

vol. 25  
no. 1  
spring 2006

\$10.00

# exhibitionist



**National Association  
for Museum Exhibition**

A journal of reflective  
practice, published by  
the National Association for  
Museum Exhibition (NAME),  
the Standing Professional  
Committee on Exhibition  
of the American Association  
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## Thank you to NAME!

*In recognition of NAME's 25 years of service to the museum field, we would like to thank NAME members, volunteers, and the entire museum field for your participation. It is exciting to participate in the vibrant community of museum exhibition professionals, and we look forward to more innovation, provocation, and shared enthusiasm in the coming years.*

### Eugene Dillenburg

*Small Koi in big pond,  
May you grow and prosper  
for Twenty-five more years*

### Jeff Hayward

*People, Places,  
& Design Research*

### Jon Jager

*From a Founding and  
Past Board Member, on  
NAME's 25 YEARS & its  
hard-working contributors,  
past & present, CONGRATS!  
The Designing Eye.*

### Ann Meyerson, Ph.D.

*Curator/Exhibit Developer  
Thanks for 25 years  
of inspiration!*

### Phyllis Rabineau

### Eric Siegel

*Congrats NAME Members!  
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*You are making a real  
NAME for yourself  
after all of these years.  
Congratulations  
on your 25th!*



from the president

**Phyllis Rabineau**  
President

**Phyllis Rabineau** is the Vice President for Interpretation and Education at the Chicago History Museum. She may be contacted at [rabineau@chicagohistory.org](mailto:rabineau@chicagohistory.org).

## Happy Birthday, NAME!

**T**wenty-five years ago, a group of designers, gathered in Indianapolis to attend the AAM conference, held a meeting to decide how they could bring the perspectives of exhibition professionals to the forefront of national dialogue on important issues related to their field. I wasn't there, so I can't pretend to relate the details of that discussion, but I do know—from listening to stories shared by NAME's founders, from reading many **Exhibitionist** articles, and from hearing dialogues that continue to unfold within the organization today—that passion, knowledge, wit and creativity, as well as the gift for late-night argument, have characterized NAME from its origins, and show no signs of letting up as we head into the future.

Some things seem to never change: we still debate the characteristics of excellence and the best ways to achieve it. But other things have changed a lot, and over the past twenty-five years NAME has become a more diverse organization, representing practitioners from many disciplines. As a legacy of that diversity, today we are one of the largest standing professional committees within AAM, with resources that enable us to publish the **Exhibitionist**, and to develop programs to benefit our members. On the other hand, growth and diversity have also sparked continuing debate about how best to preserve our distinctiveness and our advocacy role.

Those dialogues are likely to continue, since expanding our membership base is one of the objectives of NAME's recent strategic plan. It's very exciting that NAME's member numbers have increased substantially over the past year, and there is much additional potential for our organization to grow in size and influence. The new NAME logo and re-designed **Exhibitionist** are steps in an overall effort to communicate the vibrancy of the organization and to expand our constituency; coming soon are a facelift for the website, a members' survey, and subsequent strategies to stimulate further growth. Be assured that as we work to bring new faces and voices into NAME, we will continue to value and engage with the experienced provocateurs whose inspiration and guidance are so essential to its success.

The end of this fiscal year marks another transition in NAME's life cycle, as a number of our experienced leaders rotate off the Board, or transfer to new positions. I'd like to take the opportunity to recognize these individuals whose dedicated efforts so effectively guided the organization through a period of growth and transformation: Anne VonStuelpnagel (Treasurer), Gene Dillenburg (Membership Chair), Tamara Biggs (Program Chair, transferring to Midwest Regional Representative), Libby Lewis (Board Member at Large), Tara White (Board Member at Large), Paul Orselli (Mid-Atlantic Regional Representative), Salle Tulchin (Mountain-Plains Regional Representative), Beth Redmond-Jones (Western Regional Representative, transferring to Board Member at Large). Thanks to you all, and I hope you'll continue watching over us.

*Phyllis Rabineau*



Beth Redmond-Jones  
Guest Editor

from the guest editor



**Beth Redmond-Jones** is the  
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## Happy 25<sup>th</sup> Birthday NAME!

**N**AME is a quarter of a century old and wow, has she grown! She started out as a small organization created by exhibit designers and now she's a 870+ member organization that includes exhibit designers, exhibit developers, project managers, prototypers, fabricators, administrators and up-and-coming professionals. During this time, the **Exhibitionist** has grown too, from a small newsletter to a professional journal. And as you can see, the **Exhibitionist** now has a new look to kick off our next twenty-five years.

So, what's the theme of this anniversary issue? It's a snapshot in time, where we are now with our love and passion—exhibitions. This issue began to take shape when Eugene Dillenburg and I scoured back issues of the **Exhibitionist** to find those pithy articles that influenced and challenged our field. Then I asked the original authors, and some new ones, to compile their thoughts, ideas and insights about where we are today. So, we've reprinted some of these original articles for context and others are referred to within the new articles. I hope this issue provides you with some insight to the field, provokes new questions, provides answers and makes you think differently about a new (or old) idea, process or philosophy.

And, before those candles are blown out, I want to wish all the authors, Eugene Dillenburg, Jenny-Sayre Ramberg and Phyllis Rabineau best wishes and many thanks for all their assistance in reviewing articles, editing articles when I was swamped, being a sounding board for me and securing images. I could not have done it without you! And a special thanks goes to the Gecko Group for taking us by the hand and guiding us in designing a new NAME logo and **Exhibitionist**. We're very grateful.

OK, you can now blow out the candles and eat some cake!

*Beth Redmond-Jones*

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**I**t is certainly an exciting year for NAME. Our 25<sup>th</sup> birthday has given us all an opportunity to pause, take stock of our work, and the field of exhibition development. In continuing the NEWSLINE tradition, members have been sending me announcements of exhibitions and museums both great and small, weird and wonderful, real and virtual from across the country. Here are a few...

The Muhammad Ali Center held its grand gala opening last November. The center is located in Louisville, KY where "two and a half levels of exhibits feature an innovative and immersive visitor experience through which you can learn about Muhammad Ali as well as have an opportunity to embark on your own personal discovery". A series of media stations and interactive exhibits present Ali's biographical storyline through the six core values of his life: **respect, confidence, conviction, dedication, spirituality, and giving**. The Center features a two-level architectural "torch" which houses visual elements that take you through Ali's professional boxing career. The centerpiece is a video projected down onto a boxing ring that is viewable from above. Media, lighting effects, and graphic imagery bring to life Ali's triumphs in the ring—chronologically documenting some of his greatest moments in the gloves. In the *Train with Ali* exhibit you can try shadow boxing, practice your rhythm on the speed bag, and feel the strength of an Ali punch so that you too can "float like a butterfly and sting like a bee".

From "The Greatest" I take you to "The Creepiest"—The Cockroach Hall of Fame Museum in Plano, Texas. Run by Michael Bohdan, a pest control specialist with over twenty years of experience, one can view dozens of displays of "roach art" consisting of real, dead cockroaches that have been dressed in costumes to portray various themes. For example, an eighty-five year-old lady in Fort Worth dressed up a dead cockroach with a white mink cape and sat him at the keyboard of a tiny piano. She named him Liberoachi.

Also on display are live Madagascar Hissing Cockroaches that are three to four inches long and nearly an inch thick. When you pick these cockroaches up, they hiss.

The Minnesota Historical Society announced the opening of a major new exhibition, *Open House: If These Walls Could Talk...* at the Minnesota History Center. *Open House* uses a single, existing house—in the "Railroad Island" neighborhood on St. Paul's East Side—as a window into the daily lives of people of the past. The exhibit tells the stories of the working-class families who lived in 470 Hopkins Street. Visitors explore rooms representing different eras where they encounter dramatic uses of media. Sitting down at the dining room table triggers a media vignette—photos surface within the dinner plates to accompany one owner's recollections of meeting her future in-laws at a big family dinner. In the bedroom, reaching for a money jar launches home movies and another occupant's story of saving coins for their family vacations across Minnesota. Richly environmentally realized and story-driven, *Open House* engages visitors in what can—and, sometimes, can't—be recovered from the past.

As a kid I loved the book *From the Mixed-Up Files of Mrs. Basil E. Frankweiler* by E.L. Konigsburg. For further museum fiction Dianne Hanau-Strain suggests *The Bowl is Already Broken*, by Mark Kay Zuravleff. She reports "The story takes place in a Smithsonian Asian art museum that's going to be closed to make a food court—and it's got everything: politics, pedantry, embezzlement, terrorists, sex, plus all our familiar museum people with their passions. Art, too. And babies. One long, sweet, leisurely beach book."

Increasingly one is able to have a museum without having a building. Beth Redmond-Jones sent word of one such virtual museum: So, did you ever wonder what you should do with those extra packets of condiments that you get from restaurants (assuming that you have eaten fast food at least once in your life)? Artist Matthew



Bowman curates the online **Original Condiment Packet Museum** ([www.clearfour.com/condiment](http://www.clearfour.com/condiment)). The site is a continually growing exhibit of over 900 condiment packages. Check it out! And if you have a packet that Bowman doesn't, you can submit it to be included. And for those of you who collect sugar packets (and I know you are out there), he has links to sugar collector pages.

Ebay has changed the way that collecting is being done by museums, and a recent search turned up entire museums for sale. One recent posting was for The Shooting Gallery Wildlife Museum in Challis, Idaho, which boasts a 1,900 square foot gallery and its contents, featuring all original material, including a 1914 Smith working shooting gallery where you can test your skills and shoot for fun, stuffed fish and animals including eighteen world records and fourteen state records, including thirteen world-record fresh water fish. All this, a furnished bed and breakfast, and a riding lawn mower, for only \$5.8 million dollars. Bid now and you could be your own boss!

In the last issue, I mentioned the online toilet museum. As a follow up, a similarly themed institution, the Madison Museum of Bathroom Tissue in Madison, Wisconsin, has over 2,500 rolls of toilet paper ("an impressive assemblage of toilet paper from across the country and around the world") from Ellis Island, Caesar's Palace, the Alamo, and the like. There are examples of celebrity-signed toilet paper (Madonna), vintage toilet paper from the late 1800s, and yes, toilet paper poetry.

In addition to news of new, interesting, and strange exhibitions, I heard from NAME members about exhibits that had an impact on their work. Eric Siegel wrote, "I remember an exhibition on doorknobs that I saw at the City Museum in St Louis during the AAM conference held there in 2001. The artifacts themselves were displayed in a pretty straightforward way, and were pretty cool in their own right. But next to the exhibition

was a large multi-frame comic strip about the collecting of the artifacts. It was hilarious and made you see the individual passion that made this exhibition come to life. The whole City Museum opened up a world of humor and playfulness that was a good counterbalance to the sobriety of the AAM conference."

Paul Orselli contributed, "One of my favorite ongoing exhibits at The MIT Museum in Cambridge, MA is the interactive show about Arthur Ganson's creations called **Gestural Engineering**. One of my greatest frustrations with most museum exhibitions is that you only see a tidy end result of objects or components, without having an appreciation of the personalities and (often circuitous) processes that it took to create these cool things. The **Gestural Engineering** exhibition on the other hand, gives a real sense of the artist and his craft, and lets visitors have fun with cool machines and ideas at the same time! Is **Gestural Engineering** an art exhibit, a hands-on gallery, a personal statement about technology? It is all of those things, and more."

Many thanks to those of you that sent me submissions, and keep them coming! ☀

# Eleven Touchstone

## American Exhibitions of the 20<sup>th</sup> Century

by Marjorie Schwarzer

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"Our field's journey from the dusty cases of yore to the daring spaces of today has been marked by extraordinary moments."

Imagine this. You are a visitor to a typical American museum circa 1900. You ascend a long staircase to galleries filled with carvings, canvases, and colors. Statues crowd the floors. Paintings cascade down the walls. Dressed in ornate frames, they hang so close together that you can barely discern the brocade wallpaper underneath. Canvases are arranged as they would be in a collector's parlor: by size. The largest painting sits squarely in the middle, flanked by the next largest, and so on.

Stroll into another gallery. Before you unfold rows of mahogany tables crowned with glass cases. In each case, echoing the symmetrical aisles, are more rows: eggs, bones, shells. You notice a larger case, about the size of a meat locker, filled with mammals in frozen poses. Crammed inside this veritable Noah's Ark, their hides are stuffed with straw or rags. Their limbs are propped up with rods and nailed onto planks. You hope nothing is lurking in the closet. There probably isn't. Nearly everything the museum owns is on display.

As readers of *Exhibitionist* know, most museums do not look like this anymore. Exhibition techniques have evolved considerably since the 1900s. Our field's journey from the dusty cases of yore to the daring spaces of today has been marked by extraordinary moments. In 2003, as part of the research for my book *Riches, Rivals and Radicals: 100 Years of Museums in America*, I emailed a survey to NAME members asking for thoughts on those "tipping points" that have shaped exhibitions over the 20th century. Below are the exhibitions you most frequently suggested were touchstones to the astonishing changes our field has undergone over the last century.



**Muskrat Group**, Courtesy of Lisa Bruemmer

### 1. *Muskrat Group*, Milwaukee Public Museum, Milwaukee, 1890.

**Innovation:** Combining more life-like taxidermy and a popular pre-cinema form of entertainment called the cyclorama, pioneering taxidermist Carl Akeley created a vivid and naturalistic exhibit of animal life. It is considered America's first museum habitat diorama.

Carl Akeley abandoned the technique of stuffing specimens with rags and straw in favor of sculpted realistic specimens. He also displayed the animals in a recreated habitat. For his first experiment, *Muskrat Group*, he constructed a model of a muskrat lodge complete with a riverbank. Influenced by cyclorama backdrops, he fitted the model with a curved painting to create the illusion of a river bending into the horizon. Akeley used the case's glass front to "slice" the stream, showing the lodge's interior, the water's surface and a subsurface view of the animals' aquatic habitat. He positioned the muskrats in various poses so a visitor could see an entire day of a muskrat's life in one physical space. *Muskrat Group* became the prototype for what was dubbed "the Milwaukee style" of exhibition development. Akeley went on to create more elaborate dioramas for the Field Museum and the American Museum of Natural History.



## 2. Coal Mine , Museum of Science and Industry (MSI), Chicago, 1933.

**Innovation:** *MSI simulated a real experience by arranging authentic objects acquired from a defunct coal mine in a recreated “immersive” environment, supplemented with rides, smells and other special effects.*

The museum’s staff designed a basement gallery to resemble a mine’s interior, complete with walls of coal and a custom-formulated perfume. On the first floor, visitors boarded a mining cage. It creaked down rollers. Rapidly quivering canvas walls created the illusion of plunging into a shaft. Upon arriving in the “mine,” visitors boarded a railcar driven by a retired miner outfitted in authentic gear and watched mining activities. “Real?” bragged MSI’s director Waldemar Kaempfert, “It is impossible to distinguish reality from illusion here.”

## 3. Airways to Peace: An Exhibition of Geography for the Future , Museum of Modern Art (MoMA), New York, 1943.

**Innovation:** *Bauhaus-trained designer Herbert Bayer combined modern interior design techniques like white walls and partitions with abstract tools like maps and globes to communicate a message; in this case, how new kinds of cartography were helping the allies to win the war.*

Herbert Bayer is considered father of the “white cube.” In addition to coating walls, ceiling and floors with white paint in order to create “neutral exhibition spaces,” he developed the idea of hanging works so they tilt toward viewers, instead of lying flush to a wall. Fascinated with how diagrams orient visitors to a space, Bayer also invented the now-ubiquitous



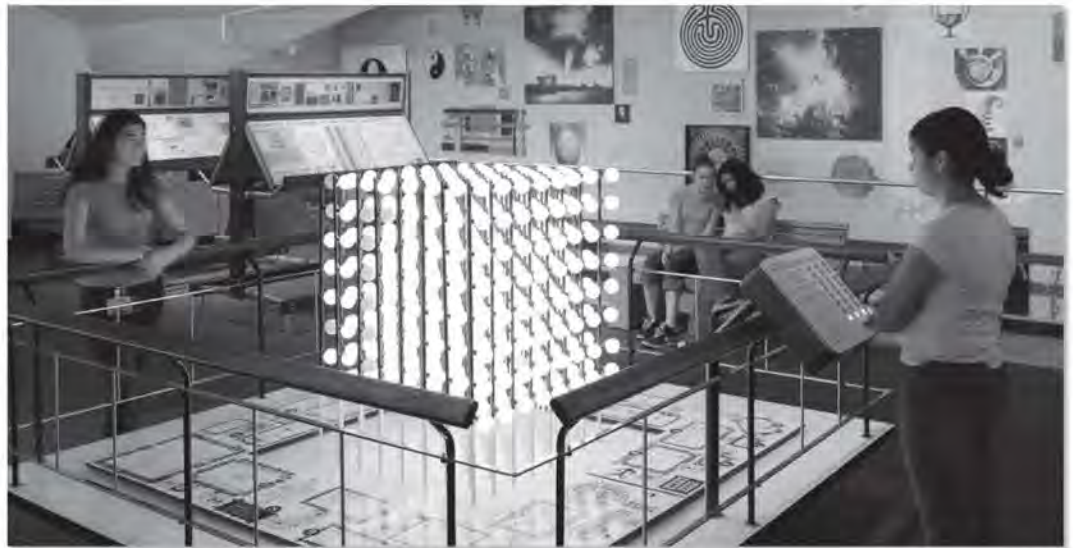
**Coal Mine,** Courtesy of The Museum of Science and Industry

directional footprints often seen on floors. These techniques came together in the patriotic World War II-era show, *Airways to Peace*. The main attraction was a giant wooden “inside-out” globe. Visitors could also use a stereoscope and Mercator projector. Michael Spock vividly recalls his boyhood visit to *Airways to Peace*: “I can make 3-D landscape images pop out of two slightly different photos with a stereoscope. I can fly over a city by walking across a bridge suspended across a room-sized aerial photo...Most elegant... is a transparent outlined globe that has a pinhead suspended at its middle so you can see, by lining up the pinhead with New York City, whether you would come out in China through the center of the earth.”

## 4. The Farmer’s Year , The Farmer’s Museum, Cooperstown, New York, 1958.

**Innovation:** *In this history exhibition about 19th century farming, curators Louis Jones and Per Guldbeck de-cluttered the galleries in favor of a narrative approach, arranging historical artifacts in a logical progression that told a story.*

In 1948, as the nation was gripped with Cold War paranoia, Louis Jones became director of this museum of agricultural bric-a-brac. A trained folklorist, Jones understood the power of stories to provide uplift. *The Farmer’s*



**Mathematica**, © New York Hall of Science

(continued from page 7)

**Year** told the inspiring tale of how America's farmers have triumphed over adversity through ingenuity and hard work. The visual organizer was a picture calendar. Per Guldbeck designed twelve earth-toned panels, each headlined with the name of a month, followed by short captions and a few artifacts to show what a farmer did during that month. *The Farmer's Year*—on display for 25 years—was a touchstone for graduate students in the Cooperstown Museum Training Program, providing a model for how they could help history museums nationwide arrange a grab bag of objects into a coherent theme.

**5. Mathematica: The World of Numbers and Beyond**, California Museum of Science and Industry (now the California Science Center), Los Angeles, 1961.

**Innovation:** *At a time when Americans were adjusting to entertainments like television and concerned about the state of science education, the design team of Ray and Charles Eames combined entertainment and education. They used industrial materials to create a "visual banquet" of beautiful things to look at, with related fun things to do all about mathematics.*

*Mathematica* was gridded with stainless steel, fiberglass, and blinking light bulbs. Visitors could press buttons, pull levers and turn cranks that set various phenomena in motion. To show the laws of probability, a twelve-foot high machine dropped 30,000 plastic balls through a maze of steel pegs to form a bell curve.

To illustrate the topology of a Mobius strip, visitors activated a 3-dimensional arrow that whooshed around on a track in the strip's center. Visitors were meant not to follow a strict linear sequence, but to weave their way randomly through the infinite pleasures of mathematics.

**6. What's Inside**, Boston Children's Museum (BCM), Boston, 1964.

**Innovation:** *Building on the "touch tables" that had been popular in museums since the end of World War I, BCM pioneered the "hands-on exhibition" where manipulating objects became central to the museum experience.*

In 1962, at the height of the baby boom, BCM's new director, Michael Spock, felt that museums could contribute to the educational reform movements of the day. Spock hired Michael Sand, a designer who had worked for Ray and Charles Eames. For their first collaboration, *What's Inside*, they sliced open a range of objects—baseball, washing machine, sewer manhole—so children could examine their insides. To extend the theme, BCM convinced an undertaker to deliver leftover flowers every morning. Children could pull the flowers apart to see what was inside of them, and then create art projects. BCM went on to create exhibitions about sensitive topics like death and disabilities and to advocate new processes for creating exhibitions that involved teams and incorporated visitor feedback.



**What's Inside**, © Sing Hanson, The Boston Children's Museum



## 7. The Exploratorium, San Francisco, 1969.

**Innovation:** *Physicist Frank Oppenheimer dispensed with rarified collections and walled-off galleries in favor of a new approach that used cheap materials like plywood and string. The goal was to encourage visitors to explore various scientific phenomena, communicating that the process of exploring is key to learning.*

One of the first Exploratorium exhibits, **Grey Step**, consisted of a rope separating two seemingly identical white rectangles. When visitors removed the rope, suddenly the two sides appeared as different colors. A hand-written label explained the science of this optical illusion. To add an aesthetic dimension, in the 1980s, Oppenheimer founded an artist-in-residence program. One of the first projects was **Sun Painting**, by Bob Miller, made from long prisms and narrow mirrors that fracture sunlight. When a visitor encountered it, rainbow colors danced all over her body. Perhaps best known was **Tornado** by Ned Kahn, a column of swirling mist that becomes an 8-foot high twister.

Visionaries and seekers flocked to the Exploratorium in the 1970s and 80s and brought its ideas back to their communities. Helped by Exploratorium instructional materials and traveling kits, they founded science centers around the country.

## 8. *The Treasures of Tutankhamun*, originated by the Metropolitan Museum of Art, New York, traveled from 1976 -79.

**Innovation:** *An extravaganza planned by politicians and marketers, King Tut is often called America's first blockbuster, spawning such innovations as logo merchandise, gift shops at exhibition exits, and crowd control techniques like timed tickets.*

From 1976 to 1979, more people lined up to see the famous pharaoh than for any other exhibition in American history. It was the result of a fortuitous confluence of events: diplomatic feats by Richard Nixon and Egyptian President Anwar Sadat; the federal Arts and Artifacts Indemnity Act; the rise of corporate sponsorships. With the nation wanting to make a splash for its bicentennial, diplomats hammered out a deal to bring fifty-five objects from Tut's tomb to the U.S., guaranteeing \$1.6 million to the Egyptian government. The Met, led by its director Thomas Hoving, was put in charge.

With such a high price tag, money worries predominated. Then Hoving saw dollar signs. The Met sent artisans to Egypt to make molds of the show's jewelry and sculpture and produce necklaces, scarabs, and figurines. These items were sold at "the official **Tut Store**," into which exiting crowds were funneled.

**Tut's** success upped the ante for all museums. Exhibition departments ramped up operations, putting less time into creating permanent displays and more into accommodating temporary spectacles. By the 1980s, the



**Tornado**, © The Exploratorium



**Wolves and Humans,** © Science Museum of Minnesota

(continued from page 9)

number of changing exhibitions at urban art museums had jumped by over fifty percent. Granted, not all shows had lines wrapping around blocks. Yet, there were enough extravaganzas to draw the wrath of critics who complained of deafening crowds and lack of innovative scholarship. Still, many NAME members (including this author) fondly recalled standing in line to see *Tut* during the 1970s. Its popularity and accessibility inspired a generation of visitors and museum professionals.

**9. *Wolves and Humans: Coexistence, Competition and Conflict*, Science Museum of Minnesota (SMM), St. Paul, MN, 1983.**

**Innovation:** *SMM created a cohesive design that presented multiple perspectives about a controversial subject—humans' relationships with animals.*

At the time when *Wolves* was developed, Minnesota had the only significant grey wolf

population in the lower forty-eight and was a hotbed of conflicting views on what to do about this animal's diminishing habitat. Biologist Curt Hadland led a team of anthropologists, artists and designers to create an exhibition that presented these different views. They fashioned a series of concentric circles. In the center was the main attraction: a wolf pack diorama. Entering through loops of trees, visitors read about the lore surrounding wolves. They heard piped-in sounds of growling and howling. They saw artistic renditions of wolves. In a further break from traditional wildlife displays, SMM exploited new technologies: a computer game allowed visitors to play the part of wolves on a hunt; a sound booth let them imitate howls. Finally, a video loop presented attitudes on wolf re-introduction, told by ranchers, trappers, environmentalists and biologists.

**10. *Mining the Museum, The Maryland Historical Society (MHS), Baltimore, MD, 1992.***

**Innovation:** *Created by artist Fred Wilson, this bold critique of the conventions of museum display and the silent—and often racist—messages communicated by exhibitions rocked the history museum field.*

Inspired by 1960s artist installations, the show was a triple pun on the word “mining:” digging something up; blowing something up; and making something mine. One of Fred Wilson’s techniques was to juxtapose objects in provocative ways. In one gallery, he arranged finely carved wooden chairs around a crude whipping post from the City Jail. In another jarring display, fine silver shared a case with slave shackles. As Wilson explained, “Actually they had a lot to do with one another; the production of one was made possible by the subjugation enforced by the other.”

**Metalwork, Mining the Museum,**  
© Maryland Historical Society,  
Baltimore, MD





"Museums have been influenced by the entertainment industry, Bauhaus, educational psychology, politics, marketing, the theater and more in the quest to create memorable, compelling exhibitions."

**11. Permanent Exhibition Hall, U.S. Holocaust Memorial Museum (USHMM), Washington, DC, 1993.**

**Innovation:** *Designed by Ralph Appelbaum, USHMM's main galleries were based on the idea that exhibitions could be like theatre, using artifacts and personal stories to immerse visitors into an emotional, affective experience.*

The design relies not only on powerful oral histories and objects, but changing floor coverings, lighting, and wall coverings which guide visitors through the story of the Holocaust. The pathway forces them to confront shocking evidence such as piles of victims' shoes and spent canisters of gas. As founding director Jeshajahu Weinberg, formerly of Tel Aviv's Cameri Theater, explained, exhibitions should work "like the three acts of a drama ... You identify with the 'good guys,' you are anxious to see the outcome. The narrative has the potential of evoking psychological identification."

