

From Death to Immortality

Modern technology brings ancient Egypt to life.

BY NINA NEILSON

When the Museum of Science, Boston, agreed to host *Quest for Immortality: Treasures of Ancient Egypt*, a traveling exhibition on Egyptian ideals of immortality and the existence of an afterlife; the museum had to design an exhibit space for ancient artifacts and build a temporary gift shop to house books, jewelry, toys and other exhibit memorabilia, from square one.

The Museum of Science is the exhibition's second stop on its North American tour. The traveling exhibit, which started in Washington, D.C. in June, is the result of collaboration between the Supreme Council of Antiquities, Cairo, United Exhibits Group, Copenhagen and The National Gallery of Art, Washington, D.C. The artifacts hail from the Egyptian Museum in Cairo, the Luxor Museum,

and the sites of Tanis and Deir el-Bahari, and will be part of a permanent display at a new national museum in Giza, which is under development. The exhibit is on display in Boston through March 30, 2003.

The exhibit features 115 pieces — the largest selection of ancient artifacts ever lent by Egypt — many of which have never been seen outside of Egypt. The *piece de resistance* is a life-sized facsimile of the 4,000-year-old burial chamber of Pharaoh Thutmose III.

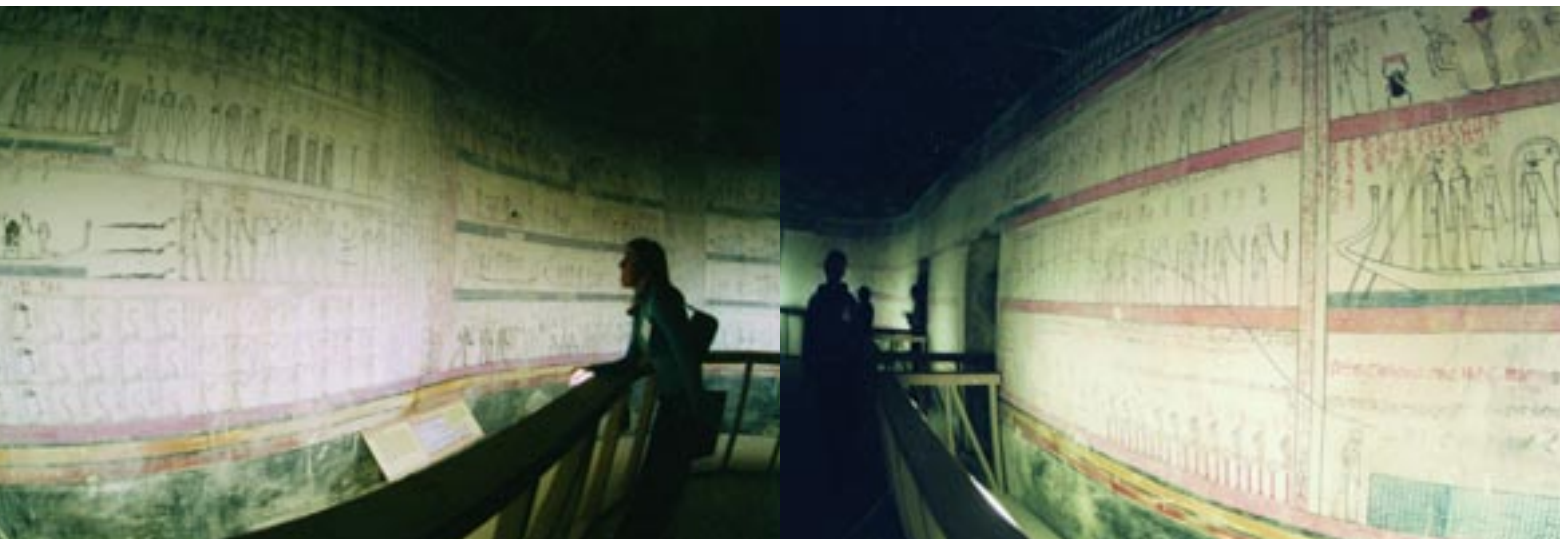
And from a digital printing perspective, "The project involved a little bit of everything," says Dave King, vice president of sales and marketing for Castle Graphics, Concord, Mass., who did the printing. "It included Lambda prints, backlit displays, floor graphics, cut vinyl... it had it all," he says. "The project was truly unique."

