Interactive Media & the Museum Experience

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Introduction

"Interactive media" has become a favorite buzzword in the museum world. Most of the attention, and much of the R&D, has focused on the "Interactive" aspect of the technology. For the most part, this is because the technology has been used behind the scenes, in collections management, image banks, etc. This is the most pioneering aspect of the medium and it holds the promise inherent in new technologies. But the emphasis on the technical aspects of hypermedia is misdirected if we want to bring interactive media onto the exhibit floor. Instead, we need to highlight the "media" available to this technology. We need to rethink the image-based media, whatever its format, and evaluate how we design and produce these images for nonlinear, museum applications.

We have emphasized the technical, and sometimes the architectural, requirements of media, but we have largely ignored the actual media. We repackage old news footage into a non-linear program; we collect a database of stills; we scroll pages from a text. In effect, we use as our source material footage that could have been collected in 1953 (and, in some cases, was) but we apply a computer technology to it. All of our magic takes place behind the screen. Yet, in most exhibits, the museum visitor relates to only one component, the monitor. It is a blank canvas in a carefully designed exhibition and we have to, just as carefully, design the many layers of that canvas.

Interactive Media Does Not Exist in a Vacuum

But that canvas does not exist in a vacuum. It shares a visual and a conceptual vocabulary with other exhibition elements, including exhibit artifacts and exhibit space. The monitor exists in a real room, surrounded by real objects, whether they are works of art, scientific instruments or 19th-century industrial machines. It has to hold its own, not compete; it has to acknowledge the links between what is happening off-screen and what is happening on- screen. Sometimes these links may be subtle and implicit.

In "A More Perfect Union", at the National Museum of American History, Washington, D.C., the interactive media introduces several individuals into an historical exhibition. They describe their personal experiences. They do not address the chronology of events that has been depicted by more traditional exhibit elements: newspaper headlines, government documents, even old photographs. Instead, the real people who speak to the visitor

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from behind the monitor tell real stories, stories only they know, and their presence brings an intimacy to the show. They also help to animate the other, more static elements in the exhibition.

At the Getty Art Museum, in California, visitors can study interactive videos of either Greek vases or rare manuscripts. Here, the connection between the object and the video monitor is more overt. The visitor is invited to explore the various dimensions of the object; he/she can select explicit background information or watch as the camera moves around a vase, stopping in close-up on a detail, or following the curve of a line.

In both instances the interface is clear and direct. The invitation is logical and consistent. In both cases the video discs are sensitive to overall exhibition needs. The visual information in "A More Perfect Union's" videos are intimate, closely-framed portraits; they are one-takes, sometimes halting, sometimes pausing. Likewise, the vocabulary established by the videos in both Getty exhibits reinforces the museum's studied and elegant approach to its collections. In turn, the media become integral to the exhibitions.

Otherwise, the medium becomes an artificial insert that has to be retroactively fit into the exhibition. It is the kiosk set in the entrance to a science center, as if to reassure the visitor that there is something familiar and accessible inside. It is the monitor stuck in the corner of an art gallery, to make an academic show more approachable. It is the speakers pinned to the ceiling of a nineteenth-century period room. But it is not the central component that animates artifacts and text labels.

The Visitor is an Integral Player

Unlike a linear program, an interactive program isn't complete until the unknown user interacts with it. That means that the producer must acknowledge the role of the user and must have a good sense of who this user is. Who is the visitor? Why have they come to this exhibition? What do they expect to see? What else have they seen in the same show?

The same questions could be asked of any exhibit element but there are special demands on interactive media. Nonlinear media cannot rely on the sequential development that linear programs presume. Every shot has to count: every shot has to contain its whole history, since there is no preceding scene to give it meaning and no predictable resolution.

Every image has to be composed and analyzed: to evaluate the quality of the image, the content in the image, and the vocabulary of the image. If the passing visitor has the option of engaging the program, then the monitor has to make a clear and direct invitation and, once that invitation is accepted, it has to be reinforced.

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Media is Not the Only Museum Experience

Media in the museum environment, whether linear or interactive, has to acknowledge its neighbors. If it is part of an art exhibition, how does the screen address the works of Picasso, or Rauschenberg? How does the screen address the scale and movements of an actual robot? How does the screen address the surveying instruments of George Washington?

The answers are in the exhibit concept, in the objects, in the design of the exhibition space, even in the institution's mission. A children's museum will answer these questions differently from a science center. A history museum will interpret maps, or even paintings, differently from an art museum. Despite its technical promise the interactive medium designed for use in any of the above is not an all-purpose product. It must be designed, and produced, for real and continued use, in a real space.

