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## BEHIND THE SCENES WITH KING TUT

by

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The Treasures of Tutankhamun Exhibition is long gone from Chicago. It has since moved on to New Orleans and Los Angeles, but who can forget the marvelous artifacts preserved in their pristine beauty: the white translucent alabaster vases, the finely crafted wooden furniture, the jewelry, the breath-taking majesty of the gold mask encrusted with semi-precious gems? Who among us did not marvel at their great age and remarkable preservation?

They remained buried in their subterranean vaults while the civilizations of Greece and Rome flowered and declined. They stayed hidden through the Dark Ages and the Renaissance, while generations of popes and kings ruled from their thrones. Through all this they waited patiently for the right moment to be discovered and to divulge their secrets about an age that was lost to us long ago.

These are some of the romantic images conjured up by the Treasures, but how many of their admirers have thought about the continuous care and conservation methods necessary to preserve their freshness and beauty? For the Tutankhamun Exhibit, conservation procedures even stricter than normal had to be adopted to ensure the safety of the pieces. Part of this was the responsibility of Miss Barbara Hall, the Conservator of the Oriental Institute Museum, who writes below.

-Peter A. Piccione, Editor

MY ASSOCIATION with the Treasures of Tutankhamun Exhibit began when I was asked to be the Conservation Representative for the Oriental Institute. This meant that I was to work with the Egyptian custodians and a conservator from the Metropolitan Museum of Art in packing and unpacking the treasures and in doing minor conservation on them when necessary.

It all began just over a year ago when a series of meetings was held at the Field Museum. We had to establish a procedure for unpacking the objects on their arrival, to consider possible problems that might arise during their installation, and to coordinate the efforts of various museum departments so that installation could proceed as smoothly and quickly as possible. Security was arranged to limit the number of people involved in the unpacking in order to avoid accidents and to give the conservators a quiet area where the objects could be examined and treated with extreme care.

Temperature in the galleries had to be maintained at 70° F. and the relative humidity at 50% as required by the Egyptians. We adopted strict rules for television and press photographic coverage to protect the objects from excessive light and heat.

Prior to the April 15 opening in Chicago, David Silverman and I went to Washington, D.C., to observe the packing procedure at the National Gallery where the exhibit was first shown. In this way we could duplicate the method when it came time for the show to leave

Chicago

Security was very tight in Washington, and onlythose with a special pass were admitted to the work area. The alarm systems were always maintained, and guards were stationed in every gallery.

It took ten days to pack the fifty-five objects. The work party was supervised by Ibrahim el-Nawawy and his replacement, Ahmed el-Sawy, who were the Egyptian representatives. It consisted of Victor Covey and William Leisher of the National Gallery, Yale Kneeland of the Metropolitan Museum, and me. At this stage I mostly watched, screwed on lids and tried to be generally useful.

One at a time the objects were removed from the display cases and placed on a table. This was normally done by one of the Egyptians wearing special cotton gloves. Then each object was examined minutely by the conservators using magnifying glasses and a raking light (see fig. 1). The artifacts were compared with photographs to see if they had sustained any damage while on exhibit, and cracks in wooden objects were measured to ensure that there was no change in dimensions. All the pieces were checked for loose flakes of gold leaf, pigment, gesso, and inlay; any new defect had to be treated before an object could be packed.

After examination and repair, each object was carefully wrapped (after padding any undercuts) in either acid-free tissue paper or thin Mylar polyester film

(see fig. 2). Then began the frustrating part. We had to place the object in its crate and arrange the pieces of polyurethane foam around it (see fig. 3). The foam was a random assortment of squares, rectangles, triangles, and other odd shapes that at one time were cut to fit a certain angle of the object. They had been re-used so often and jumbled to the extent that it was impossible to figure out which shape went where. In the end it proved quicker to cut new shapes which were in turn destined to be misplaced.



Fig. 1. Victor Covey at the National Gallery replaces a loose gold flake on Selket. (photo courtesy of Yale Kneeland, Metropolitan Museum of Art)

The exhibit arrived at the Field Museum in the early hours of the morning, and security was heavy. Present at the time were the Egyptians, the museum staff, Yale Kneeland, and I.

Things became hectic and tense during the installation as we tried to get everything done on schedule. A serious problem developed with the new display cases. They proved to have too much torque and had to be reinforced with timber supports. Then they became unstable on the thickly padded carpet, so they had to be bolted down to the concrete floor. After all this, we found that one of the false walls was swaying too much to support a wall case safely. The case had to be rebuilt as a floor model. Somehow, through it all, the museum managed to stay one step ahead of us in having cases ready for the objects as needed.

In the antechamber gallery several tables were set up for uncrating and examining the pieces. We opened each crate separately and let the Egyptians remove the objects. After the tissue or plastic was removed, we looked for any loose fragments that could have fallen from the objects in transit. No matter how carefully one packs, it is inevitable that there will be minor losses of pigment, gesso, etc. Any loose flakes we did find were carefully replaced (see fig. 4). Fortunately, however, there was no structural damage to any of the objects.

