



MORE THAN MEETS THE EYE:

# BEYOND THE THIRD DIMENSION

HOLOGRAPHY'S CONTRIBUTIONS TO  
ENTERTAINMENT SOCIAL CRITICISM  
AND MEDICINE.

BY AMY MERRICK

Holograms still embody a science fiction otherworldliness that simultaneously confuses and fascinates us. At the Museum of Holography, 1134 W. Washington St., and Light Wave Hologram Gallery at North Pier, 435 E. Illinois St., visitors explore a universe that lies just inside the boundaries of their imagination.

Stepping inside the Museum of Holography, one becomes immediately aware that this is sacred space. The four-room museum, with its worn carpets and dimly lit exhibition spaces, is eerily silent. The darkness of the museum, designed to magnify the effect of the holograms, is reverential, a testimony to man's creative powers.

"This is the first time in history that man is able to record three-dimensional images," said Loren Billings, executive director of the Museum of Holography. Billings has volunteered at the museum since its opening in 1976.

She said people are drawn to holograms because "they have an innate recognition that this is a dramatic change in visual communication."

"[Holograms] are wonderful to see, to sense and marvel at the intelligence process in the human mind," Billings said.

Holography uses laser light to record the dimensional reflection of an object. By reproducing the light patterns one normally sees when looking at the object, all of its three-dimensional qualities, such as perspective and depth, can be communicated.

"Holograms exist just as you and I do, as light energy," Billings said.

Many of the holograms take advantage of the medium's power to shock and stimulate. Shards of glass appear to jut straight out of a Medusa-like woman's mouth in "Scream." In another hologram, "More Words, More Images," red clay-like figures in positions of grief extend into the audience's space. The background is a torn page from the New York Times, which portrays mourning Croatian women.

Not all of the holograms convey profound messages, though. Some are simply designed for entertainment, such as the mammoth rainbow-colored head of a dinosaur, which is so huge that it must be viewed from across the room.

Billings said an image of a miner panning for gold seems to be a favorite of visitors. When one moves from left to right in front of the scene, the miner appears to dip his pan into water and examine its contents.

Holograms are not only visually powerful, Billings said, but they also represent a breakthrough for medicine and engineering.

One exhibit in the Museum of Holography showcases the capability of holograms to diagnose medical conditions that would be otherwise impossible to detect with conventional procedures like X-rays.

Scientists from diverse fields participate in the museum's quarterly classes, in which students learn to produce their own holograms. The current session includes physicists from Argonne Laboratory, Billings said.

Billings said the museum, which receives about 500 visitors a week, exists to "preserve the history of holography for all generations."