photos/Mike Tappin

Three views of one hologram

Three Dimensions

By Ina Jaffe

The term "museum piece" conjures up images of dusty artifacts from more primitive times, but the Museum of the Fine Arts Research and Holographic Center, at 1134 W. Washington, is anything but a shrine to the past. The treasures in this museum offer a three-dimensional glimpse into the future.

Put simply, a holograph is the image created when monochromatic light passes through a translucent, light-sensitive surface containing the frozen information of light waves that have been reflected from an object illuminated by a laser.

And you thought you didn't understand modern art.

Loren Billings, the museum's director, describes a holograph as "the information structure of our visual universe. It's a one-to-one object/image ratio. I once saw a holograph of a glass of water. When the holograph was put under a microscope, I was able to see the microorganisms in the water."

The quiet, wood-paneled museum has the ambience of a library in a turn-of-the-century mansion. It's fortunate that the decor is soothing because the exhibits tend to challenge one's grip on sensible reality. What is simultaneously fascinating and disturbing about a really good holograph is that it doesn't look like something called a holograph, it looks like the "thing." A holograph of a bas-relief of a lion's head appears to protrude several inches from the wall. There is no way to convince yourself that this is not the case, no angle from which to view this piece that will destroy the three-dimensional perception. Try to rub the lion's nose, however, and you will find your hand against a flat, colorless, featureless piece of plastic.

A holograph of a young woman's face is similarly disturbing. She appears to be smiling at you through a small window. Approach her from a 45-degree angle and you will see her in three-quarter profile. You find yourself listening for her knock: "Hey, let me in."

The aesthetic potential of holography is obvious. The museum has many examples of holography for its own sake. But it'll be a while before artists are commonly able to use this process. The pulse laser required to make the holograph of the young woman's face costs about $50,000. The special tables used to ensure a stable image are made from concrete and weigh up to 20 tons. The art of holography cannot be pursued in the proverbial garret while starving on a 500-dollar grant from the state arts council.

Industry, however, has already rushed in where artists cannot afford to tread. The museum has a display of a holographic process that causes stress points to appear as black stripes. It'll find a microscopic bubble in a 20-ply tire and trace the weak spots in an airplane's wing.

In another holograph the image of a space capsule is replaced by that of a telephone when the angle of the holographic plate is shifted about 30 degrees. Though there are only two images in this plate they represent a revolutionary concept for data storage. It is theoretically possible for so many distinct patterns to be frozen on a single holographic plate that a different image could be presented every time the angle of the plate shifted a solitary nanometer. One eight-by-ten-inch plate could hold the complete records of the Library of Congress. Nanometers must be very, very small.

Clothed Is the Best Disguise

By Neil Tesser

The current show at the Paul Waggoner Gallery—the show called "Nude in Chicago"—had attained a certain notoriety before it even opened, and so I was sure to attend the official kickoff last Friday night. In case you missed hearing about it, "Nude in Chicago" is 42 photos documenting a project of photographer Diane Schmidt's, during which she captured on film a particularly gratifying spate of indecent exposure. The pictures find model Michele Fitzsimmons, all decked out in her birthday suit, in such locales as an el platform (in broad daylight), Buckingham

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