The types of adhesives and consolidants we could use in the repairs were limited to those used back in 1922 when the tomb was first discovered. Howard Carter and Alfred Lucas worked jointly in conserving the pieces. Originally, many of the wooden objects began to shrink and crack when they were taken from the tomb and exposed to the drier air outside. This disturbed their paint and gesso decoration. To stabilize them, Carter coated them with molten paraffin that was absorbed through the surface. This in turn forced us to use a similar waxy material (synthetic microcrystalline wax) to make minor repairs.



Fig. 2. Packing the gold mask: the mask is padded and draped in Mylar film.

After we completed the conservation, we placed each object into its case with a small thermohygrometer. This measured the temperature and humidity inside the case during the exhibit.

It was a pleasure to be able to examine the objects closely and to make small discoveries—like a mistake made by the craftsman and then patched up over 3,000 yrs. ago or the carpenter's marks beneath the portable chest to indicate which carrying pole should be attached to which corner.

It was a marvelous feeling to see the cases being slowly filled with these wonderful treasures; to watch a disordered gallery being cleared of workmen, tools, and crates; and to see the halls empty of the people who would soon crowd them. When we had finished, all that remained were the objects in their elegant blue velvet cases subtly lit in the darkened galleries.

With the installation completed, Janet Linzer, a conservator from the Field Museum, took over the responsibility of monitoring the temperature and humidity readings, which had to be taken several times daily. She later joined Yale Kneeland and me for the repacking after the close of the exhibit in August.

Several days before the show closed, Janet and I borrowed the \$1500 replica of the Selket statue from the Tut Sales Shop. We used it as a model to measure



Fig. 3. Packing the Harpooner using small pieces of polyurethane foam. (Photo courtesy of Yale Kneeland)

new foam being cut for the packing crate. After emptying the crate of a mound of foam fragments, we replaced them with six layers of two-inch foam padding. With the model Selket on her back in the center of the foam layers, we cut out the figure of the goddess. In this way the original statue could be snugly fitted into the shape and remain secure during travel. In Washington it took all morning to pack this statue, but

in Chicago it took only twenty minutes with the new foam.

We duplicated the packing procedure used in Washington, except that almost all the objects were encased in the new form-fitting layers of foam. The tedious job of packing and unpacking then became safer, easier, and quicker for the rest of the exhibition in the United States.

Since Yale, Janet, and I did all the packing ourselves, we were anxious about the condition of the objects upon their arrival in New Orleans. However, when unpacking there, we were relieved to find that everything had traveled exceptionally wellon the road. We breathed a great sigh of relief until the next time that the king would have to repeat his journey.



Fig. 4. From right to left, Mohamed el-Saghir, Yale Kneeland, and I are examining the Lotus Head.

#### URSULA SCHNEIDER EXHIBIT TO OPEN SOON

AN EXHIBITION of Ursula Schneider's photographs, entitled A Photographer's World, is due to open in the Museum on March 7 and will run until April 21. Ursula Schneider, for many years photographer at the Oriental Institute, died last year. After her death, it was revealed that she was a highly accomplished and successful photographer in Europe in the twenties and thirties before she came to the States. She had given a collection of prints of her early work to our archivist, Christina Madej, and a selection of these were exhibited at the Bergman Gallery on campus last autumn. It was the critical response to this first show that has led to this expanded exhibition of her work.

The present show illustrates many aspects of her photographic career, both before and after she came to the Institute. Among the early prints are a series of photo-stories on various themes for leading German newspapers, photographs taken all over Italy, and a series of very fine photographs of Greek sculpture and architecture executed for an art historical text never published. Quite apart from their imaginative and high aesthetic quality, the photographs are a valuable social record of the period. There are also examples of the work she did for the Institute, and other commissions she carried out after she came to Chicago including photographs she took on trips to Guatamala and Mexico.

The exhibition has been chosen and designed by the Curator, John Carswell, and constructed by the museum staff. Ursula Schneider's brother, Dr. Emanuel Wolff, has generously supplied much documentary information, and has allowed prints to be made from the seven thousand or more surviving negatives. The exhibition has also provided the impetus to carry out the first stage of cleaning and general rehabilitation of the entrance hall of the museum, which should be complete in time for the opening.

The Oriental Institute cordially invites you to attend a lecture:

# HATTUSHILI I: PORTRAIT OF A HITTITE RULER IN THE OLD KINGDOM

by Harry A. Hoffner the Oriental Institute

Wednesday, March 29

8:00 P.M.

Breasted Hall 1155 E. 58th Street

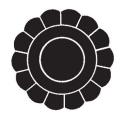
(The Quadrangle Club, 1155 East 57th Street, will be open to Oriental Institute members who wish to make dinner reservations. Please call Mrs. Schlender, 493-8601. Please remember that the privilege of the use of the dining room at the Quadrangle Club is a courtesy extended to members of the Oriental Institute only on nights when there is an Oriental Institute lecture.)

#### CALENDAR OF UPCOMING ORIENTAL INSTITUTE MEMBERSHIP LECTURES

Apr. 11 "The Shrine That Never Was: An Egyptological Mystery"
T. G. H. James, the British Museum

May 22 "Mummies and Magic: An Introduction to Ancient Egyptian Funerary Beliefs and Practices"

Lanny D. Bell, Director, Chicago House



The Oriental Institute

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