Considered together, these touchstone exhibitions have much to tell us. They show our field's impulse toward pluralism and artistry, coupled with changing technologies and an evolving sense of showmanship. They also show how different forces can come together in often surprising ways. Museums have been influenced by the entertainment industry, Bauhaus, educational psychology, politics, marketing, the theater and more in the quest to create memorable, compelling exhibitions.



**Railcar,** *Permanent Exhibition Hall, Edward Owen, courtesy USHMM Photo Archives*

With the 21<sup>st</sup> century upon us, it may seem that demands on exhibition developers are only growing more complex. But at the same time, today's exhibitions continue to do what they have always done. Whether the vision of one person or the product of a team, whether responding to the past or present, exhibitions are a civic artform. They are a collective performance, a literary and often poetic event. They are spaces of design, communication and emotion; showcases not only for the objects they display, but for the ideas of the people who put them together. ✨



# Creativity: Are Things Getting Better Or Are Things Getting Worse?

by Jay Rounds

**Jay Rounds** is Director of Graduate Program in Museum Studies at the University of Missouri, St. Louis. He may be contacted at rounds@ums.edu.

In recent decades we've gotten much more skilled at creating museum exhibitions. Staff are better trained. Teamwork brings a variety of expertise into the development process. Collaborations with user communities are organized to ensure relevance. Improved project management techniques keep budgets and timelines on track. A burgeoning research literature informs practice, and evaluation helps root out conceptual and design flaws that limit exhibit effectiveness. All in all, we're working harder at creating exhibitions, and spending more money on them—more than ever before.

So why aren't we more excited about the results?

Kathy McLean, an astute observer of the exhibitions scene, said recently that "The more I work in museums, the more I feel that most exhibition development is stuck in the old and the tried—and the tired" (McLean and McEver 2004: 2-3). Many others in the field endorse her sentiment. Certainly there have been some exhibitions widely praised for their exceptional creativity (in *Are We There Yet?* McLean and McEver nominate a dozen from science museums); but the vast majority, however sophisticated in their development processes and competent in their execution, seem to belong in McLean's category of the "old, tried and tired."

This sense of disappointment has fueled a growing concern about creativity, and an enthusiasm for creativity training for exhibition staff and teams. The special issue of *Exhibitionist* on "Managing Creativity in the Exhibit Development Process" appeared in Spring of 1999. Since that time creativity has become "a hot topic in the museum world" (Smith 2005:2). Numerous workshops, publications and sessions at professional conferences have addressed

the subject, and recently two other museum journals have produced issues focused on creativity. Monica Smith edited "Encouraging Creativity," the Winter 2005 issue of *Journal of Museum Education*. *The Informal Learning Review* featured a series of articles edited by Al DeSena, calling for the field to "raise the bar on improving the quality and quantity of creativity" in museum work, including how we "identify and nurture creative talent" (DeSena 2005: 6).

To the degree that we approach creativity training as a way of encouraging museum staff to think more explicitly about their own creativity, it can be of great value. Research has shown that highly creative individuals and teams usually have a deep understanding of their own creative processes, and of how to cultivate those processes (Runco 1999: 11). On the other hand, it is unfair and unproductive to blame our disappointment with most museum exhibitions primarily on presumed deficiencies of staff. Given the preponderance of highly creative individuals already working in museums, it's more plausible that the problem rests in institutional factors that are beyond the control of those individuals.

This is an extremely complex issue, with many facets to be explored. For present purposes I will focus on this question: When technical competence in exhibition development process has reached its highest peak, why is the average "creativity quotient" of the exhibitions perceived to be so low? Is it possible that things can be getting better AND worse at the same time?

Here are three main ideas that I will explore:

- There is a cyclical pattern in the relevant institutional contexts that generates different influences on creativity at different phases in



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the cycle. Thus, we can only understand creative behavior in the context of the specific phase in which the behavior occurs.

- Most of time, creativity is exercised within the “dominant design” of a field. That dominant design makes creativity possible, but at the same time it constrains the range of that creativity.
- Many of the things that concern us about the current situation in exhibition development process appear to indicate that we are in a late phase of our current institutional cycle, and that major change lies ahead. A different kind of creativity is needed in such circumstances.

### The Technology Cycle

McLean suggested that “the greatest constraint to innovation in science exhibitions is the conservative nature of our organizational cultures” (McLean and McEver 2004: 3). I think this is true, but it is true in the sense that **all** organizations, not just museums, are conservative by nature. That’s how they become efficient at doing their work. To understand the full significance of organizational conservatism, we need to look at the research on processes of stability and change in complex institutions.

There is a paucity of useful research on institutional change in museums, but the subject has been studied extensively in other fields. Of particular interest for the present question is research on “punctuated equilibrium” (Gersick 1991) or “technological discontinuities” (Anderson and Tushman 1990) in the for-profit sector. Those studies describe a cyclical pattern in which a “dominant design” or “core technology” emerges as the standard of an industry for a substantial period, then

eventually goes into decline and is replaced by a new dominant design.

Anderson and Tushman (1990: 606) describe the cycle as consisting of five key events or periods. The cycle is launched by the appearance of a “technological discontinuity,” a new idea that offers a radical break from past practices—an innovation that strikes “not at the margins of the profits and the outputs of the existing firms, but at their foundations and their very lives” (Schumpeter 1942: 84; cited in Anderson and Tushman 1990: 606). For instance, the appearance of the automobile or “horseless carriage” presented a sharp technological discontinuity to the firms that were still hitched to the horse.

When the innovation first appears, it opens up a seemingly endless range of possibilities. However, in these early days it is far from clear exactly how the idea’s potential might best be realized. The field thus enters a period of “ferment,” in which the new technology struggles to replace the old, and in which a wide variety of competing ideas emerge for exploiting the new technology (Anderson and Tushman 1990: 610ff). In the “Era of Ferment” of the automobile, scores of new firms produced a bewildering range of vehicles, including models based on steam, battery and internal combustion systems.

The end of the ferment period comes when a dominant design emerges—a “single architecture that establishes dominance in a product class” (Anderson and Tushman 1990: 613). This offers substantial benefits:

Dominant designs permit firms to design standardized and interchangeable parts and

"But the concept of exhibitions that enables you to be creative at the same time constrains the scope of your creativity."

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to optimize organizational processes for volume and efficiency. They permit more stable and reliable relations with suppliers, vendors, and customers. From the customer's perspective, dominant designs reduce product-class confusion and promise dramatic decreases in product cost. Finally, if the product or process is part of a larger system, industry standards permit system wide compatibility and integration (Anderson and Tushman 1990: 614; citations omitted).

The field now enters a period in which attention shifts to making incremental improvements within the dominant design.

Variation now takes the form of elaborating the retained dominant design, not challenging the industry standard with new, rival architectures. The focus of competition shifts...to differentiation via minor design variations and strategic positioning tactics. Social structures arise that reinforce this stable state, standard operating procedures are predicated on the reigning technical order, organizational power structures reflect dependencies that are partly governed by technology, and institutional networks with powerful norms arise whose shape is partly determined by an industry's technical regime (Anderson and Tushman 1990: 618; citations omitted).

Once the dominant design of the gasoline-powered automobile emerged, the number of manufacturers declined sharply, reliability increased dramatically, and the cars that were being produced came to resemble one another much more closely. Progress continued, but it now was progress within the boundaries of the dominant design. Thus, the dominant design

both **enabled** creativity (car designers continued to make innovations and improvements), and simultaneously **constrained** the nature of that creativity (they made those innovations within the dominant design).

### Museums and Creativity

This description of the technology cycle has clear similarities with the distinction between "primary" and "secondary" creativity discussed in my 1999 *Exhibitionist* article: "Primary creativity is the deeply startling kind of idea that changes things in a fundamental way—that sets the foundations for a entirely new way of understanding the relevant domain." "Secondary creativity, by contrast, builds on the fundamental ideas set by a preceding act of primary creativity. It works out the implications of the new idea and explores the possibilities the new idea opens up" (Rounds 1999: 35).

When we create exhibitions, we are engaged in secondary creativity, exploiting the potential opened up by the primary creativity that established a concept of "the museum exhibition" as a good thing that communities ought to encourage and patronize. The concept of the modern museum exhibition came into focus in the early 20th century, and we have been working within that dominant design ever since. If there were no museums, it is unlikely that it would occur to you to create an exhibition; and if you did create one, it is unlikely that anyone would perceive your exhibition as something useful. It is because museums exist, and have defined an idea of exhibitions, that you are able to exercise your own creativity in developing exhibitions. But the concept of exhibitions that enables you to be creative at the same time constrains the scope of your creativity. If you want to create "museum



exhibitions,” you are obligated to create something that is recognizable to others as a proper exhibition, which means something that falls within the parameters of the dominant design.

As noted in the first paragraph, we’ve gotten a great deal better at doing that. But—to repeat the question at the heart of this essay—how is it possible that those improvements in our processes for creating exhibitions seems to be yielding declining satisfaction with the exhibitions themselves?

No dominant design lasts forever. They may offer enormous potential for secondary creativity, but not infinite potential. Eventually practitioners come to experience the technology more as constraint than as enablement. I think that is what is facing us in museum exhibition today. To show why, we must turn back to what happens in the late stage of the technology cycle.

### **The Technology Cycle Endgame**

A number of interrelated effects appear as a mature technology nears the end of its cycle. While specifics vary across fields, the patterns are remarkably similar. Here are a few of the most important effects.

**Products become less differentiated.** Once the dominant design is established, firms work at becoming more efficient in exploiting the potential offered by that design (March 1991). This has the effect of progressively reducing the variety among products. As each technical problem is solved, each challenge addressed, a single favored solution is adopted, and all the other possibilities are removed for further consideration. In the mature technology, all

the significant technical issues inherent in the dominant design have been worked out, and so the range of permissible variations has become very small. As with today’s automobiles, it becomes increasingly difficult to distinguish your own products from all the others. Product differentiation becomes mostly a matter of relatively superficial variations in style, appearance or combinations of features (Anderson and Tushman 1990: 618).

***The cost of producing variations increases, even as the variations become less significant.***

The low-hanging fruit gets picked early on. Where once it was relatively easy to produce significant variations on the theme, now you have to work really hard to produce even a minor variation—and even harder to convince would-be customers that your little wrinkle is worth the price.

***Innovations shift toward elaborations of processes, rather than differentiation of products.*** Since the range of permissible products has narrowed, the focus of innovation moves from designing a radically different product to doing a better job of producing a relatively standardized product. This may yield lower unit costs, better quality control, enhanced capacity for customization or other benefits, but it doesn’t change the basic nature of the product itself. These process improvements also prove subject to the law of diminishing returns, albeit the effect is usually seen later in the cycle. Since competition now is focused largely on price, few firms can still afford to invest in the increasingly expensive research and development needed to search for significant breakthroughs (Anderson and Tushman 1990: 618).

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As the technology achieves maturity, the rate of innovation slows. This does not necessarily lead to an immediate drop in sales. After all, the customer is now receiving a high-quality product at a reasonable price. But within the industry itself, there is a growing sense that the technology is exhausted, that competition is becoming more difficult, and that there is nothing new left to imagine. The future appears threatening, and firms start to ponder what to do next.

***Internal constraints on radical change are matched by external constraints from the broader institutional context.*** In most cases, what the firms choose to do next in the face of threat is precisely the wrong thing. In part this is because their freedom to act has been severely constrained by the very factors that, in the past, have made them successful.

No organization can flourish in total isolation. It needs, for instance, sources of capital, suppliers of raw materials, customers to buy finished products, a legal structure that governs transactions and resolves disputes, qualified workers to hire, and that dominant design that defines the arena within which the organization has chosen to operate. For museums and other non-profits, external dependencies also include laws that establish the category of “non-profit,” and agencies that certify the organization as a legitimate member of that category.

The dominant design plays a central role in creating and maintaining this network. The external entities upon which the museum depends are willing to do their part largely because they share in the acceptance of the dominant design as a rational solution to a real need

of general importance. In other words, the dominant design provides a way that all related parties can understand what the organization is doing, and why that it's a good thing to do. It also helps everyone understand how to tell whether the organization is doing a good job of it. Csikszentmihalyi (1996) argued that an idea should be considered creative only if it is both original and useful. The dominant design includes the definition of its own usefulness. So organizations become successful in part by promoting widespread recognition and acceptance of the field's dominant design. Trade and professional associations are formed for this exact purpose.

As a result, when staff come to feel that the dominant design has exhausted its potential, they are not free to decide to change things themselves. They are part of a much larger network that is a network precisely because of its shared commitment to the dominant design. For the individual museum, abandoning the dominant design may result in being abandoned by the network it depends on.

Here is the root of that “conservative nature of our organizational cultures” that McLean observed. From the time of the establishment of the dominant design, progress is made in the field by being conservative—that is, by identifying the most efficient ways of realizing the potential of the dominant design, and standardizing efforts by excluding all other variations. Organizing is a matter of selecting and conserving the “best practices” of the field, and so the better organized you are, the less variation there is in what you do and what you produce. The network enforces adherence to the dominant design in return for the resources it puts into the organization.



"Our problem is rather to reconceptualize our entire sense of what we think we are doing when we create exhibitions."

### Museum Exhibition Today

Yes, things can be simultaneously getting better and getting worse. In museum exhibition today, things are getting better because we have become more skilled than ever before at carrying out the dominant design that has structured museum exhibition for the past century. We can point proudly to the progress made over that time. Exhibitions are better now; but they are better in regard to criteria that were implicit in the original formulation of the dominant design.

But things are also worse, because that dominant design is nearing exhaustion. The time has come for a new act of primary creativity that can renew the creative energy of the field. Our problem is not to figure out how to do exhibitions better. That's what we've been doing for many decades, and those efforts are now yielding diminishing returns as we near the end of the technology cycle. Our problem is rather to reconceptualize our entire sense of what we think we are doing when we create exhibitions. As Neil Harris put it, we need "to reconceive every aspect of museum learning and experience, to admit the need for phenomenological reconstruction" (Harris 1990: 53).

I have argued elsewhere that such common current prescriptions for improving museums as goal clarification, Best Practices and Outcome-based Evaluation, are good ways of perfecting an existing dominant design, but are major barriers to that "phenomenological reconstruction" of the field that we now need (Rounds 2001, 2004). It will also be unproductive to pursue creativity training for exhibition staff who must practice within the constraints of an institutional network that enforces adherence to the old dominant design. However much those constraints have benefited us in the past, they must now be subjected to the "creative destruction" that Joseph Schumpeter famously argued is the prerequisite to ushering in a new era of dynamic creativity.

It's hard to break the hold of ideas that have brought us so much success in the past. But here is the paradoxical iron law of the technology cycle:

During periods of stable development within a dominant design, you get better by stopping doing the things you've been doing wrong. But when that technology has exhausted its potential, and the time comes for a fundamental change, you can only get better by stopping doing the things that you've been doing right.



### References Cited:

- Anderson, Philip and Michael L. Tushman. "Technological Discontinuities and Dominant Designs: A Cyclical Model of Technological Change," *Administrative Science Quarterly*, 35 (1990), 604-633.
- Csikszentmihalyi, Mihaly. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper Perennial, 1996.
- DeSena, Al. "Creativity and Free-Choice Learning: Raising the Bar." *The Informal Learning Review*, No. 70 (2005), pp. 1ff.
- Gersick, Connie. "Revolutionary Change Theories: A Multilevel Exploration of the Punctuated Equilibrium," *Academy of Management Review*, 16 (1990): 1036ff.
- Harris, Neil. "Polling for Opinions," *Museum News*, September/October 1990: 47-53.
- March, James G. "Exploration and Exploitation in Organizational Learning," *Organization Science*, 2 (1991): 71-87.
- McLean, Kathleen and Catherine McEver, editors. *Are We There Yet? Conversations about Best Practices in Science Exhibition Development*. San Francisco: The Exploratorium, 2004.
- Rounds, Jay. "Creating Creative Exhibits," *Exhibitionist* 18/1 (1999): 35-40.
- . "Measure for Measure: Purpose and Problems in Evaluating Exhibitions," *Museum News* 80/4 (2001): 43ff.
- . "The Best of Practices, the Worst of Times," in *Are We There Yet? Conversations about Best Practices in Science Exhibition Development*. San Francisco: The Exploratorium, 2004, pgs 5-10.
- Runco, Mark. "What Do We Know About Creativity? And Why Should We Care?" *Exhibitionist* 18/1 (1999): 9-14.
- Smith, Monica M. "From the Issue Editor," *Journal of Museum Education* 30/1 (2005): 2.

# The Meaning of Meaning Making

by George E. Hein

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*I thank Leslie Bedford, Tom Hennes and Jay Rounds for their insightful comments and useful criticisms of an earlier draft of this article.*

“How new is the idea that human beings make meaning from their experiences?”

The Fall 1999 issue of *Exhibitionist* provided a rich and varied set of articles on meaning making and what that concept implies for exhibit developers. I’m grateful for the opportunity to reflect on these articles and to consider what we can learn from “this complex idea with many yet unresolved issues,” as Jay Rounds described it in his challenging introduction. On rereading these contributions, I was impressed by the continuing relevance of the issues raised and the careful analyses of both the history of meaning making applied to museums as well as its implications for future practice. The following discussion is not an attempt to update the state of the literature on meaning making or to report on major new developments (if there are any), but rather personal reflections on the term and its implications.

## Is Meaning Making a New Paradigm?

Much of recent literature, including some of the articles in the *Exhibitionist*, argues both that accepting visitors’ meaning making is a **paradigm** and that it is **new**. I want to question whether either word appropriately describes the concepts covered by the term.

## Is it new?

How new is the idea that human beings make meaning from their experiences? Unless one adopts a strict nativist approach—that human mental development is the unfolding of predetermined concepts completely determined by our biological inheritance—then one is forced to acknowledge that we have always had to create meanings based on our experiences in the world. Silverman says that “meaning making is a basic human process, something we engage in all the time.” We need to have experiences in order to make meaning. Even relatively

simplistic empiricist ideas of development, that we are born a **tabula rasa** and accumulate meanings, necessarily must incorporate meaning making. Even passive vessels “filled” through experience, (including both interaction with the natural world, for example, by kicking a rock to refute Bishop Berkeley) and through social interaction (such as learning from a teacher or a carefully designed museum exhibition) still require meaning making. We do not experience concepts and ideas (that is, meanings); we experience nature, (that is, phenomena), and we make meaning from it. Ansbacher repeatedly emphasizes this point. It is the opportunity for providing experiences that is under the control of the exhibit designer and needs to be examined thoroughly.

This idea of meaning making as an active process derives from empirical and theoretical psychological research of late 19<sup>th</sup> and early 20<sup>th</sup> century. The empirical work is most readily exemplified by Piaget’s groundbreaking research, (as well as the contributions of many others) that persuasively demonstrates that mental development is neither simple or linear, but proceeds through stages always guided by overarching schema or mental constructs that help the individual make meaning of phenomena. Throughout development there is meaning making. The child who thinks there is more orange juice in a tall skinny glass than the same amount in a short fat glass, is making meaning just as much as the older one who asserts that there is no change in the amount of juice when poured from one glass to another. On a theoretical level, John Dewey’s famous paper (1896) asserting that the behaviorist explanation of a simple stimulus-response interaction is inadequate because it ignores the larger experiential and cultural framework that



influences meaning making, exemplifies early support for active meaning making. Vygotsky's socio-cultural approach to development, elaborated early in the 20th century, although not influential in the United States until much later, also supports the notion of active engagement by learners in meaning making.

More recent is the widespread rejection of psychological theories, exemplified especially by early behaviorist writing, that meanings accumulate in a simple, stepwise manner by an additive process whereby richer and more complex understandings arise from the summation of many little experiences. Instead, it is now generally accepted that meaning making is a complex process that starts at birth and includes selective perception, transformation of sensations from the external world into concepts, and, with time increasingly includes applying memory of past experiences and cultural norms to arrive at new understandings. All of this complicated interactive, selective perception and experience takes place within limitations of biological constraints. It incorporates not only immediate relevant experiences, but also wider and deeper influence of culture, memory and mental reorganization. Meaning making is not so much "an alternative to 19th century theories" as an expansion of them to incorporate our deeper understanding of the meaning of experience. In short, meaning making is a complex process not a simple one. We are **active** participants in our construction of knowledge.

My point is that consideration of visitor "meaning making" is not very new, nor is the recognition of meanings as culturally dependent. The theory that people **actively** engage in meaning making is approximately a

century old. Perhaps more recent (but not by many decades), is recognition that uncertainty is a philosophical necessity and that diversity has value. The certainty that a particular world view was correct and others inferior, and that the goal of education was to bring everyone to a level modeled by the dominant culture has given way, at least in some societies to acknowledgement that differing personal and/or cultural meanings attributed to the same phenomena may nevertheless have equal validity. Existentialist philosophy, "post modernist" ideologies and more general intellectual and political movements have contributed to this change. Sadly, for those of us who accept this more inclusive view of humanity, fierce opposing views have also emerged that exclude outsiders or "non-believers."

Suggestions that museums should focus more on visitors than on objects, a consequence of the "new paradigm," are also a bit older than the recent past. For example, in the 1940's Wittlin (1970) found that when she showed objects from a museum collection to teen-age girls in a school "where all the pupils had failed the (dreaded) Eleven Plus Examination" in Stepney (a district in London with a long tradition of spinners and weavers) the lesson was a disaster. "Whether it was an Eskimo fur jacket, a South Sea grass skirt, or a piece of Renaissance velvet, the response was loudly negative." When Wittlin returned with materials the girls could use to create costumes and provided sewing tools and tall mirrors, she was able to generate a project about the history of clothing in England that motivated the students to produce a skit of their work for performance. Wittlin reports:

They were untiring in staging the playlet for any audience . . . and I did not mar their

"Meaning making is not so much 'an alternative to 19th century theories' as an expansion of them to incorporate our deeper understanding of the meaning of experience."

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experience of competence by correcting the invented lines they introduced, or what the few who had some writing skill lettered on posters. There was a poster proclaiming “Tools for Sinning and Weaving.”

To summarize, meaning making has a long and distinguished tradition in learning theory and education. It has been exploited in progressive education practices that can be traced to the 19<sup>th</sup> century and has had advocates in the museum community since at least the founding of the first children’s museum in 1899.

#### ***Is it a paradigm?***

Meaning making may be middle aged rather than new, but if it truly represents a “revolution” in thinking, it must be a paradigm.<sup>1</sup> But it may also be productive to question whether the term is appropriately applied to current ideas about the role of meaning making in museums. In his groundbreaking analysis of the nature of scientific discovery, Thomas Kuhn (1962) expanded the word **paradigm** beyond its original grammatical meaning, although he later regretted introducing that particular term to describe this process. He argued that a few concepts in natural science underwent revolutionary change, or “paradigm shifts” from one worldview to another. His prime example was the Copernican Revolution, the 17<sup>th</sup> century shift in astronomical theory in the Western world, from explanations of observed phenomena assuming a geocentric solar system to a heliocentric one. Kuhn pointed out that paradigm shifts were not only rare—most “ordinary” science is carried out within a framework that does not challenge basic current beliefs—but when they occur, after an unsettled period, result in dramatic differences in ways that a scientific community

explains phenomena, carries out experiments and evaluates data. After the Copernican Revolution, no astronomer continued either empirical research or theoretical work in support of a geocentric solar system. Similarly, the Darwinian “revolution” resulted in a paradigm shift in biology. As biologists today point out in their arguments against supporters of intelligent design, no reputable biologist doubts the validity of evolutionary theory, even while details of its application are still debated. The current **Darwin** exhibition at the American Museum of Natural History tells us:

Darwin’s explanation for this great unfolding of life through time—the theory of evolution by natural selection—**transformed our understanding of the living world**, much as the ideas of Galileo, Newton and Einstein revolutionized our understanding of the physical universe. **Darwin’s theory of evolution by natural selection underlies all modern biology.** It enables us to decipher our genes and fight viruses, and to understand Earth’s fossil record and rich biodiversity. <http://www.amnh.org/exhibitions/darwin/>

On an individual level, the concept of a profound change that alters a personal worldview is exemplified by Piagetian developmental stages. Once any of us grasps the concept of object permanence, we not only see the world differently—we no longer think the quantity of juice changes when poured from a wide short glass into a tall skinny glass—we also find it hard to imagine that we once thought differently. Similarly, in reference to social issues, I suspect (and hope!) that most of us find it difficult to accept the notion that rulers have “divine rights” or that women are not capable of abstract thought. These dramatic and complete



changes, at least within large cultural communities, are paradigm shifts, it is not possible to reconcile them and believe both simultaneously.<sup>2</sup>

#### ***What is the Issue for Museum Exhibit Development?***

Kuhn points out that in transition periods there will be a time when conflicting and irreconcilable views struggle for acceptance. But is that the situation exhibit developers have been in for the past half-century? Are we deciding whether to keep the old paradigm of object centered exhibitions or switch to the new paradigm of visitor centered exhibitions? Do these two options describe opposing views of exhibition design?

I think not. It seems to me that for a number of years the effort to allow visitors to construct meaning out of their interactions—intellectual, emotional and physical—with exhibits, have coexisted quite comfortably with more traditional conceptions of exhibit development based on the transmission model of imparting knowledge. The *Darwin* exhibition mentioned above has a very specific story to tell concerning Darwin's thinking and accomplishments in the context of 19<sup>th</sup> century beliefs. Similarly, many other museum exhibitions ranging from some focused on social issues (see Janes and Conaty, 2005) to many primarily aesthetic art museum exhibitions, have specific messages or stories they hope to deliver. They have a meaning they want visitors to grasp **independently** of visitors' meaning making. Silverman says "the information paradigm and the meaning making paradigm are not necessarily at odds." I agree that they need not be at odds, but that is exactly what excludes them from representing paradigms.<sup>3</sup> These goals of institutional meanings and visitor meanings can coexist as part of the complex nature of exhibitions.

The important question for designers has always been, "How can objects be best displayed<sup>4</sup> so that they will attract attention, hold an audience and tell their story?" And the answers have come from a variety of approaches, many of which are still useful and still used. Visitors' meaning making is an important consideration and can be encouraged or discouraged, but it is not the exclusive concern in exhibition or program development. The challenge for exhibitions is not to accept the "paradigm" of meaning making, but to incorporate the inevitability of meaning making into the complex set of considerations that need to be applied to exhibit development.

