

Multi-Media: A Short History

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Multi-Media Art Form

AS EARLY AS the 1920s and 1930s the Bauhaus School of Design in Germany experimented with the integration of new technology with the arts. Full-sized theater environments were constructed with images projected on walls, hanging screens and performers themselves. At the Bauhaus, men like Laszlo Moholy-Nagy and Kurt Schwitters created scores for new operas of light, sound and theater and this tradition is still to be found in the highly experimental theaters in West Germany.

After World War II, many other people took up the ideas of the Bauhaus. The Institute of Design in Chicago created multiple projection classroom environments. Designers like Charles Eames and Herbert Bayer developed events for three or more screens for colleges and universities. Another developer of multi-media was John Cage. Cage probed deep into fusing theater and dance, sculpture and architecture. Cage's work culminated a few years ago with the production of HPSCHD, a massive multi-media piece that was held in the Assembly Hall at the University of Illinois, and incorporated fifty slide projectors, seven live harpsichordists, and a bewildered audience of thousands.

Multi-Media Training

During the fifties and early sixties, a group called USCO went around presenting some of the first multi-media shows. They developed a portfolio of experimental techniques and concepts that were demonstrated at universities and museums.

USCO is involved in many commercial ventures these days. Writing in *Print* magazine, Miss Dennie Coffet reports: "Gerd Stern, spokesman for USCO, sees multi-media as being an especially useful training tool. The flexibility of the constant image against changing images in conjunction with appropriate sound can result, he feels, in an extremely effective matrix of procedure for learning tasks.

"Multi-media is also being used as sales training; conveying information, firing sales force enthusiasm. Multi-media technique strives for a total environment that results in a heightened involvement of the viewer. It seems that information advanced through a multi-media environment affords a greater retention level than conventional methods of communication."

Scott Paper Company discovered this recently when it used a multi-media environment for a series of sales meetings. USCO came up with a multi-media presentation that would help the Scott sales force "get the message" on the one product in the line that wasn't doing well.

They combined reflecting screens of metalized vinyl, programmed projectors which simultaneously flashed images on four screens surrounding the salesman, film containing pertinent Scott information, and four stereo sound tracks which blared forth a mix ranging from the Beatles to bird calls to company slogans. All the while the product manager and a public relations woman battled the product's data, market statistics, and competitive sales figures back and forth in the midst of the demonstration.

Scott's product manager stated that, "although the marketing plan was presented in a manner strange and befuddling to most concerned, the effect has been a complete turnabout in sales force attitude. At this time, sales are 11 percent ahead of the same period during 1966."

Multi-media involves all those media that evoke a basically emotional response. Multi-media bypasses judgment and rational intellectual reaction and allows information to get through to the viewer as direct experience, involving him in a wholly new way. This is most successful when media are combined to bring about a total environment.

Multi-Media Instruction

The use of more than one medium is, of course, not new.

For generations, good teachers have been using a variety of media in the classroom. Today, we speak of the multi-media system and this is a concept significantly different from what we have known in the past. All components and media are integrated to reinforce each other.

We are well on the way to organizing materials in schools and colleges so it will be easier for teachers to use multi-media for instruction. Special media teachers are needed in schools to plan and produce media and help the teachers in using the materials.

In 1961, the University of Wisconsin developed a multi-media laboratory for the purpose of improving teachers' procedures in higher education.

The integrated audio-visual system is used for improving the quality of large-group instruction at the university level. The laboratory also provides a facility where learning and teaching conditions can be studied.

The laboratory has a three-part screen with rear projection. The student often sees three images visually representing the progress of the professor's lectures. These images, the professor's words, the room lighting and the recorded sounds and music can be carefully coordinated to make an integrated impact on the student's mind through his senses of sight and hearing. The professor has complete control of both the audio and visual effects during a class period. The effectiveness of this type of presentation depends upon the talent of the individual who produces it.

On occasion, the unique installation has been used for special purposes such as a large-screen TV viewing for controlled experiments in audience reaction studies, the showing of a foreign dialogue film with a simultaneous English translation on another portion of the tri-part screen via a teleprompter mounted in the opaque projector and supplementary color visuals added to kinescope or videotape recordings to emphasize specific concepts.

The professors using the facility generally indicate that they are able to present far more content materials in a more learnable fashion and thereby achieve a greater retention of knowledge.

Research supporting this assumption has revealed increases of up to 35 percent in learner acquisition and retention.

Multi-Media Exhibits

Use of multi-media methods are evident at exhibits and expositions everywhere. During the 1971 Photo Expo in Chicago, there were installations of single screens in twelve to fifteen screen exhibits.

Ehrenreich Photo-Optics, Inc. had an exhibit entitled "The Cheshire Grin." The images changed rapidly or slowly in time with the music. The screen was filled at one time with fifteen separate images; at other times a single image was created in sections over the entire fifteen screens; in still other instances, some images were repeated while new images appeared or faded from the screens.

In the past, many variations of multi-media shows have been used at the large international expositions. The last World Fair in Japan was no exception. All major buildings have a multi-media presentation of some form.

The latest multi-media exhibit area is the new \$23 million Ontario Place, Toronto, Canada. In one exhibit, called Genesis Pod I, filmed images are projected on a 60 x 16 foot, floor-to-ceiling and wall-to-wall screen formed by oblate, ellipsoid, spheroid, and ovoid shapes. Visitors stand or sit in front of the screen. The walls and ceiling are mirrored Mylar, creating a complete environment which makes the viewer become part of the pictures.

In another section of Ontario Place, the history and the theme is "Up with Ontario." A film of children (symbolizing the future) is projected on two 30 x 14 foot curved screens. The use of audio-visual equipment is staggering—18 TV monitors, 18 tape decks, 8 35mm projectors, 10 panacolor units, 3 16mm projectors, and 1 Super 8.

The use of multi-media exhibits is becoming more and more a way of life. Today—small shows to the largest—you will find multi-media exhibits.

From the beginning, in the twenties, to the present, multi-media has struggled and found its place. We can only speculate as to what the future will hold for these media.