTP://www.lib.umich.edu/pap/

and a directory of the pages of the APIS partners at: HTTP://www.lib.umich.edu/pap/tools/other\_resources.html

On Friday 2nd April a small group met in the Director's Study. Catherine Mardikes invited Cameron Campbell, the Head of Serials Cataloguing at the University of Chicago Libraries, to discuss the Chicago component of CORC - the Cooperative Online Resource Catalogue with us. This is a research project centered at OCLC seeking to develop systems by which OCLC and libraries can cope with cataloguing the huge amount of material becoming available on the Web. They are hoping to use Oriental Institute on-line materials

as a local test base - cataloguing the resources we publish on the OI Web server, and using Abzu as a source of documents worth cataloguing, the assumption being that materials in Abzu have been selectively filtered by an area specialist. We will be working with them in the coming weeks to see what can be accomplished. As always in such discussions the stability and persistence of networked sites is a source of concern, as are issues of "conservation", "preservation' and "archiving".

For the first Friday in May, we have tentatively planned a presentation of the Achaemenid Royal Inscriptions project, the Persepolis and Ancient Iran project (see the Computer Laboratory report above), and the past present and future of these and other Persian materials on the OI web site. As always we expect this to be informal and conversational.

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#### FRED DONNER

Fred Donner will be attending the Late Antiquity and Early Islam Workshop on "Elites old and new in the Byzantine and early Islamic Near East," to be held at the University of Birmingham from 15-17 April. He will be discussant for a paper on "Concepts of Leadership in Beduin Society" presented by William and Fidelity Lancaster.

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Since I did not report my activities of February in the March OI News, let me briefly include them here. I attended the annual meeting of the Midwest Branch of the American Oriental Society held at Hebrew Union College in Cincinnati, February 14-16. These meetings are held in conjunction with the Midwest Branch of the Society of Biblical Literature. The theme of the conference this year was "Daily Life in the Ancient Near East". I was one of about six speakers asked to address plenary sessions. Naturally, my subject was "daily life" (whatever that is!) in ancient Hatti. Other speakers spoke on Mesopotamia (actually two addressed this), Egypt, Syro-Palestine, and on the East Mediterranean during the Roman Empire. At the annual business meeting I was elected to serve a two-year term as President. Next year's meetings (i.e., winter 2000) will be in

Chicago at the Lutheran Theological Seminary and the Oriental Institute.

Just this past week (March 22-26) I received a copy of volume 49 of the Journal of Cuneiform Studies, which contains my lengthy review of the most recent volume of Hittite texts, Heinrich Otten and Christel Ruster's Keilschrifttexte aus Boghazkoi, Vierzigste Heft. Texte verschiedenen Inhalts vorwiegend aus Gebuude A (Buyukkale). After a hiatus of several years during which I refused invitations to review volumes in this series in order to focus more on the work of preparing CHD copy, I accepted the invitation to review this new volume, which is filled with relatively small fragments. Such a volume poses a special challenge to reviewers to identify joins and duplicates: a tedious, exacting, and somewhat thankless task, but one that I always take satisfaction in doing. This time was no exception. I was able to identify quite a few duplicates and not a few direct joins. At the same time it gave me the opportunity to enter almost all these new fragments in my computer database, which will be used to revise CHD articles into final form for publication. Eventually the same texts will have to be processed in the form we use for the official CHD card files, but at least we now have a way to access the information for current work.

An e-mail from Piotr Michalowski, the editor-in-chief of JCS also informed me that volume 50 will be distributed within a few weeks. This, you may be aware, is the volume dedicated to Professor Guterbock on his 90th birthday, which we celebrated last October 21st, several months after the actual birthday which was May 27, 1999.

As most of you may be aware, Hans Guterbock, Aslihan Yener, and I are co-editing a volume containing papers presented at a special session on recent research in archaeology and philology dealing with Hittite Anatolia. This volume is now almost ready to be submitted to the publisher, Eisenbrauns. Editorial work on this book as well as reworking my own contributions to it have also occupied my private research time during the past month.

### CLEMENS REICHEL

During the AOS meeting in Baltimore in March, I presented a paper "A Modern Crime and an Ancient Mystery - the Seal of Bilalama." An article with the same title has been submitted to the Kienast

Festschrift. A chapter of my dissertation with the title "Artifact Patterning and Functional Analysis: The Palace of the Rulers at the Tell Asmar from the Ur III period to Usurawassu (ca. 2070 - 1980 B.C.)" has been submitted to the NELC department for consideration for the Whiting fellowship. I am currently revising my paper "Seals and Sealings at Tell Asmar - a new look at an Ur III to Early Old Babylonian Palace," which I presented during the 'Seals and Sealings' plenary session at the 45th Rencontre Assyriologique Internationale in New Haven in July 1998, for publication in the conference report.

I am very grateful to the Technology Oversight Committee of the Humanities Division for awarding me the George Walsh Award 1998-99 to support my computer work on the cuneiform texts from the Diyala Region.

I was one of the teeming mass of OI inmates who attended the 209th Meeting of the Amerian Oriental Society in Baltimore, lamentably scheduled during the spring break. I filled in for Peter Machinist by chairing a session, so I was able to announce the wrong title for Clemens Reichel's paper, induce aggravation in Daniel Nevez by announcing his paper out of order, and defer my own paper to the end of the long afternoon, when everyone was anxious to get out of the darkness and on to the free food and drink at the reception. (Reichel and Nevez did superb presentations).

Mark Garrison plans to continue his collations of seal impressions on Persepolis Fortification tablets during a visit over the weekend of 22-25 April.

Based on the published schedule, the following papers by locals will be read at the ARCE Annual Meeting in Chicago at the end of April:

Thomas Dousa with Susan H. Auth: "The Newark Museum and University of Chicago Mosaic Glass Hathor Plaques, Egyptian or Greek?"

Thomas Dousa "The Nose Knows: Some Remarks on the use of Smell as a Diagnostic Tool in Ancient Egyptian Medicine"

François Gaudard "A New Dramatic Version of the Horus and Seth Myth"

Li Guo "The Quseir Arabic Documents: A Preliminary Report"

Nicole Hansen "'The Living Egypt': The Ethnoarchaeological Work of Omm Sety"

Harold M. Hays "Form and Context of the Lion-Bed"

Ray Johnson "The Epigraphic Survey on the Occasion of its 75th Anniversary"

Joel Kramer "Maimonides' Intellectual Milieu in Cairo"

J. Brett McClain "The Decade Festival of Thebes"

Carol Meyer "The 1999 Excavations at Bir Umm Fawakhir"

Alexandra A. O'Brien "Honey-colored Woman: Physical Descriptions in Demotic Contracts"

Marlis Saleh "Coptic Attitudes towards Muslim Government and Society in the Fatimid Period"

Steve Vinson "A First Look at the Roman Ship Wreck in Alexandria Harbor"

Paul E. Walker "The Relationship Between the Chief Judge (qadi alqudat) and Chief Religious Propagandist (da'i al-du'at) under the Fatimids"

Bruce B. Williams "The Pharaonic Life in the Naqada Period"

Frank J. Yurco "Ipu-wer's Admonitions: A new light on the Hyksos Era"

Several others will be chairing sessions of the conference.

Ray Johnson's Keynote Speech will be held in Breasted Hall on Friday evening in conjuction with the preview of the Egyptian Gallery. This event will also include a reception in the Morse Genius Reading Room of the Research Archives.