#### **What is Important About Meaning Making for Exhibition Development?**

**1. Everyone does it**—Any visitor interaction with an exhibition falls roughly into three possible categories:

- a) Walking away without significant engagement.  
The meaning making involved is the decision that the exhibit is too difficult, boring, or outside the visitor's current interests to make a commitment to it. Rejecting an experience requires meaning making.
- b) Interpreting the exhibition more or less as intended by the developers and designers, with some personal amplification or simplification.
- c) Using the exhibition to confirm, enlarge or stimulate personal (and cultural) concepts that differ from any intended by the exhibit developers. In the Fall 1999 *Exhibitionist* issue, Rounds interprets Michael Spock as saying that "visitors use experiences of one subject as metaphors to help them extract meaning from other experiences that are totally unrelated." But "unrelated" refers only to the exhibition developers, not to the visitors. By definition, there is a

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relationship between the exhibition and the visitor's previous experience if the visitor makes one!

Of the three possibilities, obviously the goal for exhibition designers is to minimize the first as much as possible, while recognizing that all visitors need to use this option sometimes so as not to be overwhelmed during a museum visit (Rounds, 2004). Museums are prime sites for intellectual, aesthetic, sensory and emotional overload (even without considering the influences of social interactions, since visits are usually in social groups.) Visitors have to be selective to survive!

A deeper and more challenging question is whether designers and developers wish to (should?) encourage or minimize the third option, the individual meaning making in addition to any story that the museum wants to tell.<sup>5</sup> There are exhibitions that try to promote personal meaning making, to use the design to encourage various ways of interaction with exhibits, to stimulate and support developing the rich personal metaphors that visitors can create. Two such examples are, first, The Strong Museum's *Time Lab* gallery, "brimming with objects from America's past and present including sports gear, photos, shoes and clothing, kitchen gadgets, and TV and movie clips" (<http://www.strongmuseum.org/exhibits/timelab.html>) that invites visitors to view these familiar objects and create their own stories to be shared across generations. Second, the recent APE (Active Prolonged Engagement) project at the Exploratorium (Humphrey and Gutwill, 2005) was intended not only to have visitors engage more deeply and longer with exhibits, but also in the hope that it would encourage visitors in "asking and answering their own questions,

rather than relying on the museum to instruct and inform them." Many children's museums have areas that are intended to provide experiences with the natural or social environment that will provide visitors with opportunities to expand their experiences and their conceptual understanding through manipulating objects or from social interactions.

Here we have the essence of what is new about the application of meaning making to exhibit design: the effort to encourage and assist visitors in their own personal meaning making, above and beyond—or even instead of—making it as easy as possible to grasp the meanings that museum staff intended as an outcome of the visitor experience. This is new, but I hesitate to call it a new paradigm, because I neither expect nor advocate that it replace the older tradition of using exhibitions to teach—to follow the long tradition of creating exhibitions that strive to illustrate concepts, help visitors to understand historical events, and tell stories about culture through objects.

In this regard, I wonder about some of Lois Silverman's points from the Fall 1999 *Exhibitionist* issue. It is not clear to me that "wherever possible exhibitions should support multiple meanings." I believe there are many museums that succeed quite well in delivering specific meanings. Natural History museums, for example, are almost universally advocates for Darwinian evolution theory. Many were founded (with the notable exception of Harvard University's Museum of Comparative Zoology) to support this theory. Many history and art museum exhibitions promote a particular point of view; they strive to tell a specific story. Others intend to explore different interpretations, or to point out controversial views. It seems to



"Meaning making is a powerful and basic human activity. It comes into play when visitors experience museum exhibitions just as it is a constant component of every aspect of life that has not become routine."

me more important for museums to be clear about their **intention** towards visitor meaning making as advocated in one of Silverman's later points, "Be conscious and critical of choices and decisions." And, I would add, "Let your visitors know what these are."

Stephanie Ross explores a different possible limitation on personal meaning making. She asserts that "We certainly don't want to endorse the sort of daydreaming... where the [visitor] tends to use the [experience] merely as a background for emotionally-charged daydreams and imaginings." She goes on to suggest that such license would "make the museum exhibit the equivalent to muzak." Although it is difficult to define where (if ever) personal meaning making diminishes into irrelevance, the tension between the extremes of these two positions needs to be considered carefully in all exhibition work.

**2. Meaning making takes energy**—The traditional transmission theory of learning, besides providing an inadequate description of what it means to learn, also leaves out an important component: the mental exertion required to grasp something new. Once we accept the idea that learning is an active process, we can also recognize that there is a price to pay; for any meaningful learning to occur we need to give up current views of conceptual understanding and accept new ones. Meaning making is always about something, as Rounds says. It also usually involves a **change** in meaning.<sup>6</sup> Piaget made the distinction between assimilation and accommodation, the former representing the addition of bits of knowledge to the structures that already exist, while the latter stands for learning that requires some mental reorganization of previous knowledge.

Fully grasping the implications of meaning making requires that exhibit developers constantly ask themselves what reason any visitor might have to accept an idea they plan to illustrate if the concepts are new to the visitor. Or, more important, what reason she might have even to consider accepting it and therefore engaging with the exhibition? The rich experiences described in the 1999 issue of the *Exhibitionist*—families at provocative and challenging exhibitions or personal reflections years after the experience—all involve individuals who engaged with the exhibits and recognize the value of at least reconsidering past beliefs or ideas. A common feature of science centers is to challenge visitors by presenting a counterintuitive or unusual phenomenon. For the visitor inclined to "learn," that is, a person who has enough background even to recognize the situation as counter to what might be expected and, secondly, who appreciates and enjoys puzzles and challenges and has enough history of success to be willing to tackle new ones, this kind of exhibit can be attractive. But there are many visitors for whom the unknown simply reinforces their belief in their own inability to comprehend the world and who choose to go elsewhere to find satisfaction.

**3. The social dimension of learning**—Twentieth century educational theory has emphasized the social dimension of learning. We do not interact with the world as isolated individuals, but as members of communities. This applies at many levels. Our beliefs and worldviews are influenced and determined by our cultures. More directly related to museum experiences, most visitors come in groups, not as individuals. For exhibit design, this represents the challenge of trying to accommodate visiting groups (often intergenerational) as well as individuals.

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Although exhibitions exist that accommodate and encourage social learning, they are still the exception rather than the norm. Children's museums have developed areas where parents may watch children and have resources to help them make meaning of the experiences; at the Ruben Fleer Center, Director Elsa Feher, provided benches for two, rather than stools for one, to encourage partner interaction; exhibitions that provide multimodal access—labels, audio labels, hands-on and other modes, allow groups of visitors to peruse their individual learning modes and then discuss what they have experienced; or exhibits can be designed to require group discussion or joint decision making. Any of these devices represent recognition of the significance of social learning theory. Facilitating group meaning making, either as an auxiliary goal or a central objective of visitors' interactions with exhibits is still an area that has been inadequately explored.

**4. Evaluate! But How?**—It is difficult to generalize about complex human situations that have multiple inputs and possible outcomes. One message that infuses the 1999 articles, is the repeated need to study the meanings visitors make of their experiences in context. These are frequently different from what designers and developers expect and may take months and years to become clear to the visitors themselves. The more we learn about museum experiences, and the more varied the approaches taken to exhibits the greater is our understanding that one aspect of museum experiences is the possibility of rich, varied and subtle outcomes.

Both government and private funders for museum exhibitions have increasingly demanded more evidence of the "success" for their investments. The museum community,

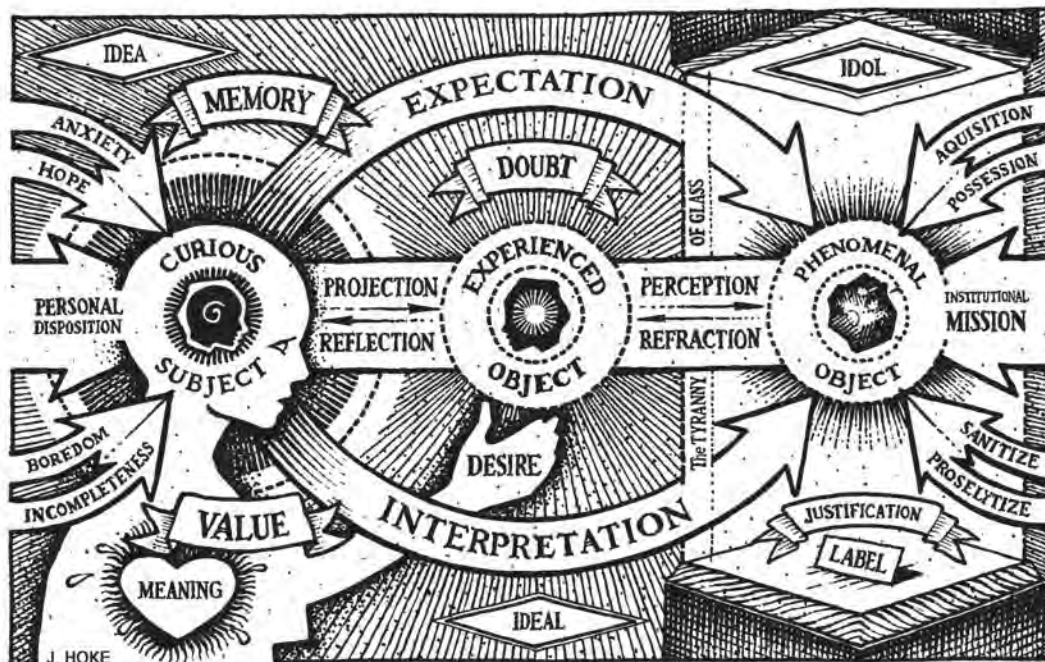
following the lead of schools, has increased its efforts at evaluation. But the emphasis on understanding meaning making is not congruent with the kinds of "results" that are most frequently requested (or demanded) by funders. Here again, is a tension that needs to be considered as exhibits become more sensitive to the expanded concepts of meaning making.

### **The Scope of Meaning Making**

Discussions of meaning making often focus on the cognitive consequences of museum experiences, "Did the visitors "get" the message we intended or did they make their own meanings?" The latter result may be viewed as either positive or negative. This leaves out all the other dimensions of museum experiences—the affective, emotive and aesthetic—as something separate from meaning making (and separate from learning). But museum experiences are powerful particularly because they have the ability to generate this entire mix of reactions in visitors. Although we can talk about these components individually and describe an exhibition as strong on content, or weak in design, actual **experiences** incorporate all our reactions into a unified whole, into making meaning from our experiences.

In a recent review of *Life in Shadows: Hidden Children and the Holocaust*, Rothstein (2006) points out "there is nothing intrinsically remarkable about the objects on display," yet, "their mundane appearance is loaded with implication." Visitors can make powerful, memorable meanings from ordinary objects and stories when they invoke feelings and memories; when they stimulate our imagination, as Bedford (2003) suggests. This response can occur in exhibitions that are carefully designed to tell a specific story or more constructively





developed to encourage visitors to introduce their own stories.

### Concluding Thoughts

Meaning making is a powerful and basic human activity. It comes into play when visitors experience museum exhibitions, just as it is a constant component of every aspect of life that has not become routine. Meaning making transcends our rational interpretation of the world. We make emotional, aesthetic and sensual "meanings" as we experience the

world. Or, more precisely, meaning making includes these other domains as part of experiencing and, therefore, learning. By embracing visitors' inevitable meaning making as part of their active participation in interpreting museum experiences, we can build stronger and more rewarding exhibitions. Accepting visitor meaning making as a positive component of the interaction between visitors and exhibits enlarges the possibilities for exhibit development. ☼

<sup>1</sup> Weil (1990) described the shifting focus of museum activities as an "emerging new paradigm," but he also acknowledged that this was "by no means entirely new, [and] it amends rather than replaces [an older] formulation."

<sup>2</sup> Both of these concepts are still challenged in some parts of the world, as are such generally accepted ideas scientific ideas as the age of the earth, or the predictive value of astrology. My point is not that a paradigm needs to have total acceptance by every human being in order to achieve that status, but that a paradigm shift requires the believer to give up the old way of thinking.

<sup>3</sup> A particularly egregious misuse of the term is in internal United States Defense Department documents that described secret financial aid to one political party in the Palestinian election "as 'a temporary paradigm shift' in the way the aid agency operates" (Wilson and Kessler, 2006).

<sup>4</sup> I use "object display" as a shorthand for the complex process of producing three-dimensional exhibit environments favored by current exhibition designers.

<sup>5</sup> Constructivist educational theory becomes significant when this third option is chosen.

<sup>6</sup> I think the need to overcome an "activation energy barrier" to accepting a new concept goes beyond Rounds' (2004) argument for selective viewing of exhibit components.

### References Cited:

- Bedford, L. "Working in the Subjunctive Mood: Imagination and Museums," *Curator: The Museum Journal*, 47/1 (2004), 5-11.
- Janex, Robert R. and Gerald T. Conaty, editors. *Looking Reality in the Eye: Museums and Social Responsibility*. Calgary, Alberta: University of Calgary Press, 2005.
- Dewey, J. "The Reflex Arc Concept in Psychology," *Psychological Review*, III (1896): 357-70. Reprinted in *The Essential Dewey, Volume 2: Ethics, Logic, Psychology*, 1998, L. A. Hickman and T. M. Alexander, eds. Bloomington, IN: Indiana University Press, 3-10.
- Humphrey, T. and J. P. Gutwill. *Fostering Active Prolonged Engagement: The Art of Creating APE Exhibits*. San Francisco, CA: The Exploratorium, 2005.
- Kuhn, T. *The Structure of Scientific Revolutions*. Chicago: U. of Chicago Press 1962.
- Rothstein, E. "Holocaust Children's Objects: Ordinary but Powerful," *The New York Times*, January 24, 2006.
- Rounds, J. "Strategies for the Curiosity-Driven Museum Visitor," *Curator: The Museum Journal*, 47/4 (2004), 389-412.
- Weil, S. F. "Rethinking the Museum: An Emerging New Paradigm," *Museum News*, 69 (1990). Reprinted in G. Anderson, (Reinventing the Museum: Historical and Contemporary Perspectives on the Paradigm Shift. Walnut Creek, CA: AltaMira Press, 2004).
- Wilson, S. and Kessler, G. "US Funds Enter Pray in Palestinian Election," *The Washington Post*, January 22, 2006, P. A01.
- Wittlin, A. "Interaction Between Man and Things," *Claremont Reading Conference*, 1970, 109-112.

# Taken by Surprise

by Janet Kamien

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"...most significant controversies take place within the museum and its staff and board, secondarily amongst politicians, political activists and the press, tertiarily between institutions and scholars, and, as a far last, within our audiences."

I've been asked to write about controversial museum exhibitions. This is not the first time—long ago I was identified as someone who created these kinds of exhibitions based on such ancient examples as *What If You Couldn't...? An Exhibit about Disabilities* in the 1970's and *Endings: An Exhibit about Death and Loss* in the 1980's, both done for the Boston Children's Museum. Both were risky ventures in their day and *Endings* especially, received provocative national press, nasty letters from people in various parts of the country who had never even seen the exhibition, and a scary and contentious appearance on *Nightline*. But since then, disability exhibitions have appeared in more children's museums than I can count. Of course, death exhibitions have been few to none. The only explanation I have for this is that disability awareness folks have been busy over the years changing our collective attitudes, and besides that, disability only happens to some of us. On the other hand, death happens to everyone and the contingent who might fight for awareness is, well, dead.

But, why were these exhibitions controversial in the first place? I posit that it wasn't the subject matter itself but the fact that they were the first of their kind, and that, more importantly, they were done in a children's museum. The attacks they received were "bad taste" attacks, made because of a perceived assault on the "innocence of childhood." This belief is an understandable and deep-seated wish to erase any difficult, bad or frightening things from the lives of our children and by extension, our own childhoods. The controversy was built around the idea of preserving an ideal about childhood—surely something a children's museum should want to do! In fact, what some said about these exhibitions is that they should have been in a

science museum, that is, a venue perceived to have an older audience and a more clinical point of view.

I want to suggest that, as in the examples above, all controversy around exhibitions is "situational," and that few are about the actual subject matter. I want to further suggest that the most significant controversies take place within the museum and its staff and board, secondarily amongst politicians, political activists and the press, tertiarily between institutions and scholars, and, as a far last, within our audiences.

I want to give some examples of what I mean by this and ask some questions about what these examples might mean to us as a profession. I'm going to start with three well-known examples:

- the *Mapplethorpe*, *Enola Gay* and *Sensation* exhibits. But first, I'd like to make some suggestions about what ingredients might actually create a "controversial" exhibition:
- Employing a technique never used before (According to a now long forgotten source, even dioramas were controversial when they first made their appearance in museums.)
  - Exploring a topic never dared before
  - Presenting an old topic in a new way
  - Putting a topic in the "wrong" museum

All of these are ways in which members of the public may feel "taken by surprise." But there is also:

- Deliberate provocation
- Carelessness
- Happenstance

Exhibitions that make the front page have usually erred—or succeeded, depending on your point of view—in more than one of these categories.



The photography show **Robert Mapplethorpe: The Perfect Moment**, was true to its sub-title. In the 1989 Chicago installation, there was nary a whisper about the show besides good reviews, despite the provocative erotic images of nude men. (Maybe this was because the picketers were all at the Art Institute, decrying a student show that included Dred Scott's *What Is the Proper Way to Display the U.S. Flag?*) But in Cincinnati, the Citizens for Community Values were lying in wait for this show, and Dennis Barrie, the director of the Contemporary Arts Center was indicted for pandering obscenity within hours of the opening. (He was, in the end, exonerated.) This event effectively ended the exhibits' planned run.

In a *Cincinnati Enquirer* article printed ten years later, everyone (except Dennis Barrie), claims to be perfectly happy about the whole event. Both local and national arts administrators said that the **Mapplethorpe** debacle united a fractious arts community just in time to prevent Republicans from altogether shutting down the National Endowment for the Arts. Charles Desmarais, the current director of the Center claims "It [**Mapplethorpe**] gave it [the Center], an international attention it never had before. Ultimately that was a very positive thing ..." He believes that plans for a new building would not have come to pass without the show. Phil Buress, head of the Citizens group that brought the suit is also quoted: "For the last ten years they have acted responsibly. How could we consider this anything else but a victory?"

This National Endowment for the Arts funded show was decidedly provocative. In many circles, that was part of its appeal. Barrie and the Center knew there would be trouble, but they elected to go forward anyway, and for this



**Enola Gay**, Photo by Carolyn Russo/NASM © Smithsonian Institution

I applaud them. But part of the dispute was the result of happenstance. The Republicans were circling the NEA. Jessie Helms was hysterical about Andres Serrano's "Piss Christ". The "Culture Wars" were about to begin. Even Mr. Barrie says that, in retrospect, Cincinnati was a likely place for a first skirmish.

So, what should we make of this? Is everyone just putting a good face on a horrifying experience or is it really true that "all publicity is good publicity"?

Buress's quote does give one a chill: "For the last ten years they have acted responsibly." Does this mean they have been frightened into submission? That they are careful to ruffle no feathers? Have others, reviewing this event, erred on the side of safety? I don't know. I do know that much contemporary art is designed to shock or at least provoke, so if these events have limited the scope of this or other institutions, it is a pity.

The years have been less kind to **Enola Gay**. She's been reinstalled in the Steven F. Udvar-Hazy Center satellite museum at Washington Dulles International Airport, finally reduced to "just another airplane."

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So much has already been written about this incident, I need only recap. In 1995, the National Air and Space Museum of the Smithsonian Institution installed the fuselage of *Enola Gay*, the Boeing B-29 Superfortress that dropped the atomic bomb in 1945 on Hiroshima, Japan. Though almost 50 years had passed, the exhibition, which had at first tried to present the pros, cons and ramifications of this wartime act invoking both hindsight and the Japanese point of view, came under ferocious review. Critics claimed that the history was “politically biased” and, among other things, implied that the Japanese were not as big a threat as the bombing suggested and that while the use of nuclear force brought the war to an end without an invasion, that the exhibit was wrong about how many American lives would really have been at risk.

The copy was revised endlessly, but the conversation was so polarized that no satisfactory agreement could be made. In the end, director Martin Harwit acceded to Congressional demands and left, and a bare bones exhibition ran from June of 1995 to May of 1998 and proved extremely popular. At least four million people sought it out.

I’d suggest that the rock-bottom issue was that, to many people, *Enola Gay* was not an airplane, but an icon. Fighting over its interpretation was like fighting over the flag, or the Statue of Liberty. Impossible. I’d also suggest that the ensuing problems came from trying to “present an old topic in a new way” along with a bit of carelessness—they didn’t seem to understand what they were really dealing with—icon, not airplane.

And years later, the argument goes on. While critics of the original exhibit concept may feel vindicated, supporters of the larger, more inclusive story once woven upon the plane’s display are decidedly unhappy. Picketers attempted to disrupt the opening of the Udvar-Hazy Center. The Committee for a National Discussion of Nuclear History and Current Policy wrote a lengthy letter about the 2003 re-installation at Dulles, chiding Air and Space about their bloodless presentation. The Smithsonian responded, explaining that they have interpreted it just as they do other airplanes in the collection.

In this case, it’s hard to conclude that all publicity is good publicity. It doesn’t seem that this wound has yet healed, and I am certain that it continues to cause trepidation about topics and exhibit approaches, not just at Air and Space, but at the Smithsonian at large and at other institutions across the country.

And lastly, everyone seems to have had a fine time around ***Sensation: Young British Artists from the Saatchi Collection***. This was done in 1999 at the Brooklyn Museum of Art. The title alone tells us its intent. Then-Mayor Giuliani had a melt-down about “The Holy Virgin Mary” an image created by Chris Ofili who adorned it with elephant dung. Hillary Clinton defended the show, though she assured us all she would never ever see it. In the ensuing fracas, the museum lost neither its director, Arnold Lehman, nor its city funding, or the show itself or its audience. Alan Friedman of the New York Hall of Science led the city’s other museums in pushing back on the Mayor’s threats. Though I am sure there were some tense moments, this show intended to provoke and did so, to the somewhat greater glory of the Brooklyn Museum and its director. And while some



viewers were indeed appalled by the exhibit, others were quoted saying such things as “I can’t believe this has caused this commotion.” Since then only one museum has decided not to show it and that museum is in Australia.

So, a children’s museum, two art exhibitions, and a history museum. Where are the natural history museums? Where are the science museums? While school districts around the country are engaged in law suits about the teaching of evolution and intelligent design, natural history museums are fairly quiet. They all have evolution exhibitions or at least exhibitions whose interpretation is based in evolutionary science. Since even our current president smiles upon the notion of intelligent design, where are the picketers? Where is the front page scandal story about the *Darwin* exhibition?

As for science museums, why hasn’t *Body Worlds* caused a terrible to-do? (As far as I have been able to find out, only one museum has reneged on their rental, and that museum is in—you guessed it—Australia.) Surely, plasticized dead people on display should cause a major controversy, but the truth is, this show plays to huge crowds in every city it visits. No director will lose her or his head over it.

In the evolution wars, I think that even the activists are inured to the fact that natural history museums believe in and exhibit evolution. The Denver Museum of Nature and Science even has fundamentalist tour groups who come to their evolution exhibition to learn a different point of view about the evidence than that presented in the text. Everyone seems at peace about this. After all, the museum’s opinion is clear and unchanging on the subject, and for the museum, a visitor is a visitor, allowed to think whatever



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he or she likes. In other words, this is absolutely ordinary material for a natural history museum. No one is taken by surprise.

*Body Worlds* is in a similar situation. Anatomy is science. It is where it is supposed to be. (Von Hagen, the creator of the show, had the most trouble in his home country of Germany, specifically about his “artistic” pieces, such as a man carrying his own skin. Von Hagen considers himself to be both a scientist and an artist, but imagine what would have happened if he’s tried to install in art museums, rather than science museums.) In addition, the publicity is smart. Ads both describe what you’ll see and show you a picture. Squeamish potential visitors just stay away—the rest of us flock. No one is taken by surprise. Small stories and in-crowd whispers about the ethics of the body collection have made no apparent difference at all.

So, blah, blah, blah, what am I trying to say? Well, most of what we call controversies are minor dust-ups, brought on by an individual or group with an axe to grind. Hundreds of these could be cited from various kinds of museums, but without the collusion of the media and a

“... I believe that the controversy we should most fear is the one in our own heads.”

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politician or two, nothing really significant comes of them and they are soon forgotten. The general public usually doesn't even hear of these controversies, and if they do, it might even bring them to the museum. How many people went to *Sensation* just to find out what all the hubbub was about? And, of course, careful work in one's community and among any of the topic's stakeholders further insures that any issues that may come up later are manageable.

Exhibits funded by the government are most at risk. Political winds change, the use of tax dollars is always an issue, and coming out for or against something may feed a political career. In fact, government money was a lever in all three of the examples: NEA funding, Congressional funding and city funding.

Contemporary art is often **supposed** to be controversial. So, if we can't stand the heat we ought to get out of the kitchen, because this speaks directly to mission.

Natural history museums and science museums seem to run the least risks. Evolution, cloning, DNA, AIDS: though dust-ups have occurred in specific communities around specific exhibits, with careful work, all these topics seem fair game. Natural history museums probably run more risk of controversy with anthropological exhibitions, but, in sophisticated museums, contemporary anthropologists are more likely to be in touch with any ethnic and racial sensitivities and more likely to feel comfortable speaking to advisors about them.

History sites may be the most at risk. The possibility of careening into a sensitive area may seem totally removed from their scholarship and teaching goals. They may be blind to the ways

that interpretation of a long ago issue may have a resonance with contemporary values, feelings or even misconceptions. In other words, they may not even see where a controversy could take root and be taken by surprise.

Having said all this, I believe that the controversy we should most fear is the one in our own heads. Fear of a new technique, a new way of thinking about something, a risky topic, what happened in some other museum—our own fears usually stop us before we've even gotten underway.

Yes, we live in complicated times, but our chances to do great or interesting or progressive new projects don't come around that often. If it's mission driven, if it's really thought through, if it's an important story, don't think twice. Take the risk. Of the three major examples referred to, only one has a truly sad ending. The controversies around those old Boston examples (one funded by the NEA, and one by the state) certainly didn't hurt the Children's Museum or any of the staff involved.

Smaller controversies are going to show up all the time and most of us won't even see them coming. **All** topics and approaches have the potential to offend someone, somewhere. If you've done your work carefully, you just deal with it and move on. You might as well take on one or two with your eyes wide open. ☀

# A Hitchhiker's Guide to Virtual Museums

REPRINT

by Dan Tomberlin

**P**anarchy—a political unit or state where everyone has power (recently heard at a hackers' convention)

Everyone wants to be a part of the World Wide Web's success, including museums. Any museum, large or small, with a new computer, scanner, and modem can copy a little html code, digitize a few images, zap in a few hyperlinks, and create a home page. It is a wonderful capability for museums, this effort to deliver information, artifacts (images), and resources to the public in this virtual way.

