

as entertaining as

GOTTLIEBS

"thousand and one nights!

Pinball machines are not typical decorative art. Pinball was illegal in many cities even as it reached the zenith of its popularity in the mid-20th century, and the machines' distinctive artwork was considered a little naughty and risqué. So it may be fitting that when a multi-colored, screen-printed back glass from a pinball machine called *Arabian Knights* became a treatment project for second-year Winterthur/University of Delaware Program in Art Conservation (WUDPAC) Fellow Jessica Ford, the painting major incorporated modern digital technology in a non-traditional way.

The back glass of a pinball machine is the vertical element that faces a player across the game's playing field. The image on the *Arabian Knights* back glass, which was illuminated from behind by a light, was created by screen-printing alkyd paints onto the side of the glass away from the eventual viewer. Pinball imagery was intended to create a sort of "working class fantasy" for males between the ages of 10 and 25, and the *Arabian Knights* image involves exotic, scantily clad women grouped around a man wearing a turban. When Jess received the 22 inch x 20 inch back glass, almost half the image had already been lost.

to flaking. She consolidated what remained using Aquazol® 200, a water-soluble synthetic resin that adheres strongly to glass. Chips in the glass were filled with HXTAL epoxy.

Jess's treatment goal was to restore the image by using a digital reconstruction, printed on an underlay, to visually in-fill the areas of loss. When she could not acquire a high resolution photograph of an *Arabian Knights* back glass, she successfully drew the image from scratch in Adobe Illustrator. She put that file into Photoshop, aligned it with a photograph of the original image and then subtracted the original from the re-creation. This left a fragmented image that completes the original image when applied to the area of loss. Jess had to search for a commercial printer able to print the fragmented image as a stable underlay, which required a clear substrate and

full-color image, with non-standard dimensions. After locating a printer willing to collaborate on the unusual project, it took a few attempts before the reconstruction underlay was properly aligned and color-matched to the original. Now, the back glass, with the digitally reconstructed underlay, is ready to be returned to the owner, who plans to display it on a light box.

ARTC Spotlight—June 2013

The University of Delaware's Art Conservation Department educates and trains professional conservators in the treatment, analysis, documentation, and preventive conservation of single artifacts and entire collections. Our students are powerful public spokespersons for cultural heritage and its preservation. For more news about our students and other department activities, visit our web site at http://www.artcons.udel.edu

To learn more about the university-museum partnership that brings material culture and preservation training to University of Delaware students, visit the special exhibition web site and activity blog for "A Lasting Legacy," on view at the Winterthur Museum, Garden & Library, at http://www.winterthur.org/?p=910

Top: Detail of a 1953 advertisement for the Arabian Knights pinball machine. Above: WUDPAC Fellow Jessica Ford consolidating paint with an ultrasonic mister. Insets: The fragile paint surface. Right: A restored Arabian Knights pinball machine (image from pinrepair.com).