In a museum there are many competing experiences. Interactive media are only one experience offered to the visitor. In any exhibition the video monitor is surrounded by significant artifacts, whether they are paintings or hands-on science exhibits. The media created for these circumstances must display the same integrity and credibility as the surrounding objects. Is it necessary, or advisable to depict these same artifacts on the video monitor? Sometimes yes, sometimes not. But the question must be raised: what is the relationship of this medium to its neighbors? How does the information (visual and intellectual) on the monitor relate to the information available in a 19th-century lathe?

Objects and documents bear silent testimony. They can tell us only some things about themselves. They cannot give us context. They cannot demonstrate process. They can't show us the broader social or political context. A suitcase used by a Japanese American on his way to Manzanar may bear poignant witness to a forced relocation, but it doesn't tell us why. And it tells us nothing about the people who are being moved. An old farm tool, set against a farmhouse exhibit at a children's museum, can't tell a visitor anything about how it was used, or the crops that it harvested, or the children who operated it. But an interactive program can introduce the museum's visitors to all of the above.

Media Must Support the Other Museum Experience(s)

A text label can provide some of the same information but there is more power in the image of the tool in operation, in the larger context of an actual field. There is more intimacy in the recorded memory of the former child. As museum professionals we have to evaluate the appropriate use of the various languages available to us. There are times when the printed word is a legitimate source of information. There are times when the image is a more legitimate, and credible, source.

But if we choose to use the language of images we have to adopt an appropriate vocabulary. We have to acknowledge the logic of the visual grammar that we share with the exhibition. Any interactive media developed for exhibit use is more effective, more immediate if it is developed to be integrated into the exhibition, if it is attentive to the exhibition

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design, its content, the objects collected for that exhibition, and the spatial relationship between these objects and the monitor. Because on the exhibit floor, the monitor is the only piece of hardware that counts. All the design and production efforts have been reduced to this 13-inch box.

Like other design arts, like film or architecture, interactive media starts with a concept, an idea that is unfinished until it takes practical form. The shaping of that form requires a practitioner to engage in a sequence of technical decisions: from the best format for the source material to the most appropriate hardware configuration. At every decision point we have to remember our original concept. It is the premise that informs all of our decisions.

In an exhibition on the history of the U.S. Congress, developed for the Library of Congress and now on permanent display at the Dirksen Congressional Center, in Illinois, an interactive videodisc is used to introduce the visitor to six members of Congress. Each is introduced in an attract loop and a series of questions is designed, for the visitor to pose of each member. The question is written in white font against a blue background with the Capitol shaded into the background. The font selected for the written question is the same that is used in the Congressional record. There is nothing in the exhibition to alert visitors to this detail and the casual visitor is unaware of it. But the visitor who reads the Congressional Record might note it. He might not.

Visitors to the Children's Discovery Museum, in California, might likewise note that the font selected for that exhibit's videodisc is the same black on white script that is found in the early "Dick and Jane" primers; and the program is narrated by a twelve-year old, off-camera narrator. Although the museum's visitors are aged 3 to 13, it was thought that a 7-year old narrator, for example, might have little credibility for the older, middle school visitors. In a small, 13-inch monitor, every detail can be weighted with some degree of meaning. Every detail can be selected to support the broader exhibition content, to reinforce its design, and to directly address the visitor.

Interactive Media has to Work Every Day

But all of this effort is wasted if the technology doesn't support it and to do that the technology has to acknowledge the real conditions of the exhibition. How do we protect a small monitor, placed at eye level, in a children's museum? How do we protect the acoustical integrity of an exhibit on modern language when the exhibit hall is one long open room, full of hard surfaces? Can we make a 26-foot screen integral to the content and design of a traveling exhibition?

If the answers seem obvious they aren't. We have only half the answer and we have to consult with our partners, the people who maintain this equipment, the curatorial and design staff who have developed the exhibition. And the question central to all of the technical details is: how will changing this plan effect the integrity of the exhibition? Will our changes undermine the exhibition concept, or content? The time to raise these questions is NOW, immediately, before the first image is recorded, before the first shoot is planned.

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The practical can never be divorced from the conceptual and both must be addressed simultaneously.

One of the "problems" of interactive media is that there are few rules: each exhibition is unique. As a result, the media developed for them is also unique, developed with a particular concept and particular space, designed to support a defined program. However, as the field has grown in recent years, there has been a tendency to adopt a standardized approach to interactive media. We have, without realizing it, created a working vocabulary: of interfaces, controls and configurations. Faced with the problem of designing a program for an exhibition we sort through this vocabulary and devise a workable solution.

To some extent, this is a rational approach. Interactive media are based on an understanding, and manipulation, of technical data and it makes sense to go back to the tried and true. But this is not exclusively a technical problem: we are researching and manipulating images. We are developing and reinforcing ideas. We are arranging these images and ideas onto a screen that is our only contact with our audience. If we truly want to make contact with that audience we must consider the end product of all our efforts. We must think of that empty screen as our canvas, a canvas that will be held to scrutiny for a long time, by our audiences, our clients and our peers.

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