Are these electronic documents exhibits? Are they being authored as publications or designed as exhibits? Are they important to our constituencies? The only way to answer these questions is to surf through the Web, sampling sites and drawing your own conclusions.

When I was given the assignment to check out what was increasingly being billed as "On-Line Museum Exhibits," or sometimes "Virtual Tours of Exhibits and Galleries," I was truly a novice in cyberspace. I first had to discover how to navigate the Web.

There are many paths to enlightenment, said Siddhartha. My local public library has a free Web computer room, and the local university libraries have on-line computers that are available to the general public. I logged all of the time for this story for free, and with the help of friendly Web surfers, it didn't take long to catch on. If you're a novice too, I encourage you try hitchhiking before purchasing your own cyber-transportation.

I was intrigued that I might be able, from the middle of Kansas, to browse through the new

dinosaur halls at the American Museum of Natural History or see the Elgin Marbles in their setting at the British Museum. But even as the new halls at the American are about what we don't know about dinosaurs, writing about virtual museums is as much about what they aren't as what they are.

## Defining Virtual Museums

What are these documents that we see on a website? They are electronically published documents, so they could fall into a number of categories. Are they information pages, virtual exhibits, on-line exhibits, virtual museums, virtual libraries, virtual magazines, brochures, pamphlets, etc., etc? For lack of another name, many site authors are loosely throwing around the terms "virtual," "museum," or "exhibit."

When I began, I expected to be able to virtually walk through a three-dimensional space. I discovered "museum" and "exhibit" mean something quite different on the Web, and I found there are plenty of authors on the net ready to define what they're doing.

I particularly liked the definition of virtual museums as envisioned by Jamie McKenzie, on the Bellingham, Washington Public Schools Web Site, so I asked him if I could reprint it.

"The World Wide Web makes possible a powerful new kind of student-centered, constructivist learning by collecting at a single site a phenomenal array of learning resources which can be explored with simple point-and-click skills." Some call these sites "virtual libraries." Because of their highly visual character, I prefer the term "virtual museum."

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A virtual museum is a collection of electronic artifacts and information resources—anything that can be digitized. The collection may include paintings, drawings, photographs, diagrams, graphs, recordings, video segments, newspaper articles, transcripts of interviews, numerical databases, and a host of other items that may be saved on the museum's file server. It may also offer pointers to great resources around the world relevant to the museum's main focus.

In Bellingham two schools are already working on virtual museums. One is called "Ellis Island," a virtual museum devoted to heritage and origin. The other museum will focus upon Pacific Rim cultures. Because students are actually building meaning as they add to the museum collection, this is, in many respects, a wonderful workshop for constructivist learning.

Virtual museums offer multisensory opportunities appealing to a variety of learning styles and to multiple intelligences. One can see a Picasso. One can see and hear Tori Amos perform "Cornflake Girl." While it is difficult to touch or taste, the same would be true of a conventional museum. Virtual museums have great advantages over books—bringing vitality, color, and motion to student exploration.

Another perspective is provided by Robert Guralnick of the Museum of Paleontology at Berkeley, whose site seems to be particularly popular.

He writes, "The UCMP Web Site has tried hard to use the technology available to create something that imparts quality information in many different formats. I do not like the word interpretive too much, since I guess it sounds

a lot like interpretive dance...why state it that way? I do not call websites exhibits or virtual museums or anything else. I call them websites because anything else does both not enough and too much justice to the Web. I might call websites a device to communicate information, but that's pretty vague, too, because so is radio and television—and the Web is not that.

"Virtual museums can take a topic deep into a hierarchy, so that people can explore and learn at some depth a particular topic. People can feel free to explore tangents and get lost in this new space."

### Lost in Cyberspace

I took Guralnick at his word and got lost. In three months, I visited hundreds of museum home pages. I spun off and visited many other sites that called themselves museums or exhibits, sometimes galleries, just to see what they were. While my search may not have been comprehensive, it was certainly full of variety. If you know of an excellent site that I fail to mention, you should recognize that as a hazard of the random Web surfing.

You must try this on your own. I can only marginally describe the quality of the experience of bouncing from museum to museum all over the country and the world—and only briefly describe some of the sites (sights!) I encountered. I won't give you a comprehensive list of museum sites. All of the Web browsers can bring up a list of the museums they find in their search function.

Or try the Museum Computer Network's site at <http://world.std.com/%7Emcn/index.html> where you'll find an extensive listing of museum sites.

Once you reach one museum, it usually will give you a hit list of other museums, science centers, zoos, and so on. You can literally skip around the world in this wonderfully random fashion, a great way to kill a rainy afternoon.

Why? Because you really can sample the world's museums from your computer.

"Sample" because, contrary to what I thought when I began, you aren't going to get virtual tours of most of the world's museums yet. But that's okay. Perhaps one day we will be able to virtually stroll through the Metropolitan, but for now, there is plenty to experience.

I say this even though I was using university or public library computers, and since they hadn't downloaded any plug-ins like QuickTime (movies) and RealAudio, which would offer additional perspectives, my visits weren't particularly exciting. They were, however, for the most part, enjoyable.

To describe every site I visited would be tedious and would deprive you of the fun of surfing and discovering them yourself. Here, however, are a handful of enjoyable, entertaining, educational, or maybe just strange museum websites, or sites that call themselves museums.

### Sites to See

I started my touring at, where else, the Smithsonian. There are different Web sites for each of the separate Smithsonian museums (SI), which you can access once you are in the SI home page. Each has pages that are fairly well developed, interactive and often updated. There are links to enlarge photos of art and artifacts, movies, and audio clips. I didn't visit each SI site, but I particularly enjoyed the

National Museum of the American Indian site, which displays dozens of artifacts, some in their exhibit settings.

The two sites I visited that came the closest to my expectations for a virtual spatial representation were the Canadian Museum of Civilization and the Rekihaku—the Museum of Japanese History. Most museum Web sites provide interactive lists of information about galleries, new exhibits, directions, calendars, shops—all the basics you would expect.

But I was hoping to find more. I wanted to find sites that would display something that would communicate a sense of space, a slide show of the exhibits perhaps. Both these museums showed wide angle views and details of every exhibit module in all their galleries. There were dozens of links and photo enlargements available too.

One of the most interactive virtual museums is the Exploratorium website with 50 interactive electronic exhibits and resources. My favorite is Ladle Rat Rotten Hut.

The incredible University of California Museum of Paleontology (UCMPL) is a tremendous undertaking that comprises more than 2,000 individual web pages, with new pages added daily. You can trace the story of life on this planet. They've used just the right amount of photos and graphics, which double as links to more in-depth information.

The UCMPL is a great demonstration of the Web's hypertext capabilities. The bottom of each page includes icons for the site's Web Lift feature which functions like an express elevator to other links.

*(continued from page 33)*


Everyone should visit the Louvre, although this Web site gives you more information on the Metro lines than on the art. The Library of Congress has links to documentary exhibits all over world, as well as their own. You can view all seventeen drafts of the Declaration of Independence in detail, or examine the documents in the Vatican exhibit closer than you could in the actual exhibit. The Colonial Williamsburg site allows you to meet the people that lived there long ago, view their homes, and look at their tools.

One of the best-looking sites is published by the Whitney Museum of American Art in New York. The text and graphics are very clean, elegant, precise, and there is actually some space between their headings. The Whitney, as is more typical among the art museum sites I visited, get their exhibiting artists involved in the design of Web pages.

Other exhibit designers I talked to while developing this story told me they are now including Web page design as a regular and important element of their exhibits, and

the Web page can reflect some of the design elements of the exhibit. The Whitney not only previews their exhibits, they have a section called "Artist's Projects on the Web," which are great fun and very personal. And some of the most interesting links to other sites I've encountered are on their pages called "Other Projects That We Like" and "Web Skies". One of these sites I jumped to is from Japan called "Banana Labels of the World", and it is beautiful!

#### **How do I get there?**

Had I Web addresses for all of these sites, many of them would be out of date by the time you received this issue. To just see what's out there, start with the Museum Computer Network and do your own random walk around the 'net. To find a particular site, you must use an index or search engine, sites which act like library key word catalogs. (But unlike a library catalog, search engines are not comprehensive.) At press time, popular guides to the Web include Yahoo (<http://www.yahoo.it.com>) and HotBot (<http://hotbot.com>). 



# Museums and the Web 2.0

by Jim Spadaccini

It is hard to overstate the excitement that the development of the World Wide Web generated in the mid-90s. There was a sense then that anyone could author on the Web, and in many cases people did just that. New museum Web sites appeared almost daily, posted by an enthusiastic employee or in some cases a volunteer.

Ten years later, larger museums have entire departments dedicated to developing and maintaining their institution's Web presence. The Internet has transformed the way many museums reach the public, research and plan exhibitions, manage and share collections, and conduct business.

It has been an amazing transformation to witness and to be part of. Reading Dan Tomberlin's article brought back a lot of my own memories of being involved in developing the Exploratorium's Web site during the era of "irrational exuberance" in the mid and late 90s.

Now is a great time to reflect, as the enthusiasm that the "Hitchhiker's Guide to Virtual Museums" article captured back in 1996 is emerging once again. This time the excitement surrounds the development of the "Web 2.0," seen by many as the second phase of development for the World Wide Web.

While it is not the headline grabbing, Internet gold rush of the 1990s, the Web 2.0 once again revives the grand concept that anyone can publish, collaborate, communicate, and share information. The rise of blogs, wikis, community sites, podcasts, and other decentralized and democratizing technologies characterize this new era.

## Re-Defining Virtual Museums

Over the last ten years museum professionals have been grappling with the question of how best to define and, ultimately, how to better develop online exhibits and other Internet-based resources. A lexicon of terms has emerged describing different types of sites and experiences.

Most of us now are familiar with online collections, Webcasts, interactive exhibits, discussion forums, and virtual tours, among others. While there is not yet a full consensus on the qualities of each of these, the distinction between them has become a bit clearer. Even a fuzzy vision of these types of experiences provides museum web developers with a shared language allowing them to discuss, learn and improve the user's experience.

With the advent of the Web 2.0, there are new models to explore and new questions to examine.

**Wikis** allow users to add content and provide the ability of any user to edit text. The phenomenal success of Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)), the free collaboratively written encyclopedia is the primary example, but Wikis can and do appear elsewhere.

**Blogs** (short for "weblogs") are personal Web sites that are updated regularly. Commonly entries are posted in reverse chronological order and in many cases they contain links to other sources. Some blogs are operated cooperatively and many have the ability for readers to post comments. Vlogs or video blogs are an even newer phenomenon.

**Community-based (or collaborative) sites** are not new, but developments in open source software have made the creation and management of

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"The Internet has transformed the way many museums reach the public, research and plan exhibitions, manage and share collections, and conduct business."

"The rise of blogs, wikis, community sites, podcasts, and other decentralized and democratizing technologies characterize this new era."

(continued from page 35)

these types of sites much simpler. Community sites tend to rely heavily on discussion forums, but they can also be collaborative in nature where many people post information. Informal and formal educators are looking to these types of sites as the key to unlocking the teaching and learning potential of the Web.

**Podcasts** are the most well known of the Web 2.0 technologies. They are a simple way to publish audio and more recently video files. Users subscribe to the podcast feeds and receive new files automatically. Audio and video episodes can be played back on the computer or in a portable device like an iPod.

**RSS** (either Rich Site Summary or Really Simple Syndication) is a format for distributing news, blog feeds, community site postings, and podcasts.

So what do all these new technologies mean for museums? We are once again asking hard questions, and perhaps none tougher than: What role do museums play in a new Web-space where users create and edit content?

The phenomenally successful Wikipedia, which is larger than Britannica and Microsoft Encarta combined and receives over 1.5 billion page views a month, may provide a glimpse. Even Wikipedia's founder, Jimmy Wales, admits the quality of its content is "uneven." Technology writer Nicholas Carr is less kind and describes it on a factual level as "unreliable" and calling the writing "often appalling." Still even he admits, "Certainly, it's useful, I regularly consult it to get a quick gloss on a subject."

Welcome to the world of the Web 2.0. Everyone can author and that is its great potential and peril. With the public viewing museums as

authoritative sources of information these questions concerning the "quality" of the information can be downright maddening.

Still many of these technologies are quite compelling and seem to live up to the promise of engaging online users more deeply, and in more meaningful ways. Web visitors are active participants not just passive consumers of information. They can pose and answer questions, express their opinions, and interact with other community members. Web statistics indicate that visitors to community sites in general stay longer and visit more frequently.

However, even this seemingly positive development may have a down side. Only a very small portion of Web users in community-based sites actually participate. The remainder "lurk." New issues over access and exclusivity abound in the Web 2.0.

### Lost in Cyberspace

The concept that somehow being "lost in cyberspace" was a good thing thankfully did not last too long. **User experience** and **usability** (the efficiency with which users can find their way around a Web site) are now the watch words for most Web designers and developers.

Not long after the original article was written in 1996, research and interaction with Web users developed into a major area of study. Influential user advocates like Jakob Nielsen taught us basic principles to apply to Web development.

In the museum field itself the Museums and Web Conference and the Museum Computer Network provided avenues to explore practically every aspect of how the Internet is changing our field. Existing organizations for museum professionals

such as the American Association of Museums (AAM), Association of Science-Technology Centers (ASTC), and others have also explored these topics in conferences and publications.

In total, these support networks and the deeply rooted knowledge that museums and museum professionals now possess, mean that implementation of Web 2.0 technologies is likely to be a smoother and better informed process than the scramble to create and post Web sites in the mid-1990s.

Some museums have already begun to implement Web 2.0 technologies. Like my predecessor, I would recommend that you take a look and explore some of the sites and podcasts put together by these early adopters.

To view or listen to podcasts, you will need the free iTunes player ([www.apple.com/itunes](http://www.apple.com/itunes)). To view blogs, wikis and other types of sites all you'll need is a standard Web browser.

In the "Hitchhiker's Guide to Virtual Museums" article back in 1996, there were a few references to "virtual tours", the idea that somehow Web-space would mirror the physical world and we might be able to "stroll through the Metropolitan."

While certainly some technologies have evolved to make these types of tours possible, most museums and developers have come to realize that creating Web sites or online exhibits that emulate physical space are usually not desirable. We now recognize the Web as its own environment.

The Web 2.0 helps reinforce the concept that the Web is its own space, with its own qualities and limitations. The sites you will see and



<http://eyelevel.si.edu>

podcasts you will see and hear do not attempt to replicate the physical museum, but rather they try to take advantage of new technology and the distributed, collaborative, and communicative nature of the Internet.

### Sites to See (and Podcasts to hear and view)

My predecessor began his tour, in his words, "where else, the Smithsonian," so will I.

"Eye Level" (<http://eyelevel.si.edu>) is the Smithsonian American Art Museum's blog. In their Opening Day entry on November 28, 2005 they introduce their blog as, "the first by the Smithsonian and one of just a handful of museum sites in the blogosphere."

The authors of Eye Level are cognizant that they are exploring something new here, "Eye Level will look at both art and museums, offering the kind of close examination that new media affords, in part simply to find out how new media can enhance the museum's role."

"The concept that somehow being 'lost in cyberspace' was a good thing thankfully did not last too long."



iTunes player <http://www.apple.com/itunes>



(continued from page 37)

A collaborative team of six post the blog entries. Each entry allows blog visitors to attach comments, although these are moderated before they are posted.

The Walker Art Center in Minneapolis (<http://blogs.walkerart.org>) pre-dates the Smithsonian with posts dating as far as back February 2005. The Walker actually contains six separate blogs, each exploring different topics such as: Education and Community Programs, Film/Video, New Media Initiatives, Off Center, Performing Arts, and Visual Arts.

The Walker has chosen to leave their comments area “unmoderated.” A simple graphic “code” area makes sure that postings can not be automated (spammed). The bottom of the Web page includes a simple disclaimer, “This page is an aggregation of the latest posts on Walker Blogs. While we try to ensure accuracy, these posts do not go through any official editorial process for spelling, grammar or fact checking so errors may occur. Every blog is open for public comment so feel free to speak your mind.”

“Science Buzz” (<http://www.smm.org/buzz>) is a community-site developed by Science Museum of Minnesota that offers “opportunities to dig deeper into science headlines, and gives you a chance to talk with each other and with scientists about your questions and concerns.”

Science Buzz effectively uses a community-based site with “blog features” to connect to science news. Comments on Science Buzz are moderated for casual users. The site encourages visitors to register and “be part of the buzz.”

Once registered (it takes just a minute) you then have the ability to create content in the form of a poll or blog post. This aspect of the site



<http://www.smm.org/buzz>

is unmoderated, but the registration process requires a valid e-mail address.


At the time this writing, Apple's iTunes listed about three dozen museum podcasts. Almost all are audio only and many contain just a few episodes. Still you can find an interesting range of programming from museums large and small.

You can take an audio tour of the Santa Barbara Museum of Natural History or learn about the science of cappuccino foam by listening to the Ontario Science Centre's RedShift Report. Visitors' questions from the RedShiftNow.ca site help drive the content that appears on the Podcasts.

The San Francisco Museum of Modern Art (<http://sfmoma.org>) is taking things a bit further, encouraging Web visitors to submit their own “artcasts.” Selected podcasts will be featured each month on the SFMoMA site.

### How Do I Get There?

Currently there is no comprehensive guide to museum blogs or museum podcasts. Due their technical nature, they do not always show up in standard search engines. However, Apple iTunes has a built-in search function for podcasts and Google recently unveiled Google Blog Search (<http://blogsearch.google.com>). New comers like Technorati ([www.technorati.com](http://www.technorati.com)), Feedster ([www.feedster.com](http://www.feedster.com)), and Ice Rocket ([www.icerocket.com](http://www.icerocket.com)) will also let you search the blogosphere.

If you would like to go back and relive the days of the Web 1.0, check out the “Way Back Machine” at the Internet Archive ([www.archive.org](http://www.archive.org)). 

## Exhibits

The Commonwealth Museum, Massachusetts  
 • **Boston Children's Museum** • Museum of Science, Boston • Brooklyn Children's Museum • Heifer International Global Village, Arkansas • The Scientific Center, Kuwait • Wonders of Wildlife Museum, Missouri • Museum of Discovery & Science, Fort Lauderdale • Sports Museum of New England • Money Museum, Cleveland • Capital Children's Museum, Washington D.C.



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# On the Occasion of Tut's Return

by James Volkert

**James Volkert** is an independent museum consultant and former associate director of the National Museum of the American Indian. He may be contacted at [jvolkert@sbcglobal.net](mailto:jvolkert@sbcglobal.net).

"With no clear path into exhibition design, the 1980s offered a spate of how-to books."

In the late 1970s, I was standing in the plaza of the Los Angeles County Museum of Art standing on the threshold of history. I was in line to purchase a ticket to an art exhibition and that had never happened before. **King Tut** was in town for the first time and the crowd was eager. The woman in front of me approached the ticket booth and said, with all urgency and seriousness, "I want a ticket for the day the king is going to be there."

Now, nearly 30 years later, Tutankhamun is back, cloaked in his capitalist robes and bolder and more expensive than ever. As before, his exhibition is drawing huge crowds and demonstrating the power of exhibitions and exhibition design. His periodic return to the United States is probably a good cycle to review the state of exhibitions and the supporting literature, for we surely must have progressed.

In looking at this span of time, one could be tempted to think of history as inexorably moving forward. Time marches on and museums move from simple to complex; self-serving to community based; relevant to more relevant, with the field of exhibition design moving from a few practitioners co-opted from other fields (notably fine arts) to a cadre of trained specialists.

Early definitional works like *Introduction to Museum Work*, G.Ellis Burcaw (1975) set a kind of awakening, dithering tone for designers as the exercises in back of each chapter indicate, "Two related concepts were introduced in Chapter 14. They are the balance between show business and serious education...An important rule in exhibit making is 'art should conceal art.' It means that the exhibit designer should be clever enough to keep his cleverness from being obtrusive." At

the same time, cleverness was drawing a crowd and there was serious experimentation going on, notably at the Boston Children's Museum and the Exploratorium.

With no clear path into exhibition design, the 1980s offered a spate of how-to books. We learned from each other. We learned from seeing. We learned by reading. These books were about dissecting the process—how to write labels, lighting, visitor studies, caring for glass collections, and how to mount guns. And on we went with the continual honing of skills through museum studies courses.

One could also look for patterns in authors of influence. D.F. Cameron's tomes, *The Museum Visitor I, II, III* (1959-1961) later appearing as *Communicating with the Museum Visitor: Guidelines for Planning*, Royal Ontario Museum (1976) were a fresh view and validating reference for emerging designers. Beverly Serrell's books of the 1980's described efficiency and attitude in developing labels and remain relevant today. Stephen Bitgood, Chandler Screven, Ross Loomis, Lisa Roberts, John Falk, and Lynn Dierking all defined the field of museum evaluation over this period of time.

Rather than taking any of these approaches, I would like to look at exhibitions and related literature categorically as follows: Exhibition design as fine art; Exhibition design in the service of others; and Exhibition design as metaphoric expression. Each category has had, and still has, practitioners, authors, and seminal exhibitions.

## Exhibition Design as a Fine Art

This is all about taste and style. Some exhibition designers, like some signature architects, developed a visual and recognizable style that



"What was needed was a kind of 'Bob Vila approach' to this old museum."

spun the same approach in ever tighter circles. Books of choice included: *Print Casebooks* (1980-87) conceived by Martin Fox, *On Display: A Design Grammar for Museum Exhibitions*, Margaret Hall (1987), and *Exhibits: Planning and Design*, Larry Klein (1986).

Exhibitions following this approach included *A Nation of Nations* at the National Museum of American History and virtually any show at the National Gallery of Art (or any other art museum). Following the more taste, less filling model, these exhibitions blurred into details of crown molding and image walls. The question remained about whether finely tuned sensibilities were a learnable skill and could one practice to become more tasteful. I knew an exhibition designer who saw the drawings themselves as works of art that could only be interpreted with arm gestures and expressions. Tough to build,

#### **Exhibition Design as a Service to Others**

Some time after the cabinet of curiosities, museums understood the need to plan and design exhibitions. There were few exhibition designers and many staff took on design decisions with little more than a hammer. What was needed was a kind of "Bob Vila approach" to this old museum. *Exhibits for the Small Museum*, Arminta Neal, appeared in 1969. We now had a manual for turning closets into exhibit cases. With the place cleaned up, all we needed to do in a historic house was put out the china and pull on a costume.

By the 1980s, these skills were polished into a specialization. Exhibit design was a support service, a kind of re-modeling agency. Just as we had this mastered, the museum design world was rocked. *Open Conversations: Strategies for Professional Development in Museums* by Carolyn

Blackmon, Teresa LaMaster, Lisa Roberts, and Beverly Serrell (1988) was published. This was the Team Approach and we still feel the resonance. Now, designers, educators and content specialists were locked in a room to develop balanced exhibitions, each contributing from their expertise. Consensus of the team sometimes amplified the idea and made it more broadly relevant and sometimes it pounded the idea flat. Why was it that we didn't all get it?

Enter *Frames of Mind: The Theory of Multiple Intelligences*, Howard Gardner (1985) and the idea of multiple intelligences that documented our preferences for learning through differing modes. This book, perhaps more than any other, affected the field and challenged designers to look for communicating vehicles that recognized the variety of learning styles in museum audiences.

There remained a need for designers to develop a training vocabulary for the profession and a series of books filled that need. *Human Dimension and Interior Space: A Sourcebook of Designing Reference Standards*, Julius Panaero and Martin Zelnik (1979), *Good Show: A Practical Guide for Temporary Exhibitions*, Lothar P. Witteborg (1981, 1991), and *User Friendly: Hands-On Exhibits that Work*, Jeff Kennedy (1990) all offered information that allowed designers to more fully serve the process of developing exhibitions. This was not about taste, but about logic.

More recently, *Planning for People in Museum Exhibitions*, Kathleen McLean (1993, 1996) takes a broad approach to exhibition development and still serves as a solid foundation for those entering the field.

The 1980s also spawned hundreds of technical publications like *Silica Gel*, *Technical Bulletin*

(continued from page 41)

"So, after thirty years and two rounds of Tut, what have we learned?"

no. 10. Canadian Conservation Institute (1985). These filled designer's binders and reflect the Golden Age of Reference. Indeed, the National Association of Interpretation has developed an entire system for interpretive planning. More recently, we have *The Manual of Museum Exhibitions*, Barry Lord and Gail Dexter Lord, eds. (2002). This is the ultimate service manual for exhibitions with useful case studies.

Looking at exhibitions from this vantage point, one could cite *Teen Chicago* at the Chicago Historical Society as one of logical design where service to the team, the idea, and the teen community generated a thoughtful and coherent product. At the other end of the spectrum, the *Enola Gay* experience at the National Air and Space Museum demonstrated design neutered by an ineffective process and hobbled by swirling disconnects.

#### Exhibition Design as Metaphoric Expression

Of the literature, perhaps the most potent pieces look at museum exhibitions as multifaceted, metaphoric expressions built on storytelling skill. One could go back more than thirty years to "Museums, Temple or Forum," Duncan Cameron, *Curator* 14 (1) (March 1971) to see the seeds of that discussion.

But it was the 1990s that saw rich approaches to exhibitions bloom. We saw *Art/Artifact* by Susan Vogel and *Field to Factory* at the National Museum of American History. This was a time when great thinkers were writing and designers were listening. Listening for the metaphor. *Rethinking the Museum and Other Meditations*, Stephen Weil (1990) was a seminal piece of work, followed closely by *Exhibiting Cultures: The Poetics and Politics of Museum Display*, Ivan Karp and Steven D. Lavine (1991). These and other books gave designers the spark to reach beyond the pedestrian to new visual vocabularies. In this light, *Envisioning Information*, Edward Tufte (1991) was under-utilized as a guide for reformatting information. In fact,

exhibition designers began recording their own multifaceted process in such compilations as *Recent and Recommended: A Museum Exhibition Bibliography with Notes from the Field*, Kathleen McLean, ed. (1991).

It was also a time when the profession was looking to its own growing body of experience as a source. *Philadelphia Stories: A Collection of Pivotal Museum Memories*, Michael Spock, ed. (2000) was an analysis of the field in which he interviewed museum professionals to understand what makes us tick. It resulted in a sixty minute video and accompanying study guide featuring the personal stories of two dozen museum professionals relating their own experiences of informal learning in museums. This was an important piece of work.