A SACRED SPACE

Museum of Science assistant exhibit planner, Diane Bronstein, designed the exhibit graphics. Humberto Cordero of Gensler Assoc. of Boston, designed the temporary gift shop and Castle Graphics brought all of the designs to life.

The exhibit consists of a variety of fabrics and materials, many of which are translucent, in an effort to evoke a sense of ethereality, history and serenity.

For instance, printed sheer, flowing curtains were hung from the ceiling around a mummy on display. According to Bronstein, the curtains help to delineate the space as sacred. The curtain's movement and flow create a living effect and remind visitors that mummies were real human beings, not objects. In addition, poplin fabric was used for banners and signage. The material was hung with wooden



These photos were taken inside the life-sized facsimile of the burial chamber of Pharaoh Thutmose III. The images on the walls, from a book on the afterlife entitled *Amduat*, help to guide the king through the netherworld. Text and images within the actual tomb in Egypt were digitally photographed, then inkjet printed onto the plaster walls. These images from the *Amduat* can also be seen on banners, displays and walls in the lobby and gift shop. The entire re-created tomb, including the walls, floors and ceiling, travel with the exhibition.



Museum visitors waited outside the gift shop entrance for tours to begin. The shop's temporary walls were fabricated with Polygal, a lightweight yet sturdy fluted, square, tube material.

Humberto Cordero, of Gensler Association in Boston, designed this temporary gift shop to house merchandise from the *Quest for Immortality* exhibition. Castle Graphics, Concord, Mass., was hired to fabricate a variety of Lambda prints, backlit displays, floor graphics and cut vinyl applications.



The gift shop glows with backlit images, including an image of the gold mummy mask of Wenedjebauendjed. In addition, a border of backlit droplet designs runs along the top edge of the gift shop wall. The backlit images and text were printed on Duratrans using a Durst Lambda photo-writer.



The gift shop's walls consist of 11 48" x 94" panels of Polygal screwed together. The walls were covered with clear, temporary adhesive, with a matte film laminate. A clear vinyl was chosen so that museum visitors can see through the walls to the merchandise on the opposite side. The 36'-long wall graphic was printed on a wide-format printer.



The interior of the gift shop has a variety of blocks used to hold merchandise. The boxes are made of .25" P93 Matte Plexiglas covered with more than 75 Egyptian symbols, and fabricated with cut vinyl. The floors are covered with blue scarab beetles created with floor graphic material.

dowels so that the banners resemble ancient scrolls.

In an effort to capture the look and feel of papyrus on large wall graphics, experiments were conducted on various types of wallpaper. In the end, it was determined that canvas is more sturdy and pliable.

"We experimented with all sorts of materials," Bronstein says. "We wanted to focus on the idea of ancient Egyptian aesthetics; bright colors, flowing fabrics, symbolic meanings and multiple layers of decoration. We had Castle Graphics printing on all sorts of things. We are very grateful to them for their creativity."

The museum's exhibit team saw the exhibit in D.C. and chose colors directly from the artifacts. The walls and display cases were painted with matching, rich colors, including dark blue, terra cotta red, warm gold and light green, to achieve a bold backdrop for content and provenance signage.

THUTMOSE'S TOMB

According to Bronstein, the exhibit features a wide range of artifacts, not from one particular tomb, dynasty or period. Some of the pieces are very ancient and some are from the Roman Empire era. Most of the pieces are from royal tombs, but some are from an artisan's tomb and common life.

In order to recreate the tomb of Thutmose III, who ruled Egypt in 15th century BC, Factum Arte, based in Madrid and London, took digital photographs of every inch of the actual tomb's interior in Egypt. They inkjet printed the numerous images and hieroglyphs directly onto 100 wooden panels covered with linen and gesso. The panels are assembled on-site at each museum venue.