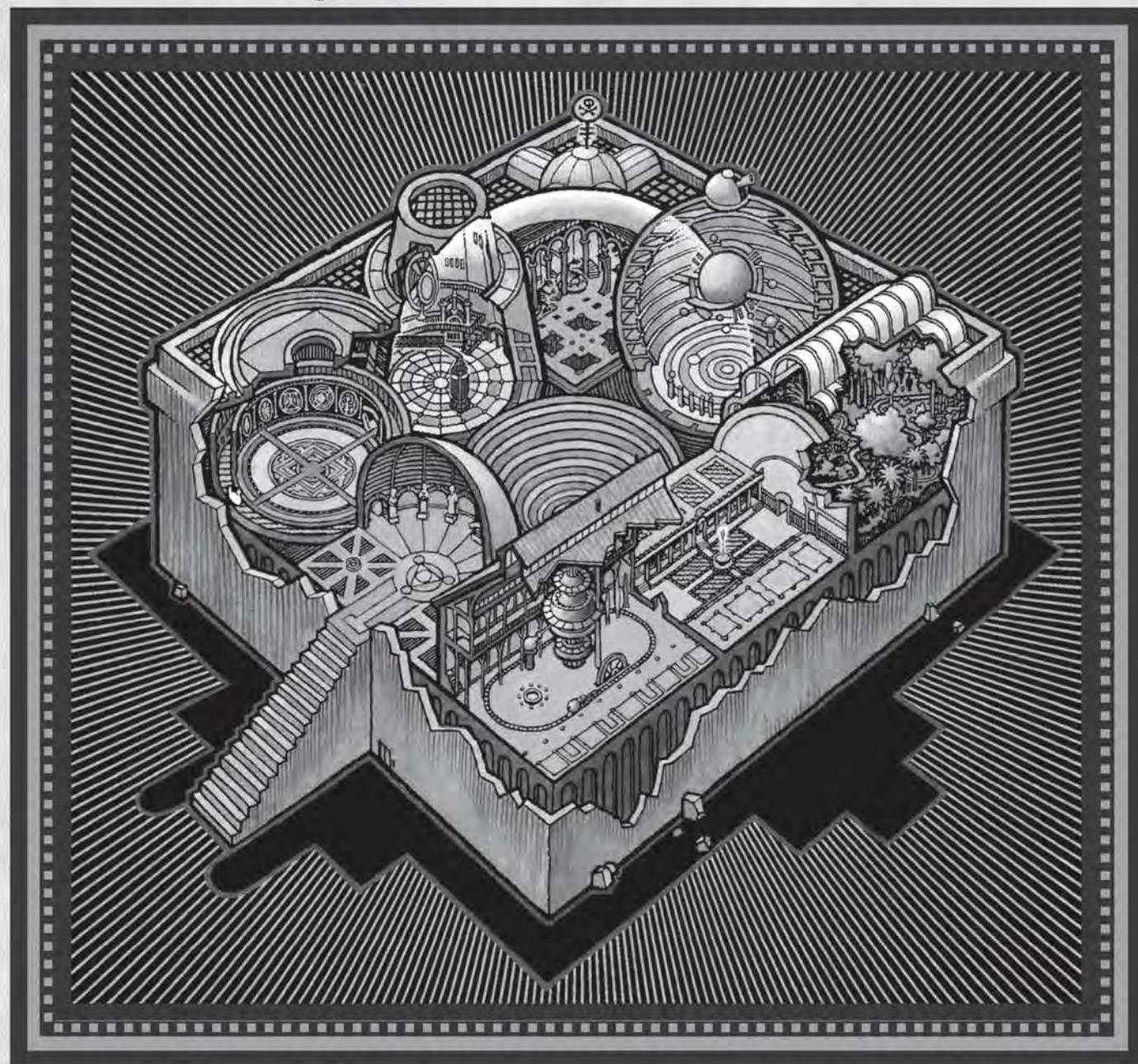
It is a small cadre of people that have witnessed this sweep of time and even a smaller group that have commented on it. *Civilizing the Museum: The Collected Writings of Elaine Heumann Gurian*, Elaine Heumann Gurian (2005) is now released and a worthy read coming from someone who was there. Pairing this book with *Are We There Yet? Conversations about Best Practices in Science Exhibition Development*, Kathleen McLean and Catherine McEver, eds. (2004), and you have a very excellent two book library that brings back the thoughtful joy of exploration.

So, after thirty years and two rounds of Tut, what have we learned? We have learned that exhibit designers and exhibit developers do not write very much. We have learned that experimentation is a laudable goal, but difficult to practice and the process is messy. We have learned that keen insights do not happen without no-fault play on the part of the practitioners. We have learned that conversation beats lecture and logic beats taste.

Perhaps our responsibility is to find ways for the king to be there every day. Let's talk again in 2036. ☀



# The Museum of Lost Wonder



## WHAT THE MUSEUM IS ABOUT

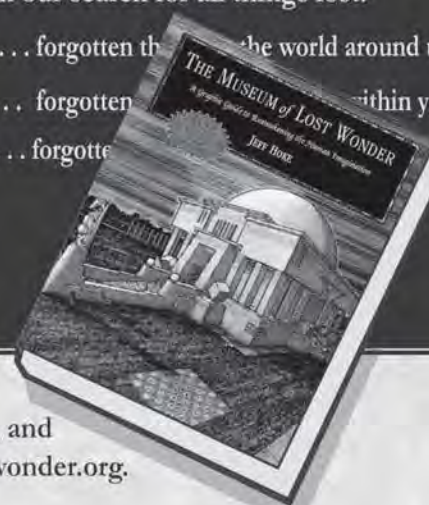
In a familiar and friendly format this Museum of Lost Wonder will attempt to address those concerns that are of importance to youths of all ages. Through enlightened discussion, instructive illustration, and captivating activities we will uncover a forgotten way of looking at the world that once induced wonder to many, and now only produces confusion for the few.

Join us in our search for all things lost.

Discover . . . forgotten things in the world around us.

Recover . . . forgotten things within you.

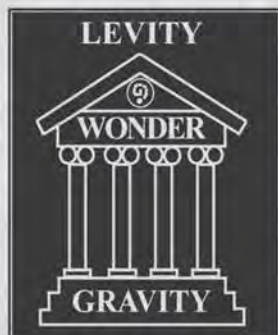
Uncover . . . forgotten things



Excerpts from the book, *The Museum of Lost Wonder*, by Jeff Hoke. Available in August at a bookstore near you, and from the author at the official museum website: [www.lostwonder.org](http://www.lostwonder.org).



# Welcome to the Museum of Lost Wonder



At first glance, the seven exhibit halls in the Museum of Lost Wonder look similar to those found in other museums.

There's a hall of technology, an aquarium, a botanical garden, and other familiar exhibits you may think you've seen before. But a closer look reveals something more.

Each of the exhibit halls borrows its theme (and its Latin name) from a particular step in the process of alchemy. These steps have to do with transformation, not just of physical elements but also of personal psychologies of the subconscious.

Alchemy lent a personal meaning to science by equating the mystery of matter with something that really mattered—the mysteries of the heart and the soul. Some people think of alchemy as misdirected foolishness. At the Museum of Lost Wonder, we like to think of it as a whole lot of fun. By refining and recombining physical and psychological elements, alchemists sought to reduce everything to



On our front door is the museum's emblem—the circle of creativity. This portal to adventure is flanked by two greeters—Dexter and Sinister: the Infant and the Dragon, representing the right and left hands, who invite you in to play in this hands-on museum.

## The Muse in the Museum

### Thalia Sacred Comedy

The word "museum" invokes the muses—mythical goddesses of creativity and wisdom. Traditionally, muses didn't dispense artistic motivation from on high. They were earthy spirits whose inspiration bubbled up from the dark caverns of the uncon-

scious. One of these divine guides presides over each room in the Museum of Lost Wonder.

At the Museum of Lost Wonder, Thalia is the queen of the muses. As the goddess of sacred comedy, she symbolizes the good-natured spirit of levity that counters the gravity of so many other museums. Thalia inspires us to infuse our visit with humor, hope, and joy.



The drawings of the muses in this book were drawn from statues in the Vatican museum.



# Your Journey Begins Here

*Circulatio Entrance Hall*

its essential golden nature of wonder. Alchemists modeled their path of inner transformation on patterns and phenomena found in nature. To them, the world was one big mystical laboratory, a place to refine the senses and the self through acts of creative experimentation.

We've arranged our exhibits to encourage this same sort of creative reflection and refinement. Taken separately, each of the exhibit halls represents a certain stage in the creative process of alchemy or any other art. Together, the halls embody all of creation, be it the larger Creation that surrounds us or the personal creativity within each of us.

Each chapter in this book will guide you through one of the seven exhibit halls, explaining the ideals inherent in a particular step in the creative process. Each exhibit hall is full of allegories and other symbols placed to induce the proper mood, or "humor." This is a hands-on museum, full of experiments and things to try. Each exhibit also includes a paper model. When you build the models you'll be taking two-dimensional ideas and transmuting them into three-dimensional reality—just like an alchemist!

Welcome to our experiment in meaning. Leave your baggage at the front desk and your cares and worries behind. You'll find Gravity, Levity, and Wonder and lots of little pieces to put together memories of your own. Your visit is appreciated, for when you picture each exhibit and each idea, you complete the museum. It wouldn't exist without you. Metaphors be with you.



**WARNING:** The weary, bored, and disenchanted are welcome in the Museum of Lost Wonder, but there are elements here that are not suitable for closed minds and cold hearts. Side effects may include doubt, irrationality, and synaptic pathway realignment. Enter at your own risk!





**MUSE** [Latin. *musa* <Greek. *mousa*, amuse, music, <Indo European, *mendh*—to pay attention to, whence < Old Norse, *munda*—strive for.] 1.) Greek Myth. any of the nine Greek goddesses who preside over literature and the fine arts and sciences. 2.) the spirit that is thought to inspire artists and poets; a source of genius and inspiration. **INSPIRATION** <L. *in-spirare*, to breathe, the act of breathing.

## THREE GRACES

Sister goddesses who have control over beauty, pleasure and charm in human life and in nature.

**AGLAIA**  
Brilliance

**EUPHROSYNÉ**  
Joy

**THALIA**  
Fecundity

## 9 MUSES

**THALIA**—also the muse of comedy

**MELPOMENE**  
tragic poetry

**URANIA**  
astronomy

**POLYHYMNIA**  
sacred poetry

**CLIO**  
history

**CALLIOPE**  
epic poetry

**EUTERPE**  
music

**TERPSICHORE**  
dance

**ERATO**  
erotic poetry

**MNEMOSYNE**  
The goddess of memory, and the mother of the muses.

## PEGASUS

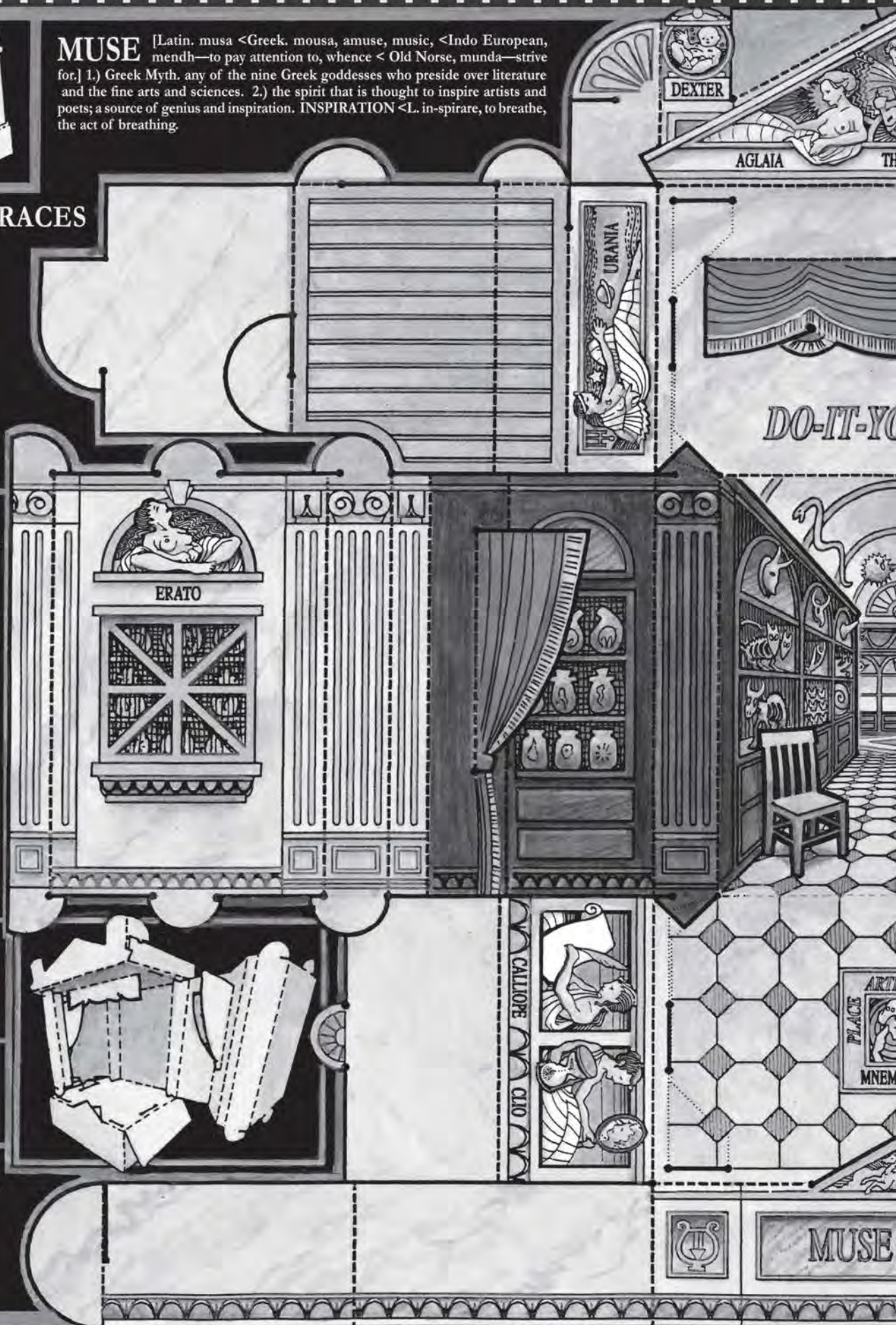
The winged horse was a gift to the muses from Apollo.

## DEXTER

The right hand—skillfulness

## SINISTER

[<i.e. base *sene-str.*] preparedness







**MUSE** verb [Old French. muser, to ponder, to think deeply < Mid Latin. muses-mouth ] to meditate, with muzzle in the air. **a**  
**muse** [Old French. muser, to stare at fixedly.] the agreeable occupation of the mind. (especially by something that appeals to the sense of humor.) Archaic. To divert the attention in order to deceive. Syn. Diversion. To occupy the mind. To take attention from previous thought or worry..



## INSTRUCTIONS

### Stage 1.

**CALCINATIO**  
 Release Dexter  
 & Sinister. (*Skill  
 & Dexterity*)

### Stage 2.

**SOLUTIO**  
*Immersion in the  
 work.* Color the  
 existing plane.

### Stage 3.

**COAGULATIO**  
*Assembly of the tools*  
 Pen, ruler, X-acto  
 blade, scissors.

### Stage 4.

**SUBLIMATIO**  
*Foliation of the  
 plane.* Score  
 dashed lines with  
 pen and ruler.

### Stage 5.

**SEPARATIO**  
*Division of the plane.*  
 Cut and pierce all  
 slots and cutlines.

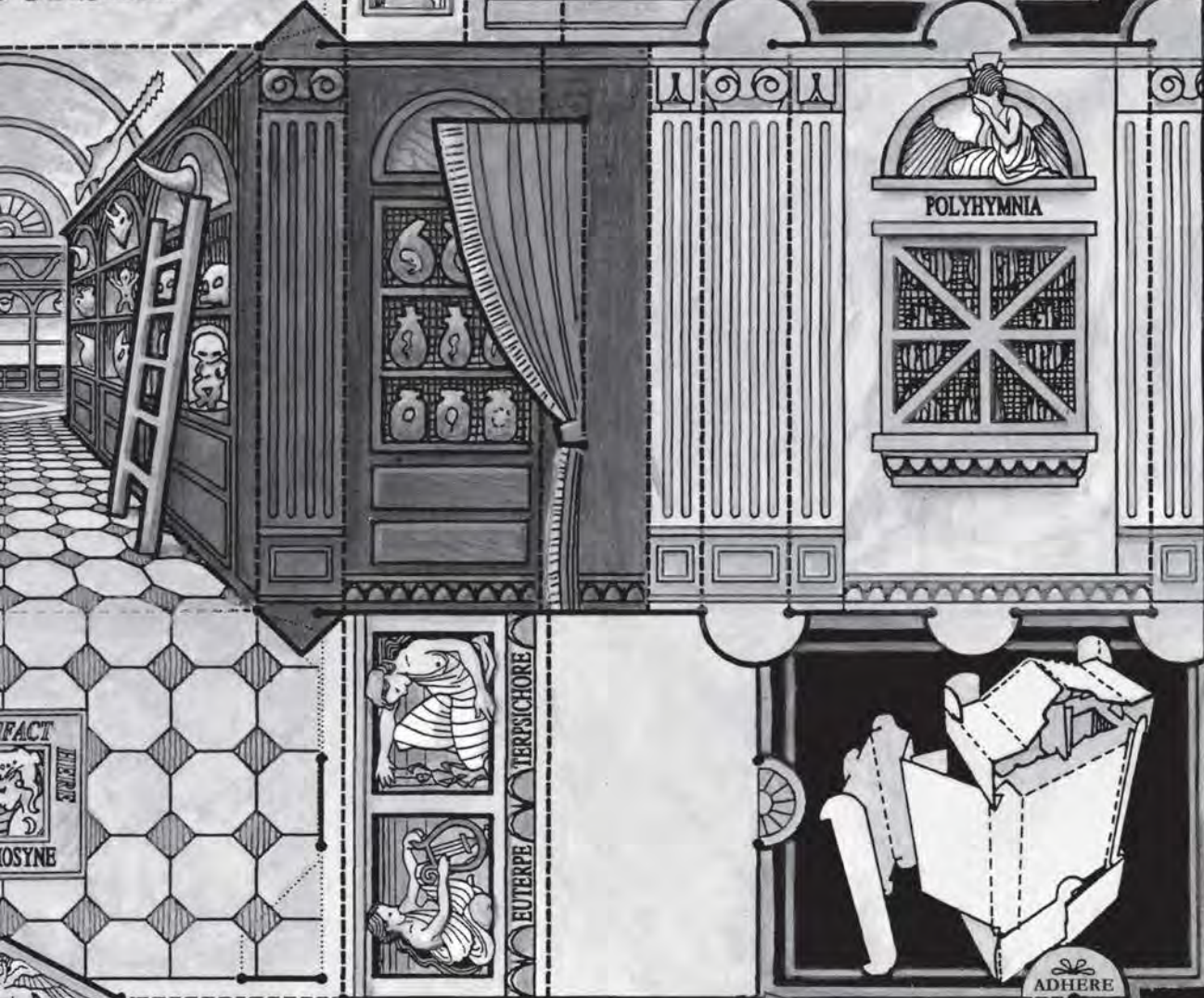
### Stage 6.

**MORTIFICATIO**  
*Death to the plane.*  
 Fold scored  
 lines, insert tabs  
 in slots, erect the  
 work.

### Stage 7.

**CONJUNCTIO**  
*Culmination of the  
 work.* Acquire arti-  
 fact of personal  
 significance and  
 mount in your  
 MUSE-A-UM.

OURSELF



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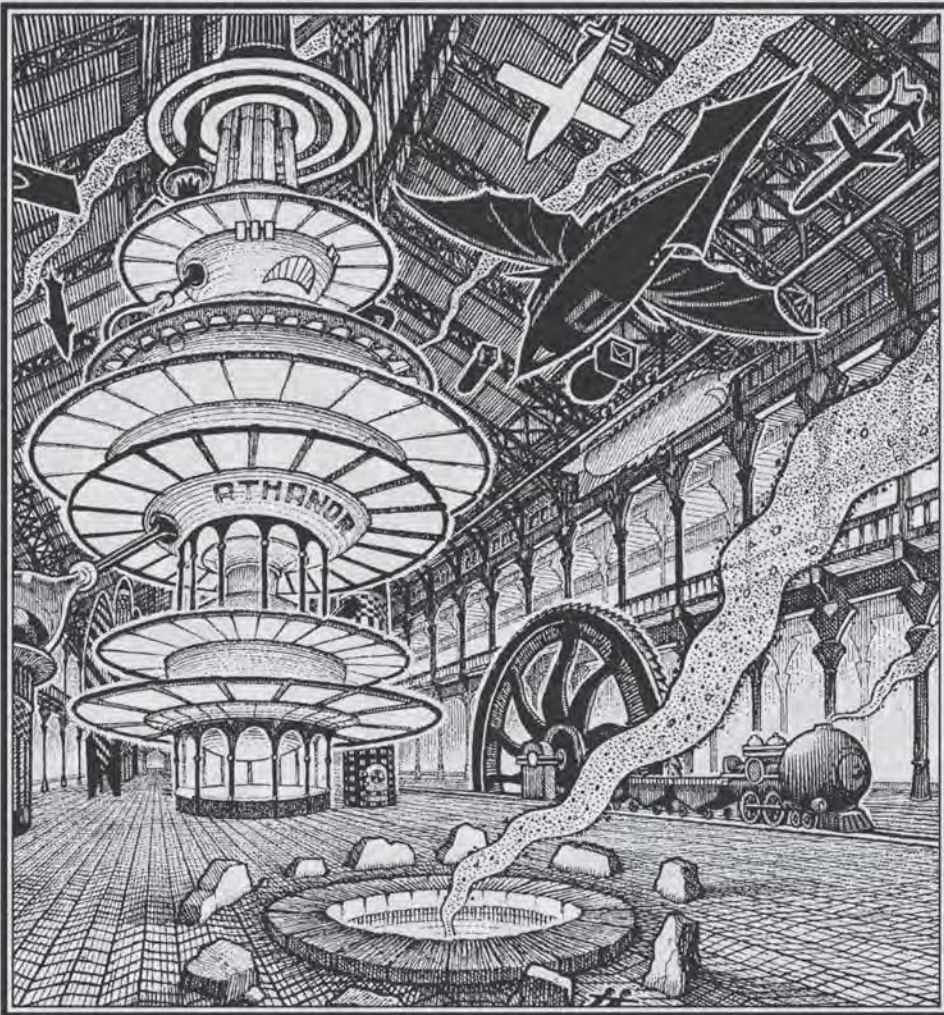
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ADHERE



# CALCINATIO

*"If we had a reliable way to label our toys good and bad, it would be easy to regulate technology wisely. But we can rarely see far enough ahead to know which road leads to damnation."* FREEMAN DYSON



**CALCINATIO:** The Hall of Technology in the MUSEUM of LOST WONDER  
Home of all our hopes, fears, and preoccupations with what civilization has brought us.



Our first exhibit hall explores all the wonders that science and technology have brought us. Calcinatio shows us that excitement and terror are two sides of the same coin. By examining its exhibits we follow the trail of technology, beginning with the discovery of fire all the way up to the invention of the hydrogen bomb. Toys and gadgets amuse us, weapons terrify us. Calcinatio helps us burn away our preoccupation with all these inventions and reminds us that there is more to the creative process than diversion and destruction.

As mankind got more technologically inclined, scientists explained the body and the mind by comparing them to machines. You've probably heard the brain described as the world's most incredible computer, but don't you think there's more to us than cogs, wheels, and stimulus-response mechanisms? Keep this question in mind as you continue your tour of the Museum of Lost Wonder.

*"It's become appallingly obvious that our technology has exceeded our humanity."*

ALBERT EINSTEIN

*"I am become death, the destroyer of worlds."*  
ROBERT OPPENHEIMER —A-bomb creator

## DEFINED



**CALCINATIO:** *CALCINATION*, to calcinate, to heat an unrefined substance in a crucible over an open flame until it is reduced to ashes or powder.

## THE INNER DEFINITION



### The Fire Within

Calcinatio represents the spark of imagination that gives us original thoughts and interpretations. It also symbolizes the fire of introspection. By holding our anxieties and subconscious preoccupations close enough to the light of reason, we ignite our petty concerns and material attachments, reducing them to ash. Through the process of Calcinatio, our ego is set alight and refined to a purified state. Who knew enlightenment could be so humbling?



Calcinatio displays all the amusing gadgets that have entertained us since the invention of amusement. This hall both congratulates and questions mankind on its mechanical achievements. There are some amazing devices here, but what have all these machines done to our inner nature? Let's use Calcinatio's fire to shed some light on that question.





Umbræ Rex  
*please*  
**DO NOT TOUCH**





REPRINT

# We Need Criticism

by Kathleen McLean

**Kathleen McLean** is Principal of Independent Exhibitions. She may be contacted at [kmclean@ind-x.org](mailto:kmclean@ind-x.org). This article is being reprinted from the *Exhibitionist*, vol. 17, no.2, Fall 1998 with permission from the author.

"It forces us to listen to critics who have no stake in our happiness, but have a take on our effectiveness. And it compels us to be more thoughtful about the exhibitions we create."

It's about time for some hard-hitting criticism of museum exhibitions. For too long, we've practiced in a self-congratulatory atmosphere, heaping indiscriminate praise on each other, sometimes without really meaning it. Perhaps this is because we appreciate the tremendous effort it takes to create an exhibition. Or perhaps we can't bring ourselves to tell colleagues when we think their efforts missed the mark. Exhibition criticism forces us to look hard at our exhibitions.

## We Need a Forum

It's been hard to find good criticism in the museum exhibition arena. Mostly, we see reportage-style reviews lacking critical analysis. The few analytical reviews usually focus on curatorial content with little or no analysis of form and experience; or on design and form with no consideration for content and experience.

Since 1990, I have been chairing sessions on exhibition criticism at the American Association of Museums annual meetings. Every year, a standing-room-only audience suggests that we're ready to open our exhibitions up to the critics and engage in a more substantial dialogue about the quality of museum exhibitions.

Traditionally, there have been few venues for exhibition criticism. *Museum News* has always played it pretty safe and will probably continue to do so. But other publications are a bit more daring. *The Journal of Museum Education* has printed several exhibition critiques over the years; plans for *Curator* include serious exhibition reviews; and the *Exhibitionist* has ventured into this uncharted territory with its last issue. Let's hope that these publications will increasingly provide an essential forum for thoughtful analysis of individual exhibitions.

## We Need Models

There seems to be persistent confusion about the true nature and function of criticism as it applies to museum exhibitions. Many people confuse evaluation and criticism. Some people insist that reviews must be objective and "fair" (whatever that means)—they feel they have a right to insist on a positive review to balance a negative one.

Unlike evaluation, which is grounded in some form of **objective** assessment, criticism is **subjective**. It is a personal judgment, no matter how sincere and informed. And unlike promotional reviews full of praise that are meant to draw audiences, critical reviews are meant to help develop a clearer sense of the parts of an exhibition and to illuminate how those parts relate to the whole exhibition experience. Critical reviews come from looking deeply at exhibitions.

Good criticism is always based on the reviewer's own experience **of** and **in** the exhibition. And good criticism can only come from people who have a deep and holistic understanding of exhibitions. Personal intimacy with the medium is essential if the reviewer is to provide the depth of analysis necessary to inform the way we think about exhibitions, improve the processes we employ to develop them, and ultimately, improve the experiences people have in them.

I developed the following model to help focus on the types of questions reviewers might want to consider as they assess an exhibition. It's an attempt to define criticism as a chronicle of the reviewer's personal experience in the exhibition.

"Unlike evaluation which is grounded in some forms of **objective** assessment, criticism is **subjective**...Good criticism is always based on the reviewer's own experience **of** and **in** an exhibition... Personal intimacy with the medium is essential."

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### One Approach to Criticism

#### *Before the Exhibition—Your State of Mind*

All of us bring preconceptions and pre-judgments to an exhibition. You may have heard a glowing review from someone you respect and therefore will be very receptive to anything the exhibition contains. You may be interested in the subject. You may know people who worked on the exhibition. Or, conversely, you may approach the exhibition as if you are going into battle, having heard negative things about it from a colleague you admire.

Your attitudes towards the exhibition, the circumstances of your life the day of your visit, and the people around you all affect your experience of the exhibition, and an awareness of these factors will help to remind you of their influences on your experience.

#### *Exhibition Entry*

Before entering the exhibition, stop and note your initial reactions. Does anything attract your attention: the title, the structure, colors, sounds, objects, or lighting? Do the title graphics create an image for the exhibition? Are you drawn into the space or would you rather go elsewhere?

#### *Organizational Clarity*

From where you stand, can you determine the exhibition theme? Are there advance organizers of interpretive graphics to assist you in understanding the scope of sequencing of the exhibition? Do the graphics describe what you are about to experience, provide a menu for selecting portions of the exhibition, or introduce the exhibit creators and explain their goals?

Where do you go from the entry and why?

As you move through the exhibition, is there a defined path indicated by placement of signs, graphics, exhibit structures or furniture?

Does the path seem arbitrary or is it related to some sequence, such as historical chronology?

Do you feel constrained by the path, or can you move about freely and at your own pace?

Are individual exhibits grouped or clustered, and if so, can you determine why? Do you notice any organizing elements, such as banners, pylons, graphics, highlighted objects or exhibits, or area title signs that identify themes or sub-themes? Are there clear relationships among these elements?

#### *Exhibition Environment*

Note the use of the overall space. How does the environment contribute to your experience of the exhibition? Can you focus on the exhibition, or are there other museum activities or exhibits competing for your attention? Does the design of the exhibits encourage you to interact with other visitors, or do you feel constrained or restricted from interacting?

How do you feel in the exhibition? Are you aware of temperature or air quality in the space? What kind of sounds can you hear? Does the environment echo with footsteps? Can you hear other visitors interacting? Do audio components draw you into the environment, or do the sounds compete for attention? Does the noise soothe or irritate? Is there adequate seating?

Are there any areas in the exhibition that make you uncomfortable? Why? Do you feel crowded and confined; or conversely, do you feel as if

*(continued from page 51)*

you're in an empty and cavernous space? Can you get close enough to exhibits to see and use them? Is there adequate viewing space for all objects and elements?

Look for elements that pull you through the space. Stand in one place and look around you. Are there focal points, "hot spots," of landmarks within your line of sight to pull you into specific areas, and are they related to an organizing principle? Do lighting effects, colors, or sounds attract you to an area? Why? Once attracted to an area or exhibit, does the element that attracts you contribute to the exhibit context, or does it feel gratuitous?

Note the use of additional props, such as period furniture, plants, models, and stage sets. Do they intensify the environmental setting of the exhibition? Do they relate to concepts of themes? Do any of these props distract you from the exhibits?

How effective is the lighting, and is it sufficient? Is the room generally lit with ambient or unfocused light, or are objects, signs, and labels dramatically spotlighted? Are there any shadows or glare that impair your viewing of the exhibition?

Are museum staff people present, and are they helpful and accommodating? Is a guard stationed in the vicinity? Are special security devices such as electronic eyes, cameras, or alarms used, and are they obtrusive in any way?

How well is the exhibition being maintained? Can you see smears and smudges on the Plexiglas or glass? Are there fingerprints or dust on case and wall surfaces? Are paint and other surfaces worn or chipped? Have graphics been worn away, making them difficult to read?

Is the exhibition directed toward a specific audience? How do you know? Is the exhibition accessible to the disabled? Have provisions been made for hearing- and sight-impaired visitors?

### **Appropriateness of Exhibition Media**

Consider the use of exhibit elements, objects, artifacts and multimedia. Are there a variety of things to do and experience in the exhibition? If the exhibition is based on objects, are the objects the subject and focus of the exhibition? Are they used as examples to communicate ideas? Are they individually displayed or grouped for some reason? Do they complement or overpower one another? Is there an interesting format in which the objects are presented? Are there too many or too few objects to support exhibit ideas? Are there provisions for relief of monotony by size, shape, or placement variations?

Are there any interactive exhibits that allow you to experiment on your own or deal with a topic in different ways? Do they encourage you to think more carefully about a topic or discuss the exhibit with others? Are the exhibits working properly? Do you find yourself saying "so what" afterwards?

Where is the text placed in the exhibition? Is it legible and easy to read? Has it been broken into small palatable amounts, or is it too much to read at one time? Is your vision of labels, signs, and interpretive graphics obstructed by anything? Could this have been avoided? What eye level was chosen for the labels? Is it clear which label accompanies each exhibit? Do the signs and labels convey a specific style that is in keeping with the subject of the exhibition? What is the tone of the text and labels (conversational, didactic, preachy, dull)?



"Critical reviews are meant to help develop a clearer sense of the parts of an exhibition and to illuminate how those parts relate to the whole exhibition experience."


If the exhibition contains multimedia or audiovisual presentations, are they relevant to the exhibition? Do they support the exhibition concepts, or do they seem like an afterthought? Are they easy to use? Are you aware of cables, electric cords, plugs, and other equipment, and does this distract from your experience of the exhibition?

#### **Overall Effectiveness of Communication between Planners and Visitors**

After having thoroughly reviewed the exhibition, do you have a clear notion of its focus and themes? Do you have a notion of the exhibition creators and their reasons for creating the exhibition? Can you determine a pattern of conceptual relationships? Does

the exhibition succeed in communicating its messages? Are they implicit or explicit? Are there conflicting or confusing messages?

How important a role does the exhibition design play in communication? What aspects of the design were particularly effective and what could have been improved? Is the design overbearing or coercive? Has the exhibition inspired or excited you in any way? Will you remember it tomorrow, next week, next year? Or, would you rather have gone to the movies?

*Parts of this article were excerpted from Planning for People in Museum Exhibitions, published by the Association of Science-Technology Centers (ASTC), 1993.* 

# Still We $\Delta$ Need Criticism

by Kathleen McLean

**Kathleen McLean** is the Principal of Independent Exhibitions. She may be contacted at [kmclean@ind-x.org](mailto:kmclean@ind-x.org).

I used to imagine that if exhibition professionals would only embrace exhibit criticism in all of its manifestations, museum visitors ultimately would be offered more high-quality exhibitions. In my 1994 article in the *Exhibitionist*, I said, “We need a forum.” We now have several, including the regular exhibition reviews of which I am the editor in *Curator: The Museum Journal*. I also said, “We need models,” and I think the field has evolved over the years to embrace a wide variety of models, styles, and approaches to professional assessment and peer review of exhibitions—in publications, in sessions at conferences, and in projects like Beverly Serrell’s *Framework for Assessing Excellence in Exhibitions*.

In my 1994 article, I offered a model for critiquing exhibitions that provided potential reviewers with questions aimed at describing their **personal experiences** within an exhibition. I hoped this experience-based approach would help foster a sharpened awareness field-wide of the sensory nature of three-dimensional exhibitions, at a time when most exhibition reviews focused on curatorial content or exhibit and graphic design. Today, peer reviews of exhibitions usually are much more comprehensive, critiquing the overall experience as well as content and design.

So now, after twelve years of developing forums for and models of exhibition criticism, do museums offer more high-quality exhibitions? I don’t think so. Some practitioners are certainly more comfortable thinking and speaking critically about their work today than in the past. But criticism based on personal experience alone is not enough; it is just the first step in creating a more reflective group of practitioners, and ultimately, better exhibitions.

## We Need Context

Criticism uninformed by past practice is simply opinion. And while opinion can be interesting, it is not usually helpful from one situation to the next. We need to become more familiar with what has been done in the past, from exhibition design and popular media techniques to the results of prior visitor research and evaluation studies. We need to place our experiences within a larger context of exhibition development practice.

Several examples of this contextual approach appear in a recent issue of *Curator: The Museum Journal*.<sup>1</sup> In “Lincolns in Latex” (one of the best exhibition reviews I have read, by the way), Daniel Spock reviews the new Abraham Lincoln Presidential Library and Museum in Springfield, Illinois. Spock not only describes his experiences as a visitor to the museum, he also compares the exhibit elements he experienced to other museum exhibitions and popular culture presentations, from Disney theme park attractions like the *Pirates of the Caribbean* ride, to old dioramas and German expressionist films. The review reflects Spock’s familiarity with the history of exhibition practice and situates his experience within that context, provoking readers to consider the exhibitions (and museum) as examples within a larger field of practice.

In the same issue, Beverly Serrell reviews “The Civil War in Four Minutes” and discusses why she found the exhibit compelling and memorable. She also includes a postscript that identifies two other presentations that used the same technique: Charles and Ray Eames’ short 1952 film *Atlas: The Rise and Fall of the Roman Empire*, and the 2000 film *World Population* produced by Zero Population Growth. These references allow readers to step back from




## "Criticism uniformed by past practice is simply opinion."

the specificity of "The Civil War in Four Minutes"—to set aside all of the personalities and politics—and better understand why this type of presentation was so good at depicting complex large scale events over long periods of time. It helps transcend the notions of brilliant designers or expensive budgets and focus on the powerful effects of a well thought out technique applied and presented appropriately.

### Going Forward

We need to cultivate an evolutionary consciousness that encompasses past and current practice, and seeks to innovate and expand upon the knowledge base of a long line of museum exhibition creators, from curators and designers

to educators and evaluators. When we consider which elements of exhibits are "successful" or "compelling" or "powerful," we should be able to step back from the particularity of the exhibit and identify some sets of similar examples or more generalizable principles. This would help us consciously select specific techniques, media, and designs for specific purposes. We could be much more intentional. And perhaps we would see more innovation in the field, as we build upon the past and evolve over time. 

<sup>1</sup> Spock, Daniel. "Lincolns in Latex: Exploring Lincoln's Legacy at the Abraham Lincoln Library and Museum," *Curator* 49 (1), 2006, pp. 95-104. Serrell, Beverly. "The Civil War in Four Minutes," *Curator* 49 (1), 2006, pp.105-108.

## ExFiles: An Online Science Exhibit Community

*In the spirit of this statement by Lee Shulman, work is underway on the ExFiles project, which over the next three years will result in a community-based collaborative web site for the exhibit field. ExFiles is made possible by a grant from the National Science Foundation, awarded in January 2006 to the Association of Science-Technology Centers (ASTC). Kathleen McLean is part of the core planning team, along with Wendy Pollock of ASTC, Jim Spadaccini of Ideum, and seventeen exhibit practitioners and advisors, including representatives of NAME, who will help to build and test the site.*

*Records of exhibitions—from titles and opening dates to outcomes and lessons learned—will form the core of the site, which will also take advantage of recent developments in web design to provide ways for registered site users to not only quickly retrieve information about exhibitions, but also to contribute, comment, and critique. One starting place for site design is the case study format developed for **Are We There Yet? Conversations about Best Practices in Science Exhibition Development**, edited by Kathleen McLean and Catherine McEver. Among the possibilities are multiple users adding elements of an exhibition case study over time, in "wiki" style. Other sources of inspiration are the **Cheapbooks of Exhibit Ideas**, compiled by Paul Orselli, part of the ExFiles team.*

— Wendy Pollock, Director, Research, Publications, and Exhibitions, ASTC, [wpollock@astc.org](mailto:wpollock@astc.org)

"Learning is least useful when it is private and hidden; it is most powerful when it becomes public and communal. Learning flourishes when we take what we think we know and offer it as community property among fellow learners so that it can be tested, examined, challenged, and improved..."

— Lee S. Shulman\*

\*From Taking Learning Seriously, by Lee S. Shulman, originally published in *Change*, July/August 1999, Volume 31, Number 4. Pages 10-17. Available at <http://www.carnegiefoundation.org/publications/sub.asp?key=452&subkey=618>

# Comparing the “Excellent Judges Framework” to Other Methods of Reviewing Exhibitions

by Beverly Serrell

**Beverly Serrell** is the Principal of Serrell & Associates. She may be contacted at bserrell@aol.com.

In developing the Excellent Judges Framework, we were informed and inspired by other sources of review and criticism in the museum field, such as the American Association of Museums’ (AAM) *Standards for Museum Exhibitions*, critiquing sessions at the AAM annual meetings, NAME newsletter discussions, other articles, and countless exhibition evaluations, primarily summative studies. In this article, which originated in another *Exhibitionist* article (Serrell 2001), we will discuss what distinguishes the Framework from other methods of reviewing exhibitions. For a more thorough version of this discussion, as well as a copy of the Framework, see the new book, *Judging Exhibitions: A Framework For Assessing Excellence* (Serrell 2006, available from Left Coast Press, www.lcoastpress.com).

The first and biggest difference between using the Framework and using other forms of review is that with the Framework there is usually no product (e.g., a report, article, award, or summary) to distribute or share. Evaluations result in reports; critiques and reviews are often published in museum journals, and the AAM

award is announced at the annual conference where the winning entry receives a plaque. With the Framework, the “product” is the process. The people who benefit from the Framework are the people who share the experience of using it to review an exhibition.

There are further differences and distinctions between the purpose, process and products of the Framework and other forms of review, as well as some similarities. Summative evaluation, exhibition critiques, reviews, the AAM Standards, and the lesser-known review process called critical appraisal, are briefly compared to the Framework on the Chart (Figure 1) and below.

## Summative Evaluations

Summative evaluations of exhibitions rely on systematically collected feedback from visitors. Standard practices of evaluation, such as interviews, surveys, and trackings, are well known and learnable (i.e., they are not personal or idiosyncratic). Summative evaluation is often (although certainly not always) goal related; that is, evaluation looks for evidence that the exhibition’s objectives were met and defines

**Figure 1.** Chart to compare different methods of reviewing museum exhibitions that are completed and open to the public.

Method	Conducted by	Question asked	Primary purpose	Product	Primary Audience
Summative Evaluation	Evaluators— in-house or consultants	Did it work?	Accountability to funders; measure of objectives achieved	Report	Institution, exhibit developers
Exhibition Critiques	Individuals	Did I like it?	Share opinions	Speech or article	Profession
Reviews	Individuals	What’s it about?	PR	Publication	Readers, visitors
AAM Standards	Members of AAM SPCs	How does it measure up to the standards?	Present annual award	Award	Profession, institution
Critical Appraisal	Visitor studies experts	Where are the problems?	Aid remedial fixes before summative evaluation	Report	Institution, exhibit developers
Excellent Judges Framework	Museum practitioners	Where and why do we agree or disagree?	Discussion for professional development	The process	Participants



“With the Framework, the ‘product’ is the process. The people who benefit from the Framework are the people who share the experience of using it to review an exhibition.”

success in those terms. The question exhibit evaluators ask is, “Did it work?” or “Was it effective?” Evaluation usually compares visitor feedback about the exhibition to the exhibit developer’s intentions and objectives. Harris Shettel says that the main basis for saying an exhibition is “good” is to find out what the exhibition was supposed to do and then to see whether it did (Shettel 1994).

Summative evaluations are carried out by trained evaluators, often consultants for hire, for museums that are obligated by a funding agency or operating on their own volition to find out what the impact of an exhibition was on their audiences.

The Framework is not a replacement for other forms of judging excellence or effectiveness that use direct forms of feedback from visitors. It’s not a substitute for doing visitor studies. The degree to which an Excellent Judge’s review agrees with or differs from a summative evaluation of the same exhibition is an outstanding research question at this time; early indications are that they converge.

### **Critiques**

Critiques are the opinions of informed professionals, given their training, experience, and personal biases. The critic asks, “Did I like it, and why or why not?” Critiques are not intended to be objective. Depending on the critic, his or her opinions may be informed by and compared with a broad range of knowledge of the field. Criticism is analysis and consists of value judgments measured against the “doctrinal allegiance” of the critic (Chambers 1999). The critic applies his or her own standards, the ones that exist in his or her mind. It’s up to the listener to judge the value of the critic’s opinion.

A critique of an exhibition is usually carried out by an individual, with or without permission or invitation by the museum being critiqued. The exhibition’s intent may or may not play a strong role in the critique, and the intent might be interpreted differently by the critic than by the hosting institution.

Probably the most well-known and public exhibition critiques were the AAM sessions at the annual meetings, from 1990 to 2000—the decade during which they were organized by Kathy McLean. The sessions were always well-attended, and the audio tapes of them were bestsellers after the meetings. One of the aspects that made them popular was the critics’ frankness in their less-than-positive impressions. Discussions following these sessions were often long and loud and led to some provoking publications which contrasted the issues of criticism, standards, and the AAM exhibition awards (Serrell 1993; Spillman 1993).

The Framework is similar to critiques in that the review process includes consideration of negative reflections and delineation of missed opportunities. It therefore has the potential to also be threatening in its judgments. The Framework, however, helps the assessors move to a broader range of considerations and a shared set of values.

### **Reviews**

Reviews vary widely. Depending on the author, reviews of exhibitions may sound more objective or subjective. The reviewer’s intent is often not clearly stated, and his or her qualifications may not include museum practice in visitor studies, exhibition development, or scholarship in the subject matter. The intentions of the exhibit developers are often a main focus. In a guide

(continued from page 57)

for writing reviews, Phyllis Rabineau includes the suggestion to phone the people most directly responsible for the exhibition and ask them questions about their agendas, intentions, and constraints (Rabineau 1994).

In a review of reviews, Paulette McManus points out that they typically contain excessive praise, ignore or lightly skim over exhibition faults, ignore accountability to claimed communication goals, and employ descriptive rather than analytical methods, and, therefore, fail to offer information that can be helpful for improving museum practices (McManus 1986).

In developing the Framework, we wanted to be clear about its purpose and who we were, to include the consideration of both positive and negative aspects, to base the criteria on practical research findings, and to assist museum professionals in doing a better job. While the Excellent Judges are not without individual bias, the Framework offers a more focused and structured alternative to critiques or reviews.

### **The AAM Standards for Museum Exhibitions and Indicators of Excellence**

In 1997 three standing professional committees (SPCs) of American Association of Museums (CARE, NAME, and CurCom, with help and input from other SPCs) developed standards to be used as guidelines for judging the entries in the annual exhibition competition. Museums who competed for the award submitted application forms and other materials (e.g., label text, photographs of displays, walkthrough videos) to three judges, each a representative of one committee, who discussed their choices and picked the winner(s) jointly at a meeting. When using the AAM guidelines to assess an exhibition, the judges ask, "Did it achieve or

exceed the Standards?" (For a copy of the AAM Standards, go to the NAME Web site, [www.n-a-m-e.org](http://www.n-a-m-e.org).)

The AAM Standards include many important exhibit concerns that are not obvious or available during a normal, unguided, public experience of going to the exhibition. These issues include the exhibition's budget, conservation and mounting techniques, security measures, special educational programming, or the process of the exhibition's creation. The perspective of the AAM's criteria is mainly on presentation and intent. The standards are listed in six categories (Audience awareness, Content, Collections, Interpretation and Communication, Design and Production, and Ergonomics), each of which is followed by a question. Following the question, there are specific ways the category might be expressed in an exhibition that would constitute effectiveness for that category.

When the Chicago Excellent Judges<sup>1</sup> first reviewed the AAM's Standards, we concluded that we did not have the expertise to assess many of these issues. Most of us would simply not be able to tell if an exhibition showed evidence for achieving standards about security, climate control requirements, mounting techniques, and whether or not the content was current, significant, or accurate. Nor could we tell how the decisions were made about the content and intended audience, production techniques, marketing strategies, or mission statements. All that would require obtaining lots of insider information from the museum that developed the exhibition. These are all important and interesting factors to think about when judging an exhibition, but many of them did not deal with the essence of experience and clarity we were looking for.



“We wanted to create a set of standards that could be applied solely by looking at and experiencing the exhibition without the need for behind-the-scenes details.”

We wanted to create a set of standards that could be applied solely by looking at and experiencing the exhibition without the need for behind-the-scenes details. We cut out all categories, requirements, and specification that were not visible or knowable from a visitor's viewpoint. We brought in all of the ways that an exhibition is organized and presents itself to the user.

Nevertheless, among the AAM's Standards and the Framework, there are some strong parallel and equivalent concerns. (Details of this are published in the book, *Judging Exhibitions: A Framework for Assessing Excellence*, Serrell 2006.)

The AAM's Standards separate “Design” from “Interpretation.” The Framework does not. Instead, the Framework expects that the exhibition design supports the interpretation to effectively communicate the ideas. We concur with Leinhardt and Knutson's conclusion, “When the designed environment functions in support of the message of the exhibition as intended, it seamlessly blends into the experience” (Leinhardt and Knutson 2004).

One of the biggest ways the process of AAM's judging differs from that of the Framework is that the Excellent Judges visit the actual exhibition and experience it firsthand. The AAM judges look at photographs and video and read narratives and label copy. It is logistically and financially unfeasible to send the AAM judges around the country to visit all of the entries each year. Also, temporary shows are included in the yearly competition, and awards are given for exhibitions that have been de-installed or may come down a short time later.

The Framework is not used to give awards or to reach consensus about the best or the worst exhibitions. The Excellent Judges ask each other, “Where and why do we agree and disagree on our assessments?” Yet, after a group of the same Excellent Judges has conducted several discussions and rating exercises together, they will have some fairly strong ideas and evidence about which of those exhibitions showed more excellent aspects than others.

### Critical Appraisal

Critical appraisal is a review done by someone well-versed in visitor studies literature. Its main purpose is to identify obvious and potential problems in a new exhibition before conducting a summative evaluation (Bitgood and Benefield, 1995). While there are several differences between critical appraisal and the Framework as to the purpose, the product, and the audience, the visitor studies expert who conducts a critical appraisal would see many similarities between the Framework's criteria and the appraiser's concerns for improving the visitor experience. Visitor studies inform both processes.

Critical appraisal looks for exhibit weaknesses that can be easily fixed before collecting data on visitors' responses to the exhibition. “The client has at the completion of the study an itemized list of those things in the exhibition that should be corrected to improve visitor response...” (Shertel 1994). For example, recommendations regarding problems with orientation, lighting levels, label placement, wording in texts, or sight lines might be the outcome of a critical appraisal. Critical appraisal can also be used to review older exhibitions before undertaking major renovations. Questions asked by an appraiser are usually related to achieving the

(continued from page 59)

#### References Cited:

- Birgood, S. and A. Benefield. (1995). "Critical appraisal of the Heart Exhibition at the Franklin Institute of Science." *Visitor Behavior* 10(4): 14-16.
- Chambers, Marlene. (1999). "Forum: Critiquing Exhibition Criticism." *Museum News*, September/October: 31-37, 65.
- Leinhardt, Gaea, and Karen Knutson. (2004). *Listening in on Museum Conversations*. Walnut Creek: AltaMira Press.
- McManus, Paulette. (1986). "Reviewing the Reviewers: Towards a Critical Language for Didactic Science Exhibitions." *The International Journal of Museum Management and Curatorship* 5: 213-226.
- Rabineau, Phyllis. (1994). "An Editor's Guide to Writing Criticism." *Exhibitionist* 13(1): 31-32.
- Serrell, Beverly. (1993). "Awards for Exhibits—What Are They Based On?" *Curator* 36(1): 6-7.
- \_\_\_\_\_. (2001). "A tool for judging excellence in museum exhibitions." *Exhibitionist* 20(1): 16-20.
- \_\_\_\_\_. (2006). *Judging Exhibitions: A Framework for Assessing Excellence*. Walnut Creek, CA: LeftCoast Press.
- Shettel, Harris. (1994). "What Can We Learn from 'N=1'?" *Exhibitionist* 13(1): 12-13.
- Spillman, Jane. (1993). "An answer to 'What are the Curators Committee Awards For?'" *Curator* 36(2): 86-88.

exhibit's teaching objectives, and findings from research and evaluation are used to predict impact.

Harris Shettel and Steven Birgood have taught workshops on critical appraisal at the Visitor Studies Association's conferences for many years, but there are no published references on how to conduct one. To obtain their checklist you have to take the workshop or borrow it from someone who has.

The critical appraisal checklist includes twenty-six questions about orientation, circulation, label text, and factors within and between exhibits. Certainly all of these factors are important to creating clear, accessible, understandable exhibits. Many of the items on the checklist address concerns of concept, message, comprehensibility, and label length, legibility, and content.

Overall, critical appraisal looks for problems and ways to solve them. If this is the kind of exhibit study that a client needs, and it needs to be done quickly, it's a good choice. Alternatively, the Framework takes a more positive approach, looking for indicators of excellence and rates them according to some general criteria. Missed opportunities would certainly get noted as well at the level of specificity that the critical appraisal checklist provides. "Perhaps the most difficult aspect of a critical appraisal is minimizing personal bias and restricting the appraisal to empirical findings," say Birgood and Benefield, and those challenges exist for the Framework, too.

The Framework's aspects cover the same issues and concerns as the critical appraisal checklist and many others as well. Contracting with a group of Excellent Judges could provide an interesting expansion on the idea of a critical

appraisal—with several added benefits: There is more than one person's opinion; the Framework provides a more comprehensive view of the visitor experience; and the protocol can embrace stakeholders in the process.