"It's a truly amazing process," Bronstein says. "The images don't look printed. They look as though they were painted directly onto the walls. People who had actually visited the real tomb in Egypt said that the recreated tomb looks identical."

The walls of the pharaoh's tomb, which are part of a complex of tombs at the Valley of the Kings, are covered with text and figures from a guide to the afterlife entitled *Amduat*, which translates to *that which is the netherworld*. The images depict the 12-hour nocturnal voyage of the sun from dusk to dawn and from death through resurrection.

The writings on the tomb's walls were made to look exactly like the text in the book, which was written on papyrus. Stylized drawings of creatures the pharaoh will encounter in the afterlife were printed in bold colors including black, red and blue.

The images from the tomb of Thutmose III are found throughout the rest of the

exhibit, the gift shop and the museum lobby.

"The visitors see the images in many different formats and on many different materials," Bronstein says. "Each area has its own graphic border and main color, but the style is similar and consistent throughout. We really tried to push the envelope by experimenting with different textures and bold color, yet we also strived for consistency of style."

ANCIENT SHOPPING SPREE

The gift shop is located near the entrance of the exhibit.

"We wanted the gift shop to serve as a gateway to and from the exhibit," Cordero says. "The store has two facades, one facing the lobby and one from above as visitors go up and down the stairs to the exhibit. We really focused on making the store engaging from above with towers of cubes and bold colored graphics."

The museum set three major parameters in regards to the gift shop: it had to have an Egyptian theme, it had to be structurally sound and the walls had to have a translucent quality.

"Ninety percent of all concerns were structural based," King says. "The museum's main concern was safety. They

wanted a prim and proper look with themed visuals, clean cuts and smooth edges. With lots of people coming through, the shop had to be able to withstand a lot of abuse.”

SAFE AND SECURE

Castle Graphics had roughly two days to apply graphics to the gift shop once it was fabricated.

“We had roughly 48 hours, from start to finish, to open the files, convert and manipulate the files, print them, mount them and get them to the store,” King says.

The walls of the gift shop consist of 11 panels of a lightweight yet sturdy fluted, square, tube material. According to King, the material, Polygal supplied by Laird Plastics, is often used for sunrooms.

“People waited outside the gift shop for tours to begin,” King says. “The shop’s walls had to be very secure and safe, so that when children bumped into them, both the child and the exhibit didn’t get hurt.”

Due to bright light issues caused by the many large windows surrounding the temporary gift shop, a wide variety of vinyl films, including white and clear were tested. The vinyl had to stand up to the bright light and look good day and night.

In the end a clear film was chosen, so that people waiting for a tour could see through the walls of the gift shop to the merchandise on the other side. The gift shop walls were covered with clear, Avery MPI 2021 temporary adhesive film, and with Avery DOL 3000 matte film laminate.

The 36’-long wall graphic, complete with images from Thutmose III’s tomb, was printed on a NUR Fresco printer.

“We looked at the graphics within the tomb recreation,” Cordero says. “All of the large-format graphic images came directly from there. The tomb’s graphics are very stylized, as if hand drawn, so we tried to keep that look when working in Illustrator.”

Each Polygal panel is 48" x 94", but the graphic pieces were printed 50" x 96", so

that the material could completely wrap around the top, bottom and backside of each panel. The theory is: if the edges of the graphics are not exposed, children will not be able to pick at them.

“No child of any kind, shape or form, unless maybe they have a knife, can damage that vinyl,” King says.

Once the graphics had been applied, the eleven panels were screwed together to create the gift shop walls.

“The Polygal creates a digital screen effect with subtle lines, as opposed to Plexiglas, which is simply clear,” Cordero says. “The Polygal gives a much more animated view of the figures [on the walls]. The faces of various creatures appear and peek out behind the shelves.”

FINISHING TOUCHES

The gift shop glows with backlit images, including an image of the gold mummy mask of Wenujebauendjed. In addition, a border of backlit droplet designs run along the top edge of the gift shop wall. The backlit images and text were printed on Kodak Duratrans using a Durst Lambda photo-writer.