A final note about comparisons among critical appraisal, the AAM Standards, and the Framework. We strove to be guiding with our four Criteria and twenty-three Aspects, but not prescriptive. The Framework identifies the important aspects of an excellent exhibition, but it does not tell you how to achieve them; that is up to the individual exhibition makers. Critical appraisal is more prescriptive with its twenty-six item checklist and is heavily focused on text/label issues. The AAM Standards are less prescriptive, but still are fairly directive in the twenty-nine ways to achieve or demonstrate their six categories. For example, compare all three with how each deals with orientation:

- Critical Appraisal: Is there a label telling what the exhibition is all about?
- AAM Standards: Orientation at the start and throughout the exhibition provides visitors with a conceptual, physical, and affective overview of the exhibition.
- Framework: Physical and conceptual orientation devices were present.

An exhibition developer's time would be well spent becoming familiar with all of these methods of assessing exhibitions. The Framework, we think, is the most accessible for all types of museum practitioners. ☀

<sup>1</sup> The Chicago team at that time consisted of Clifford Abrams, Roy Alexander, Nancy Goodman, Dianne Hanau-Strain, Virginia Heidenreich-Barber, Deborah Perry, Therese Quinn, Beverly Serrell, Barbara Becker, Tsvia Cohen, Eugene Dillenburg, Mark Hayward, Hannah Jennings, and Kris Nesbitt.



# Should Exhibit Designers Professionalize?

REPRINT

by David James Whitemyer

Tucked away in the poorly lit back closet of our office, near a box of spray adhesives and adjacent to the decommissioned Waxmaster, is a dusty file drawer labeled "Resumés." I recently took the opportunity to shuffle through the folder of old job applicants, curious about the varying experience and skill levels of my colleagues and competitors—the ones who never made it into this small exhibit design firm.

Where did these job seekers come from? What did they have to offer? And what similarities did I have with them? In all honesty, I was just looking for an ego boost. What was it in my resumé that made me a better candidate?

Paging through the pile of resumés—altering in shades of off-white and stock weights, all with matching envelopes—I was humbly reminded of the impressive diversity of backgrounds from which we, as exhibit professionals, come.

The question surfaces often in many fields, including exhibit design: Should there be professional criteria to which all exhibit designers should adhere before they be allowed to publicly practice in the exhibition business? In the introduction for her book *Planning for People in Museum Exhibitions*, Kathleen McLean states, "the field lacks clear professional standards and offers few comprehensive training programs."

The argument on behalf of professional standards usually arises from one of two scenarios. It comes up when we witness an exhibition that is unsuccessful, unattractive, or unsafe. How easy it is for us to raise our noses and scoff at the museum display created by an untrained "designer." Or worse, the standard is taken up when we see beautiful and successful

exhibitions built from the minds of architects, interior designers, or industrial designers, and we feel justifiably threatened.

In the United States, it is against the law to advertise yourself as a medical doctor or lawyer without the appropriate registration. It is improper to place the word Architect after your name without a state license. Yet, looking through our stack of resumés, I frequently spotted Exhibit Designer written as a title, regardless of the person's schooling or past experience. In one case, the applicant was still in college. And in another, a museum employee had helped to develop a small exhibition and had done some writing for a related publication. Both called themselves Exhibit Designers.

## A Matter of Degree?

There are presently only a scattering of universities that offer any type of museum exhibit design or planning program. An increasing number of design schools are beginning to offer one or two exhibition planning courses. As more and more colleges begin to add exhibit-related courses to their curriculum, such courses may become expected precursors to entering the field.

This may be a disappointment to, for instance, the young man currently enrolled in a political science program who finds, after graduating, that he has a knack for capturing the minds of young children with his visual displays of scientific principles. Or to the talented woman who after graduating high school went to work building cabinets for a fabricator but discovers an ability to envision inviting and educational three-dimensional spaces. Should people be excluded in practicing exhibit design simply because they lack the educational requirements of our related associations and organizations?

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**Exhibitionist**, Vol. 16, No. 1, Spring 1997 with permission from the author.

"I frequently spotted Exhibit Designer written as a title, regardless of the person's schooling or past experience. In one case, the applicant was still in college."

"A person with a degree in forestry has a very different thought process from one who was educated in exhibit design or museum studies and took forestry courses as a side interest."

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"A group of workers with identical training and similar educational backgrounds will create stale, unimaginative spaces."

I enjoy a wide assortment of personalities and experiences of my co-workers. In the exhibit design field, you are always learning something new, about the history of prairie dogs, the art of Gauguin, the workings of fiber optics, or whatever the topic of the day, it helps to have the support and input of so many different minds.

#### **The Argument for Multidisciplinarity**

One of our copywriters was educated in forestry. One of our exhibit developers has a degree in landscape architecture. It is the variety of personal contexts that adds so much to the success of each project. A person with a degree in forestry has a very different thought process from one who was educated in exhibit design or museum studies and took forestry courses as a side interest. When an exhibition is required to communicate something as specific as, say, the evolution of Euclidean geometry or the 19th-century slaughter of bison, it is vital to have many types of thinkers readily available in the office. And it is a closed mind that believes only an appropriately trained exhibit designer can, in a three-dimensional fashion, present this information successfully.

My educational background is in architecture. In school, I was somewhat turned off by the rigid professionalism and exclusion that the field of building design offered. It created a large clique of automatons that were only able to think, write, and converse in terms of architecture. In exhibit design, I find just the opposite. Every day is a gathering basket of new information from differently trained minds. And that is what is so appealing.

Multidisciplinarity is an essential aspect of successful exhibit design offices. A group of workers with identical training and similar

educational backgrounds will create stale, unimaginative spaces. An ideal preparation for future designers cannot be defined by a grouping of college courses. The cultivation of well-learned exhibit specialists cannot be achieved by the requisites drawn out in a syllabus. Many voices sharing different opinions is what creates successful design.

#### **Learning the Ropes**

In architecture, as in medicine and some other occupations, a certain type of apprenticeship is required before practice is allowed. The concept of apprenticeship was born from the medieval crafts guild, where vocational training was the only formal education a young person ever received.

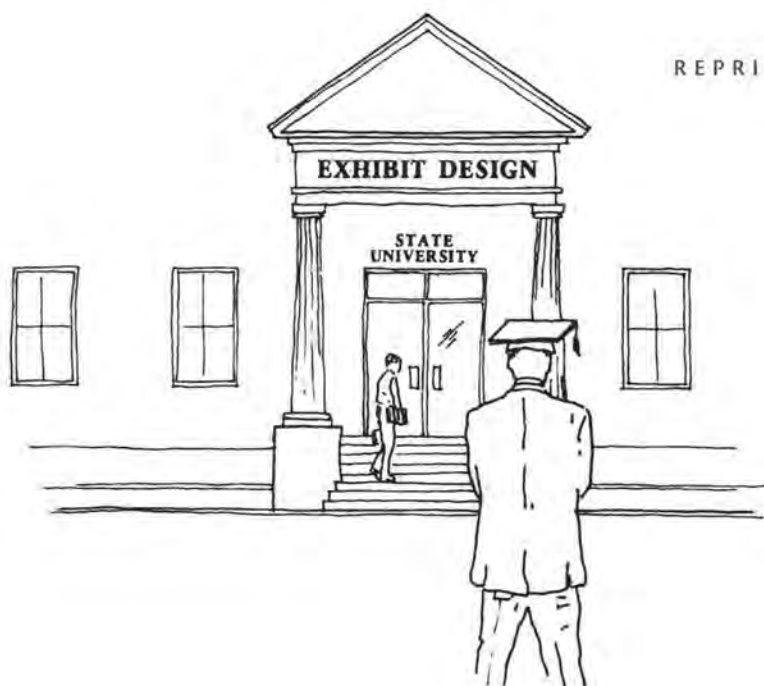
Our modern-day equivalent of medieval apprenticeship is internship, a rite of passage for many professionals that usually begins immediately following school. Our interns are usually energetic young graduates doing lots of work in various areas and, like their medieval predecessors, receiving little or no pay.

The architecture profession has created the IDP (Intern-Architect Development Program), which specifies fourteen different training areas to which the entry-level architect must be exposed before becoming eligible to take the registration exam.

There is no comparable process to the IDP for exhibit development and museum space-planning. When applying for a job, an entry-level exhibit designer is usually expected to have certain skills that can, and will, be developed further, such as drawing, writing, three-dimensional thinking, and a basic knowledge of production. It is management's responsibility to determine—most often with



only trust and assumption to go on—that the person being hired is somewhat familiar with the tasks required of them. This does not always work. I have seen a few graphic designers become frustrated or even leave the job because their experience in print work left them unprepared for exhibition work. I have often found myself a bit frightened and embarrassed because of my unfamiliarity with certain building materials.



### The Importance of Dirt Under the Fingernails

The Bauhaus school of thought stressed the importance of getting dirt under your fingernails as key to learning about design. Students were encouraged to take up a trade, such as metal-working or plaster-forming, and learn how objects are constructed. Only then, it was believed, would they excel as designers. My experience suggests that students who spend their summers on construction sites seem to become better designers than the ones who spend it with pencil in hand. Perhaps a year or two spent in a fabrication house, mixing paints and cutting acrylic, should be suggested to young designers looking to enter the exhibition field.

### Which Course to Follow?

So, what should be considered proper training for an exhibit professional?

In an *Exhibitionist* interview ("On Being an Exhibit Designer", Spring 1996), Ralph Appelbaum answered a similar question by saying, "Read, travel—literature, human experiences. Really engage yourself in what the world is like."

Much more is needed in displaying ideas than just technical experience and good design skills. In a well-managed office, apprenticeship will

occur naturally. It is a good idea for a young designer to have a mentor, whether formally or informally. Managers and mentors should encourage the people under their wings to pursue other interests and other outlets for exhibit-related topics.

### The Tyrannies of Professionalism

The concept of professionalization evolved in the mid-19th century. The idea was to create career-related laws meant to designate the persons who should be considered adequately trained and credibly competent for the jobs they wished to pursue. This idea excluded others from working in the field. It also permitted groups of workers in the same vocation to achieve public recognition.

The first occupations to define professional standards were lawyers, physicians, and the clergy, followed quickly by architects, nurses, social workers, engineers, dentists, and more. In cases such as medicine and large scale building construction, where people's lives are put at risk, professional standards are necessary. Someone has to be responsible. Yet, in most cases I tend to agree with George Bernard Shaw, who wrote, "All professions are conspiracies against the laity." As early as the turn of the

(continued from page 63)

century, Shaw and others were doubting the fairness and necessity of professionalism.

It might be too early in the evolution of our chosen profession to worry about such “conspiracies,” but one can anticipate dangers. In *Rethinking the Museum*, Stephen Weil wrote, “the practitioners of the professions may themselves actually prescribe and monitor the preparatory training for the field, control the entry of new practitioners, and not only promulgate standards of achievement and conduct, but also enforce these standards by imposing sanctions upon those who violate them.”

The question keeps entering my mind; who will watch the watchman?

Even ignoring the threat and unfairness of reduced competition, enforceable standards for exhibit design do not seem possible. Ours is a business that requires many schools of thought and types of minds. Again, as in internship, the desired “standards” must rest with those doing the hiring and firing.

#### **Tyranny vs. Anarchy?**

Without professionalization and without a well-defined criterion to which we should aspire, how do we control the field and separate the exhibit designers from the Exhibit Designers? Or is a separation even necessary? Are the untrained designers making us look bad? Are the other non-exhibit-related designers stealing our projects?

Such questions pop up at work and at gatherings. In the constant bettering of ourselves in our careers, we sometimes feel incomplete and inadequate because we lack the certification so many other vocations require. We yell “no fair” when we think respect is due and none is given.

Kathleen McLean warns against taking such concerns too far, saying “The level of exhibit professionalism must be raised, but we must also take care not to “professionalize” ourselves into a specialized corner.”

#### **Taking Ownership**

At this stage in our field’s development, perhaps the most useful way to keep ourselves out of a specialized corner is to claim more personal responsibility in our careers, and to not sit back, waiting for rules to be implanted by our various associations. This requires us to expend energy educating ourselves, our prospective clients, and students interested in the business, about what an exhibit designer is and what “standards” we demand from our colleagues.

It is the outstanding diversity of our backgrounds, specialties, and interests that will restrain us from ever achieving any type of “professionalization.” But that is also the treasure that makes exhibition design so intriguing and so fun.

The control of our field and the respect we so much desire will be achieved not by good rules but, rather, by good work. ☀



# We Don't Need No Education: The Struggle for Museum Training

by Eugene Dillenburg

Reading Whitemyer's article, I was struck by two things. First, there's a basic contradiction. He favors professionalizing exhibit design, arguing it will raise both the profile of the field and the quality of work. But at the same time, he opposes standardizing the profession, fearing it will standardize the product and lead to a loss of vital creativity.

The second thing I noticed was how strongly I agreed with both of these positions. And in researching this response, I discovered that, in the field at large, the tension between these points of view remains unresolved.

The exhibit profession has changed greatly in the nine years since Whitemyer wrote about it. For one thing, museum studies—a nascent phenomenon he mentions in passing—has exploded. New programs are popping up like mushrooms, churning out more and more graduates. A second change—less obvious, perhaps, but far more profound—is that exhibit design no longer defines exhibit practice. Twenty-five years ago NAME was founded as “the designers group;” today, less than a third of our members are exhibit designers. We have more label writers and project managers. But the largest share of our members, over 70%, claim expertise in exhibit development—a position so new that the same issue of *Exhibitionist* that carried Whitemyer's piece also ran an article entitled “What is an ‘Exhibit Developer?’”—a question many were then asking.

So, in updating Whitemyer we must ask: has museum studies had a professionalizing effect on the diverse activities of modern exhibit practice? To answer that question, I spoke with a number of exhibit workers—department

chairs, commercial contractors, museum studies professors, and program graduates. While far from a comprehensive survey, our conversations did shed some light on the relationship between the exhibit profession and professional training.

## It's Just a Theory

One of the first things I discovered was a serious disconnect between the academy and the field in what each considers valuable. Over and over, academics stressed the importance of theory and context. For example, Jay Rounds, Professor of Museum Studies at the University of Missouri, St. Louis said, “A degree gives you a knowledge of the issues, of the history, and ways of thinking about problems.”

Many graduates agreed. Renee Mensing-Solick, an Exhibit Developer at The Science Museum of Minnesota, notes, “If you work your way up through the field you can get experience, but you won't have the theory behind it.”

This stands in sharp contrast to the attitude in the field. While not exactly dismissive of museum studies, the professionals I spoke to placed far greater value on experience. “Prior museum experience is the key” says Rachel Hellenga, Exhibits Director at the Chicago Children's Museum. “If it's a choice between a candidate with experience and one with a degree, you go with the experience.” Erich Zuern of Derse Museum Group in Milwaukee concurs: “A degree isn't a shortcut.”

There was sense among the professionals that museum studies programs offer all class work, but no real work. This perception is particularly strong in the small-museum community. Lisa Mason-Chaney, Assistant Director of the Hammond-Harwood House, Maryland, feels

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*The author would like to thank all the interviewees who contributed to this article.*

*For an overview of issues in museum professional training, see Joy Davis*

*“Responding to Change: Challenges for Professional Education in the Museum Sector” in Curator, vol. 48 no. 4, Oct. 2005.*

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“For one thing, museum studies... has exploded. New programs are popping up like mushrooms, churning out more and more graduates.”

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students need to learn that “all the beautiful concepts and theories that one is taught in graduate school do not necessarily hold true.” Another director complained of programs teaching “ivory tower ideals that can’t be afforded in a million years.”

Lynne Robertson, chair of AAM’s Committee on Museum Professional Training, disagreed. “Excellent programs give students lots of hands-on, real work.” Melissa Wraalstad, a 2002 graduate of the Cooperstown program and now an Exhibit Developer at the Morton Arboretum outside Chicago, insists, “everything we did was real work, not just class assignments.” They built exhibits, wrote curricula, and developed programs, all for real clients. “The projects allow you to apply theory to the real world.... We learned to tweak the ideal to fit the situation.”

Virtually all museum studies programs now require students to complete internships. Whitemyer would approve of this trend; he argued in favor of formalized apprenticeships as an entry into the field. Jim Sims, Principal of Threshold Studios in Virginia, draws an analogy to the theater, where “there are well-defined levels of apprentice actor, journeyman, and finally guild member,” based on experience and successful performance. Similar entry requirements for the exhibits field could help raise the bar for us all.

Cliff Abrams of Abrams Associates, Connecticut, worries that this may not be possible. “A graphic designer can cut their teeth on a hundred small jobs,” he notes. “An exhibit designer simply doesn’t have a lot of opportunities to hone their craft.” (As Janet Kamien said about developers, “few of us have the chance to do this often enough to get really good.”)

### Seeing the Big Picture

The debate over theory vs. experience reminds me of the story about the Prussian general. Told that experience is the best teacher, he shouted, “Nonsense! My mule has been through a dozen campaigns with me, and is as ignorant today as when she was foaled!”

The fact is, experience alone isn’t worth much unless you can learn from it. And this is where museum studies gives students an edge. Paul Martin, Vice President of Exhibits at The Science Museum of Minnesota, explains, “I believe in constructivism, the idea that you learn by building on what you already know. And museum studies graduates enter the field already knowing stuff.” “They learn critical thinking, and to think about the whole museum,” says Marjorie Schwarzer, Professor of Museum Studies at JFK University. Other academics agree. “Students see the bigger picture,” according to Polly McKenna-Cress, Chair of the Museum Studies Department at the University of the Arts, Philadelphia. “They understand their work at a different level, and see how it fits in to the museum as a whole.” This institutional perspective helps them move up in the field.

The students echo these sentiments. “I find I can relate to other departments,” says Mensing-Solick, a recent grad of the Philadelphia program. Wraalstad notes “I gained perspective. Chatting with colleagues at conferences, I realize the program gave me a broader knowledge base.” Rounds related a quote from a graduate, who told him “At the time, I wondered why I had to study all that crap. Now I see the relationship to the work, and it gives me a leg up.”



"The resistance to museum studies no doubt comes in part from the fact that current professionals have had successful careers without any high-falutin' degrees."

"Students, unlike busy professionals, have time to read the literature, and to think about the big ideas," says Kris Morrissey, Director of the Museum Studies program at Michigan State University (where I teach part-time). "If exhibition is to be viewed as a professional field, then practitioners need to know history and theory. Too much professional discourse is simply 'my opinion,' and not based on anything."

#### **Leader of Tomorrow**

This theoretical grounding seems to give museum studies students, though few in number, an outsize impact on the field. As Sims notes, "a graduate program is about creating leaders to change and move the field." McKenna-Cress, whose program is in its 16th year, finds that many of her early graduates are now serving as deputy directors and VPs. "The museum world is academic," she notes. "Having an advanced degree can make a difference."

And trained leadership is sorely needed. Joyce Cheney, a Missouri grad now working as an independent consultant, tells of state-run museums with inexperienced directors hired for political reasons. Robertson notes that museums of all stripes have brought in leaders from outside the field—as if running a large, complex institution requires no special knowledge or experience.

(At a symposium on best practices in exhibits a couple years back, I proposed we create a book for museum directors, explaining how exhibition works, how our practice supports mission. The directors in attendance dismissed the idea: they wouldn't read it. The men and women running museums couldn't be bothered to learn about the single, defining feature of their institutions.)

Perhaps the growth of museum studies will help Boards recognize there is an accumulated body of knowledge in our field—one prospective Directors need to know. And perhaps the growing number of museum studies graduates will mature into a new generation of knowledgeable, capable leaders.

However, their impact may be limited by other factors. Tim Murray, Director of Exhibits at the San Diego Natural History Museum, notes that "degreed students are more in demand, and command a higher price." While this is good for them—and may be good for the field at large—it does price academically-trained workers out of some markets. Many small museums complained they couldn't afford them. As one anonymously lamented, "I don't know if anyone with a museum studies degree would work for under \$20K a year."

This is unfortunate, as a museum studies background is particularly valuable in the small museum setting, where staff wear every imaginable hat. Lin Nelson-Mayson, Director of The Goldstein Museum of Design, St. Paul, notes that students "develop an awareness of resources available...to answer questions, provide expertise and make connections," all valuable assets at a small institution. "We learned the whole museum, from administration on down," adds Wraalstad.

#### **My Lack of Education Hasn't Hurt Me None...**

The resistance to museum studies no doubt comes in part from the fact that current professionals have had successful careers without any high-falutin' degrees. Indeed, despite our commitment to informal learning, it sometimes seems that our field is downright hostile to the idea of professional education.

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Whitemyer stressed the need for self-education. Robertson agrees, noting there is “an incredible need” for continuing professional education. “The field is changing so fast. Professionals need to think strategically—both about their own needs, and the future needs of the field.”

Many opportunities for professional training exist: workshops, conferences, symposiums and retreats, in addition to formal classes. But relatively few professionals take advantage of these. Cash-strapped institutions cut travel and training budgets; under-compensated employees can't afford to pay their own way.

The exhibits profession is at a particular disadvantage. Exhibits are permanent; staffing is not. Many museums only hire designers, developers, project managers, etc. when renovating a gallery. Once the exhibit opens, the staff goes away. The museum has no incentive to invest in an employee who won't be around in a year or two. And once that employee “graduates” to freelance or commercial work, bottom-line pressures put a squeeze on funds for training.

But it's more than economics; it's attitude, too. I have often seen regional and even national conferences come to town—in one case, literally across the street from my institution—and many of my colleagues didn't bother to attend. I can't understand why. As Robertson says, “I always come home from a conference with a bulging suitcase and a million ideas.” But we hear the same old excuses: I don't have time. I can't afford it. I won't learn anything. Until this attitude changes, and exhibit workers become active, engaged learners, “professionalism” will remain an elusive dream.

And this is having a negative effect on the field. Schwarzer says her students find “the best practices they learn are not practiced on the job. Good exhibit theory is often ignored out in the field.” Graduates tell stories of basic standards not being followed—long labels in tiny type, pinch points at gallery exits—or suggestions being ignored. One asked a curator at a major museum for the Main Message of a planned exhibit. After first asking “What's a main message?,” the curator derisively snorted “That's irrelevant! We don't need one of those!”

Karen Pollard, another UArts grad now working in Minnesota, says “People get set in their ways, tied to their favorite school of thought. They need to break out, and expose themselves to multiple approaches.” As Hellenga notes, “the field as a whole should be learning more from the body of written knowledge. Staffs become isolated and parochial, and we risk reinventing the wheel.”

Clearly, there is much work to be done. Department managers need to promote ongoing education. Those coming from a museum studies background are more likely to understand the benefit of a well-trained staff.

### **Professionalism, Yeah or Nay?**

So, where does this leave us? The type of professionalization Whitemyer described is nowhere on the horizon, largely because there is no—and can be no—enforcing body. While government has a legitimate role in safeguarding its citizenry, and thus regulates doctors and architects, it has no such interest in regulating exhibits. Whether you see them as aesthetic experiences, didactic discourses, or something in between, exhibits are communication, protected by the First Amendment. If an



uncredentialed operator wants to design a museum on creationism, conspiracy, or Jurassic technology, nobody can stop them.

And that, I would argue, is a good thing. The great strength of our profession is its tremendous diversity. As Whitemyer notes, we come from a variety of backgrounds. A good exhibit team features many types of thinkers and many different voices.

For example, I have a background in advertising. I work with exhibits people who have degrees in history, medicine, theater, radio, poetry, etc. This broad spectrum of knowledge informs our work in many wonderful ways. There is a concern that museum studies, or any kind of standard requirements, will make us all think the same, and lead to “cookie-cutter” exhibits.

Zuern agrees. “The exhibits field is a crazy quilt of backgrounds, a rich compost of different points of view. If we all come through the same mill, will there be fewer good design solutions?” This cross-fertilization is important. Erich has heard me describe label writing in terms of ad copy—a perspective not likely to arise in a classroom.

Schwarzer agrees that diversity is crucial to the field, but turns the issue on its head: “Suppose you had an exhibit team made up of folks from advertising, theater, etc., but there was NO museum grounding. Isn’t that team also lacking something essential?”

Like the theory vs. experience debate, this too seems to be a false dichotomy. Museum studies programs are themselves diverse. At Michigan State, Morrissey notes she currently has students from twenty-six different undergrad majors; other chairs report similar variety.

Rounds actively recruits students from diverse backgrounds, and finds he gets a lot of adult students making career changes. McKenna-Cress also purposefully chooses students from different backgrounds. “Museums are too diverse for there to be a single approach,” she says. “We don’t want cookie-cutter graduates.” (Pollard jokes, “We will never lose the diversity, because only weird people are attracted to this field.”)

There is also diversity in the programs themselves. “All the programs are very different,” says Wraalstad, “and not all programs are created equal.” They may focus on exhibits, or education, museum management, or collections care. Some have a more theoretical bent; others are more practical. And Robertson cautions, “programs are not monolithic...some are good and some are not. It behooves students—and employers—to look at the content and quality of a program.”

Most museum studies programs do not grant degrees, but rather are certificate programs (what people of a certain age would call “a minor”). For example, Sims notes that the Museum Studies program at George Washington University, where he taught for fifteen years, “requires students to pursue a traditional academic discipline” such as art or anthropology, “while working with emerging theory and current practice in museums. This gives them one foot in each world.” This model—which again promotes the diversity of people entering the field—is extremely common.

Fresh perspectives are vital, but so too is common understanding. At the 2005 AAM conference, an attendee rhapsodized about bringing outsiders into the exhibit process. This prompted Beverly Serrell to respond, “we have an awful lot of knowledge about what goes

“The great strength of our profession is its tremendous diversity.”

## "So, what does the future hold for museum studies?"

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into developing exhibits.... When we bring in new people who aren't familiar with that body of knowledge, it's important to get them up to speed."

Hellenga agrees. "For all the diverse talent we have, we still need a basic knowledge of what works. It's so discouraging to see brand new exhibits make the same old mistakes. When the basics become routine, we are free to focus creative energy on the more interesting stuff."

### **The Future is Now**

So, what does the future hold for museum studies? It's an important question. As Morrissey says, "we're training workers for the museum of tomorrow." It can be quite a challenge. As Rounds asks, "How do you train people to enter a field that is changing rapidly?" (An advisor told him, "don't provide technical training in obsolescence...we already have enough curators who just want to sit in the basement with the collections and never talk to anyone.") All of the programs collect feedback from the field—from the working professionals teaching courses, from internships, alums, and colleagues. New trends and emerging needs are integrated into the programs, often on an annual basis. "We try to stay ahead of the curve," says McKenna-Cress.

According to Schwarzer, one important trend in museum studies has been a greater emphasis on the visitor. Robertson of COMPT agrees. "There is a focus today on the psycho-social aspects of exhibits...an emphasis on evaluation and how people interact with the experience." And museum studies is playing a major role in consolidating and disseminating that knowledge. "Thirty years ago, the field went

through a major shift and began to focus on the visitor," says Martin. "Those of us who lived through it figured it out as we went. Now that the shift has happened, students are learning it in school. They enter the field already hip to what's going on."