“Most of the light in the gift shop is from the backlit borders,” Cordero says.

Museum visitors are able to sit and rest on wooden cubes lining the walls of the gift shop. According to Cordero, ancient Egyptians used cubes for aesthetic purposes and for ancient architectural rules and forms. For instance, ancient Egyptian sculptures often began with wooden cubes glued together. Therefore, the cube was the main unit used in the interior fabrication of the gift shop.

Cordero carefully chose images of Egyptian characters in a seated position, so that the



In order to direct visitor traffic within the museum, this stairway was divided with a border of Egyptian graphics. The border helps to separate visitors to the Omni-max theater from those visitors coming to and from the Quest for Immortality exhibit.



Poplin fabric was used for hanging banners such as this. The material was hung with wooden dowels so that the banners resemble ancient scrolls.



The walls and display cases were painted with colors like terra cotta red to achieve a bold backdrop for artifacts. Colors used were lifted from those on the actual artifacts.



Flowing curtains with small digital prints, were hung from the ceiling around a mummy on display.

figures appear to be sitting on the cubes.

"Everything had to be exactly to scale, in order to achieve this 3D effect," King says. "The images were lined up 21" above the wooden cubes, so they could be perfectly seated. Everyday hundreds of kids sit on these cubes and bang on the walls. It gives a whole new meaning to the word *challenge*."

The interior of the gift shop has a variety of blocks used to hold merchandise and feature exhibit-related images. The boxes are made of .25" P93 Matte Plexiglas. The frosted boxes are covered with more than 75 Egyptian symbols fabricated with Avery Matte Black Cut Vinyl.

According to Cordero, several museum visitors saw the cubes as, "Egyptian children's blocks piled up into towers."

The floor of the gift shop is covered with bright blue prints of scarab beetles. This ancient Egyptian symbol of rebirth was printed using Avery DOL 4400 floor graphic material. The original image of the scarab is only 6" x 9". To capture detail the

museum floor beetles were printed on a Hewlett-Packard HP 3000 inkjet printer at 600 dpi.

SWEET SUCCESS

Within its first two weeks, the *Quest for Immortality* tour in Boston amassed a great deal of praise, and a lot of visitors. The exhibition was installed within nine months, which is a shorter period of time than the other large-scale exhibits hosted by the museum. Thousands of visitors, including many school groups, have already toured the exhibit.

"We've gotten some great feedback from people who said they really like the graphics, colors and overall atmosphere," Bronstein says. "It's nice to go up to the gallery and see all the people asking questions and the smiles on all the kids' faces."

Billboard Under Wraps

This billboard was created to help promote *The Quest for Immortality* Egyptian artifact exhibit at the Museum of Science, Boston. Rachel Houk Seeger, art director at Gearon Hoffman Advertising (hired by the museum), wanted to create a sense of mystery by wrapping the 48' x 19'6" billboard like a mummy, gradually revealing the graphic as the exhibit date drew nearer.

When large-format graphics provider UniGraphic, Saugus, Mass., was approached with the billboard project, the firm had to come up with a fabric that was both durable for outdoor elements and light-weight enough for easy installation and removal. UniGraphic chose PixelPerfect PX5561, a 3.8 oz 100 percent polyester fabric from Fisher Textiles. The 3.5' x 21' fabric strips were soaked in 30-gallon barrels along with hundreds of tea bags. This process left the material looking aged and worn, much like the wrappings of an ancient mummy.



The fabric was later sewn to the billboard just below the pole pocket to ensure that the installers (Metro Sign and Awning, Tewksbury, Mass.) would not have a problem stretching the vinyl. On installation day, high winds proved to be a big challenge and prevented the covered billboard from fully showing the intended mummy-like crisscross fabric pattern.

The billboard itself was printed on Cooley seamless 13 oz. vinyl using a Scitex Grandjet S5 printer.

The fully wrapped billboard was posted Nov. 8, 2002 on the Massachusetts Turnpike. The first section was removed Nov. 12, the second section came off Nov. 14 and the last section was removed Nov. 19, revealing the starting date (Nov. 20) of the exhibition.