Hellenga notes another trend in the field which is trickling down to museum studies. "Processes are becoming formalized," she says. "Process leads to accountability and clear division of labor. And those can be taught." Rounds, however, worries about standardizing methods and procedures, the emphasis on standards of competence rather than of excellence or creativity. He has written that fields under threat, such as exhibition in fiscally conservative times, retreat to the tried-and-true. "Does the emphasis on process and best practice," he asks, "actually make it harder for the museum worker to see the visitor point of view?"

An emerging trend, noted by several people, is the need for solid financial training. "Museums are businesses," says Martin. "They can and have failed." Small museums and large all wanted students to understand budgets and business—the one area several graduates admitted was a weak point in their programs.

Including these ideas into museum studies will have a dramatic impact on the exhibits field. "Museum studies are not going to go away," says Wraalstad. It may take years, but the slowly rising tide of educated exhibit workers will lift all our boats to new levels, if not of professionalization, then certainly of professionalism. ☀



# A Project Manager is...

by Jennifer Bine

Museum exhibitions can be viewed as works of art created by committee, under a schedule and, somehow, within budget. At the Smithsonian, a curator typically chooses the objects and guides content, a designer imagines the perfect setting, and fabricators use their unique skills to make it all a reality. But someone within the exhibition team needs to be responsible for the un-glamorous job of minding the budget and schedule, and coordinating the efforts of all the contributors. Various museum staff members have carried out this responsibility, but within the past ten years, designated project managers have begun to appear on some museum staff rosters and their presence has changed the structure and operations of museum exhibition teams within their institutions.

The first exhibition project managers to appear on the scene resided at the Field Museum of Natural History in Chicago. David Foster, recently named the Field's Project Management Director for Exhibitions, reports that he was the museum's first project administrator (a title later changed project manager) in the spring of 1998 when the Field's new president, John McCarter, directed the museum to expand its temporary exhibitions program from one to as many as six new shows each year. With most exhibitions planned, designed, and constructed in-house, it was clear that coordination within and between projects would be one of the organization's greatest challenges. Within eight months, Foster had four additional colleagues sharing this responsibility and the role of the project manager expanded to synchronizing the work of all departments associated with the development of an exhibition.

Before the era of project managers at the Smithsonian's National Museum of American History (NMAH), Project Manager Nanci Edwards recalls that most exhibition projects were directed and managed from the museum's curatorial departments. In some instances, this led other department representatives to feel that curatorial concerns routinely took precedence over other aspects of the exhibition development process. A strategic planning process and subsequent reorganization led to the creation of a neutral project manager under the administrative arm of the museum in 2000. While it was met with some initial skepticism, Edwards is pleased that curators and others who generate exhibition ideas now view project managers as assets and ask for them to be assigned early in a project's development. While NMAH project managers are not decision-makers within the organization, Edwards feels that their presence has helped to balance the needs of all of the players, while simultaneously helping the institution respond more effectively to last-minute needs and shifting priorities.

So what does a project manager do? This specialized position is found most often in large institutions with busy exhibition schedules. With input from her content, design, and fabrication team, Edwards drafts an exhibition charter that includes the scope of the project, milestones, and a budget. This document serves as the project's touchstone and Edwards is responsible for making sure that it is kept in the forefront of all discussions. Expenditure and oversight of exhibition funds are the responsibility of the project manager, but Edwards notes that her office has systems in place to avoid bottlenecks.

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*The author would like to thank all the interviewees who contributed to this article.*

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"But someone within the exhibition team needs to be responsible for the un-glamorous job of minding the budget and schedule, and coordinating the efforts of all the contributors."

“... they are more like the hub of a many-spoked wheel, relying on communication, diplomacy, and team-building skills to accomplish their goals.”

*(continued from page 71)*

While administrative work would be a project manager's primary responsibility, it is their role as facilitator and information hub that can determine a project's success. Unlike the corporate world, project managers in museum settings do not supervise the members of their project teams. Instead, they are more like the hub of a many-spoked wheel, relying on communication, diplomacy, and team-building skills to accomplish their goals. The make-up of each project team is different, and a project manager needs to be able to adjust his or her working style to suit the group that has assembled. Edwards notes that academic curators and creative artists often don't see eye to eye and project managers are expected to assist in finding a dynamic middle ground between the two.

As one would expect, both Foster and Edwards report that encouraging and supporting creativity within time and budget constraints is often a major challenge of their jobs, as is coordinating the needs of competing projects. Members of Foster's staff frequently manage four or five projects at once while the museum as a whole may be planning for over twenty exhibitions. Out of necessity, a standardized schedule of project "milestones" was developed which helps Foster's staff and all of the museum departments organize their workload more effectively. Project tracking software is used to visually organize work and make clear the impact of delays in any aspect of the project.

Project managers have a longer history in the corporate world. I spoke with Ken Eng who oversees a team that collects and manages data under a contract with the National Weather

Service. He too is responsible making sure that specific goals are met, on time and within budget. According to Eng, business schools often emphasize that a manager is a manager: one doesn't need to have a deep understanding of the technical details of a given project to manage a team's work. Experience has lead Eng to disagree with this viewpoint. His knowledge of his employees' work helps him respond to their needs, establish viable schedules, and communicate more clearly with his client.

Likewise, many of the managers at the Field Museum and National Museum of American History came to their positions from another field, be it exhibition fabrication, collections, or registration. Both Edwards and Foster felt that this varied experience helps project managers communicate more effectively with their teams and often guides their assignment to new projects. An exhibition expected to feature a particularly elaborate design might benefit from a manager with fabrication experience. One that will rely heavily on external loans might benefit from a manager that came from the registrarial ranks.

Specialized project managers will likely only be found in larger institutions for the foreseeable future. However, many institutions, large and small, are committed to creating more and ever-more complex exhibitions in the future. To accomplish this goal while remaining both sane and solvent, it may be useful to assign one individual on each exhibition team the responsibility for strategic oversight of work within and between projects. ☀



# An Exhibit Developer is...

by Penny Jennings

Sharyn Horowitz and Katherine Krile's 1997 *Exhibitionist* article "What is an 'Exhibit Developer'?" was a turning point for me. Just out of graduate school, armed with a background teaching school field trips, wrangling public programs, answering phones and other museum odd jobs, I was at loose ends trying to plot my career trajectory. I was tagging along with an exhibit team, helping out with focus groups and project management, learning my way around the process and trying to figure out what I was good at. When I saw the sidebar listing of the various roles of the Exhibit Developer: visionary, curator, researcher, secretary, thinker, warrior, whiner, etc. I squealed with recognition, as did several others on the team. "This is it! Exactly!" we exclaimed. We wear many hats; we seek out the balance, stroke egos and stoke fires. We are not too shy to ask academics to slow down and explain their ideas in more simple terms, nor too proud to seek expert advice from fourth-graders. I still smile at that list when I see it. It has been photocopied, cut out, and taped to the office wall by exhibits staff and consultants all over the country.

Ten years later, I have been asked to reflect on how our profession has changed since then, if at all. My first reaction is that while we may be more widely recognized, and have access to more refined tools and methods, the necessary skills and attitudes remain the same. I asked a handful of colleagues to weigh in.

## What Qualities and Skills are Most Important to Doing Your Job Well?

At the top of most developers' lists are flexibility and organization. You must be a good listener, able to hear what people are trying

to communicate beyond what they are able to express. An exhibit developer has to synthesize and respond to a variety of opinions, building consensus without losing vision. Jenny-Sayre Ramberg adds, "You may be surprised that I put organized and good humored first—but I think that without those all the creativity and passion in the world can crash and burn in a team process. And of course—you could be organized and good humored and create a terrible exhibit." We are always looking for ways to communicate with visitors—we borrow techniques from science, art, history and children's museums, school classrooms and playgrounds, TV, film, advertising, theme parks and other entertainments.

## Which Tools or Techniques are Most Useful to You?

On the pragmatic side, we listed project management skills including database management, on-line research tools like Google and Wikipedia, and negotiation skills (most often put to use for vigilant audience advocacy). On the creative side, we are always trying to improve our brainstorming, problem-solving and team-building techniques, and promote creative collaboration between team members, and with clients and communities.

## Which Books and Articles Do You Keep Close at Hand for Reference?

- Kathy McLean, *Planning for People in Museum Exhibitions* (1993) and *Are We There Yet? Conversations about Best Practices in Science Exhibition Development* (2004)
- Jeff Kennedy, *User Friendly: Hands-On Exhibits That Work* (1990)
- Sam Taylor, *Try It! Improving Exhibits Through Formative Evaluation* (1992)

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*The author would like to thank everyone who contributed their thoughts to the article, and especially thank Katherine Krile and Sharyn Horowitz for their inspiration and permission to reprint portions of their original text.*

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"We wear many hats; we seek out the balance, stroke egos and stoke fires. We are not too shy to ask academics to slow down and explain their ideas in more simple terms, nor too proud to seek expert advice from fourth-graders."

"An exhibit developer has to synthesize and respond to a variety of opinions, building consensus without losing vision."

(continued from page 73)

- The Issues Laboratory Collaborative, *Communicating Controversy: Science Museums and Issues Education* (1995)
- Minda Borun, et. al., *Family Learning in Museums: The PISEC Perspective* (1998)
- John Falk and Lynn Dierking, *The Museum Experience* (1992)
- Beverly Serrell, *Exhibit Labels* (1996) and *What Research Says About Learning in Science Museums* (1990)
- *Chicago Manual Of Style*

#### **How Do You Think This Field (Exhibit Development) Has Changed in the Last Ten Years?**

We agree that the job has become more professionalized. In museums, Exhibit Developer is a more frequent job title, and a more acknowledged role on an exhibit team. At design and consulting firms, to whom more and more development work is being outsourced, it is getting a lot more respect. Exhibit Developers are now expected to do something beyond research and clerical support—teams turn to us for ideas and expertise. In the past people came to the role from documentary film, writing, teaching or arts backgrounds, but now more museum studies programs are including exhibit development in their offerings. Gretchen Jennings observes, "In science museums I think exhibit developers are working increasingly with professional evaluators as well as doing their own 'quick and dirty' prototyping; in history museums I think the biggest development is that exhibit developers are beginning to appear on exhibition teams in addition to curators, educators, and designers." Cheryl Downes McCoy adds, "Information design and interaction design are now (hopefully) recognized as important components in the development of exhibits."

While there is still a disconnect between the science museum model of Exhibit Developer as tinkerer and builder, and the collections-based museums' use of Developers to organize and translate curator-researched topics, there seems to be a better understanding that both sets of skills are important and that both are ultimately concerned with putting the visitor experience at the forefront. We hear more acknowledgement of different learning styles and modalities, and of the importance of play to the museum learning experience. We have to fight less often for physical accessibility, but are still weighing the "chicken and egg" balance between wanting content to drive design, and understanding that design issues are paramount to attracting and holding visitors' attention. And since many Exhibit Developers would prefer to follow their passion than climb the institutional career ladder, there are more Exhibit Developers working as independent consultants.

#### **What New Innovations Do You See on the Horizon that Might Impact the Way You Do Your Work?**

- Tools for visualizing ideas. Already we can search for images on the web, copy and paste into an InDesign, Keynote or Quark document, add text, color, even QuickTime movies and 3D renderings from Vectorworks or SketchUp, and show the team what we are thinking about instead of just telling them. As visualization tools become more available and easier to use, exhibit creation will become more like exhibit experience.
- Real-time networked exhibits that access live data and update automatically. The potential has not even begun to be exploited.
- Non-invasive brain research (i.e., fMRI studies) will give us new ideas about how learners collect and process information.

Still, some of the tested techniques still work the best—brainstorm, write ideas on index cards so you can shuffle them around, make sketches on cocktail napkins or whatever is at hand, craft clear communication goals in visitor language, and refer back to them throughout the process.

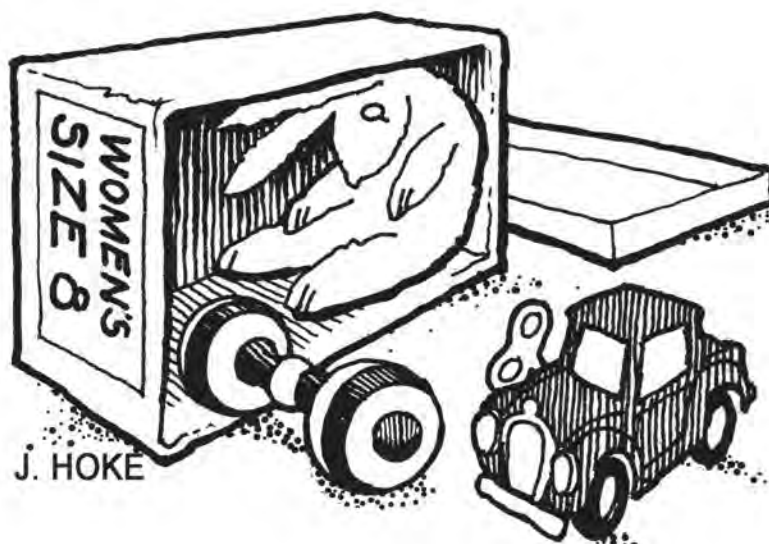
### What Do Exhibit Developers Do? Job

#### Descriptions These Days are Likely to Include:

- Research content
- Coordinate advisors and advisory groups
- Manage schedules and budgets (although sometimes your team is also blessed with a project manager)
- Facilitate team meetings
- Define content organization, communication goals and messages
- Design interactive devices
- Write multimedia treatments and scripts
- Research artifacts and images, and negotiate loans or rights and permissions
- Produce reports and client or funder presentations
- Write label copy

Some days it feels like bee-keeping; as curators, designers, educators and evaluators discover or dream up content and design ideas and bring them back to the hive, we give structure to their efforts, organizing the material for further refinement, and skimming off the sweetest stuff to serve to visitors.

Regardless of refinements in our roles or process, in Jenny-Sayre Ramberg's words, "We will always have to answer the basic questions—Why are we doing this? Who are we doing it for? What are we trying to accomplish? What is it about? How much money do we have to spend? When does it open?" ☀



### What Do I Do?

If you're an exhibit developer, you might be all, some, or none of the following:

**Visionary:** Inspire the process.

**Curator:** Without the Ph.D. or the years of preparation, but with the pressure for accuracy.

**Researcher:** Compile background, interview experts.

**Secretary:** Listen to the Board, listen to the administration.

**Thinker:** Synthesize all of it to get the main message.

**Warrior:** Defend the main message.

**Whiner:** Complain when the main message is ignored.

**Translator:** Turn words into a three-dimensional, interactive, exciting exhibit.

**Teacher:** Educate the designers who are too busy to learn about the content they're exhibiting.

**Evaluator:** Speak with visitors.

**Advocate:** Speak up for visitors.

**Project Manager:** Make charts, write purchase orders, manage, make it happen.

**Therapist:** Make sure everyone feels a part of the process, that everyone's ego is stroked.

**Parent:** Prevent squabbling from bringing down the house.

**Laborer:** Actually build the thing.





# An Exhibit Designer is...

by James Sims

*James Sims is the principal of Threshold Studios. He may be contacted at mail@thresholdstudio.com.*

**"Exhibition design is inherently interdisciplinary."**

## EXPERTISE

### **What's Needed?**

We need a sense of public mission, a taste for authentic collaboration. And a little visual art. We also must be ready to dance—to perform, with stamina, an unusual repertory of talents and skills in a highly productive work environment, and in public.

Exhibition design is inherently interdisciplinary. It is also four-dimensional, more like the work of storytellers and dramatists—makers of events and images—than industrial designers.

### **What Do We Do?**

We make changes happen. We transform relationships among audiences and artifacts. We transform raw materials into new forms. We change dollars into stuff. We effect institutional change through our work. We can change people and communities.

We construct a place highly charged with meaning, an inhabitable metaphor, a social context for the specific history and material culture of this interpretive encounter. If the story is told in full-scale terms, the past is as big as we are. The exhibition becomes a landscape of decision, consequence, endurance, and memory.

What are some of the jobs we do along the way? Our work requires a flexible, capable repertory of abilities. Here are some of the jobs designers are doing everyday:

- interpretive planning and research
- audience research
- working with community groups planning an exhibition
- working with community scholars collecting and documenting local histories

- site planning and architectural design
- planning a museum
- planning fundraising
- exhibition conceptual development and scriptwriting
- working with collections managers and conservators to evaluate collections
- educational prototype development and testing
- exhibition design and technical planning
- publication design and production
- multimedia design and production
- staff training
- project management
- budget accounting
- supervising fabrication and installation of the exhibit
- evaluating the product on the floor and planning change

## PRACTICE

### **What Does This Mean as We Do Our Daily Work?**

Discipline is required. We have to maintain a relaxed sense of being able to do our work in public, as barbers, policemen, and prizefighters do. Exhibition designers invent new ways—and remember old ones—of making the audience's experience physically engaging and memorable, adding layers of meaning to the content at each encounter. We shape spaces, words, images, and material culture, not only to document but to dramatize, transform, and set in imaginative, imagined motion the past lives, past choices, and present things we re-present. And each project takes a different route to successful synthesis and realization—part of the creative investment we make is our invention of the specific design process that's right for each exhibition.

"We construct a place highly charged with meaning, an inhabitable metaphor, a social context for the specific history and material culture of this interpretive encounter."

#### **Working Together**

Throughout the exhibition-making process designers collaborate—with our colleagues and with our audiences—as we imagine, plan and build experiences: stories of people, places, things, and ideas made memorable. In each project we must find a way to put abstract ideas into concrete, inhabitable shapes: places for children and adults with different learning styles, different abilities, and different cultures.

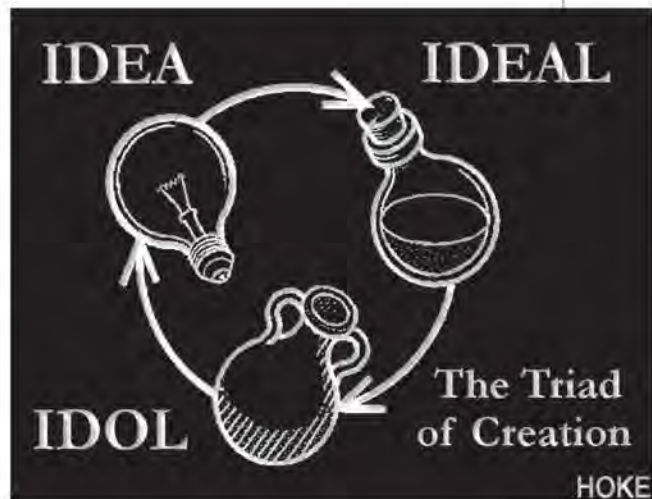
We're on a team to do a work of interpretive art. We help shape it, sometimes coach it. We lead the process of visual thinking about the content. In collaboration with our colleagues, we establish the criteria and resources needed to do the work. Then we, the designers, make a system to make it real—accurately, as pictured, within the budgets of time, talent, and money while opening on time. Our responsibility does not end with the opening, we are part of the ongoing use and evaluation of the project.

Partnership with our audiences means a commitment to designing accessible and durable exhibitry. We collaborate with fabricators in ongoing technical research and development, to ensure the quality, safety, and economy of exhibit materials. And this economy, in turn, ensures the flexibility of exhibit components that can be changed in response to ongoing audience research and professional evaluation.

As we gain prowess and professional suppleness, we learn better ways to work with the difficult, hard-to-define, emerging, and often conflicted **content** that happens in an interpretive exhibition.

#### **Working with Meaning: A MANIFESTO**

- Authorship in interpretive art is not singular.
- In the exhibition event, the content is transformed into a work of public art, a contingent moment, a multisensory experience for diverse learners and different people from different cultures.
- We will construct interpretive events that transform abstract themes into felt experiences, uncovering layers of meaning.
- We will create encounters with complicated ideas that transform audiences.
- We will make exhibitions that are popular, accessible, and pleasurable complex.
- We will seek the pleasures of complexity. ☀



# What's a Museum Evaluator?

by Jeff Hayward

**Jeff Hayward** is the Director of People, Places & Design Research. He may be contacted at [jeffhayward@ppdresearch.com](mailto:jeffhayward@ppdresearch.com).

It seemed so simple. I thought I would start this article with a short definition of what an evaluator is, in the context of the museum community,<sup>1</sup> and then I'd go into some of the background as well as current themes and issues.

But no, I had to approach this article the way evaluators do, with data! This shouldn't just be MY perspective on the field, I said to myself, because I know there are some passionate differences of opinion out there ...so I drafted a few ideas and asked a variety of people for their reactions. Forty people responded to my three-page list of issues and questions (wow, I was surprised), and on the very first question—my attempt to simply define an evaluator's role—I got a resounding warning. By about two to one (28 vs. 12), most people said the definition was not sufficient to include the work they do. Whoa, I've got to re-think this. Well, y'know, that was just a first draft of ideas, folks; I would've elaborated the ideas in a coherent way. And meanwhile, why did I want other people's opinions anyway? Don't I have a reasonable sense of what evaluation is about, with twenty-eight years of doing this in the museum field (and some years before that in environmental design research)? Oh, forget them—right?—I can do this with my professional insight and talent, and it'll be fine.

I laughed. Substitute a couple of words and those same questions could be a conversation about why bother with evaluation in exhibition planning. The truth is, I love the fact that people are different, that many heads are better than one, and dissent is useful. I'm not sure that I grew up thinking this way, but my training in architecture contributed to it, and maybe it's why I enjoy being an 'audience researcher' (my preferred identity instead of 'evaluator'<sup>2</sup>).

Like other designers, I was socialized to always reject situations that sounded like design-by-committee, but over time that scare tactic seemed overdone; in fact, I thought it was essential to have input from not only a building owner but also the likely occupants and other users of it. Similarly, I don't think this is an article-by-committee, but there is a context—my opinions and that of 40 others—so let's launch into the substance.

"What is a museum evaluator?" can be defined by what evaluators do, who they do it for and why, the skills they have, and how they see themselves in relation to other exhibit-related professionals. The core of the answer to this question is:

- A museum evaluator focuses on the experience of visitors, conducting scientifically defensible studies for the purpose of testing-improving-documenting the use and effectiveness of museum experiences, usually, exhibits and programs (proposed, or already in place). In general, the purpose of this work is to inform the intuitions of the people who produce museum experiences so they can better understand their audiences and make decisions about exhibits and programs.
- The work of an evaluator requires skills and knowledge in social and behavioral sciences (to systematically define and measure expectations, attitudes, curiosity, learning, interest, satisfaction-enjoyment-fun, behavior, etc.), keeping in mind that evaluation is different from a critique offered by an experienced professional.
- While the most obvious defining features of an evaluator are that s/he designs strategies and methods; collects, analyzes and interprets data; and reports findings in



"A museum evaluator focuses on the experience of visitors, conducting scientifically defensible studies for the purpose of testing-improving-documenting the use and effectiveness of museum experiences..."

relation to goals and purposes. There are two other features of this role that are reasonably common. Roughly speaking, these other features are 'facilitator' and 'disseminator.'

This attempt at an inclusive definition was certainly informed by my 40 colleagues, but it falls short of meeting all their needs and perspectives. So I'll address some of those perspectives by highlighting a few issues that matter to evaluators.

#### A Little Background About Evaluators

There is no one complete source to identify evaluators and audience researchers for the museum community. People may belong to professional associations, or not—the Visitor Studies Association (VSA) and American Association of Museums' (AAM) Committee on Audience Research and Evaluation (CARE) are the most prominent. We do know that there are evaluators working independently, and evaluators who work in-house. Some only do evaluation, while others split their job between evaluation activities and another role. In 2004, our survey and analysis of the membership of VSA revealed these characteristics:

- 37% are evaluators/researchers as a primary role, for 39% it's a secondary role<sup>3</sup>
- 59% work 'in house' in museums, 22% are independent, 12% work in academia
- 60% have been doing this for eleven or more years, 17% have six to ten years of experience
- 78% are women, 22% are men

#### Some 'Hot Buttons' in Evaluation

**Getting respect:** Thankfully, the stereotypical negative associations with evaluation are not as common these days. (I've endured being called a bean-counter, the Grand Inquisitor, and "a guy that the National Science Foundation (NSF)

says we need but we don't see why you need to be here.") But some people are still apprehensive about evaluation, so evaluators sometimes feel as though we're on thin ice (or up against a brick wall—choose whatever analogy fits your experience). Asking my colleagues about their preferred term, one person said:

*Visitor studies professional? audience researcher? I don't know, but 'evaluator' is seen as the person who "tells us if the exhibition sucks" (quote from a museum scientist).*

This is what we deal with. Lately, with the steady increase in the number of in-house evaluators, it seems to me that the rationale for evaluation has mostly changed from we-only-do-it-when-we're-required-to, to we-need-this-because-it-benefits-our-organization. In fact, some people actually **ask for** and **like** evaluation!

**Skills:** Many evaluators have formal training in social science (theories, methods, statistics, strategies for measuring intangible phenomena such as attitudes and understanding), and some are self-taught with experience. However, the skill level of evaluators is an issue because it's fairly easy to make blind mistakes leading to incorrect conclusions if one isn't aware of the principles that make evaluation systematic instead of anecdotal. Some of my colleagues said:

- *It should be clear that just doing comment cards doesn't make someone an evaluator.*
- *So often, those of us thrown into the role of the evaluator have limited knowledge of the social scientist's research skills.*
- *Unfortunately, many museum evaluators do not know much about research design or research in general. Museum evaluators need to be rigorous.*

Concern about skills has advanced to the point where credentialing is being carefully considered with an NSF planning grant to the Visitor

#### From Wikipedia

(the free online encyclopedia)

Evaluation is the systematic determination of merit, worth, and significance. Evaluation is often used in an educational context, but applies to many other areas, such as computer science, business, health interventions and engineering. There is some degree of dissent in the difference between the terms 'evaluation' and 'assessment', some practitioners would consider these terms to be interchangeable, others contesting that evaluation is broader than assessment and involves making judgments about the merit or worth of an evaluand. ... Merit involves judgments about intrinsic value. Worth involves judgments about instrumental value. For example, a history and a mathematics teacher may have equal merit in terms of mastery of their respective disciplines, but the math teacher may have greater worth because of the higher demand and lower supply of qualified mathematics teachers.

## “...there is more to it than conducting studies and analyzing data.”

(continued from page 79)

### American Evaluation Association

A Task Force produced a 7-page document, articulating assumptions and guiding principles about evaluation, as well as describing the background and process by which the Task Force did its work (for the full text, see: [www.eval.org/Publications/GuidingPrinciples.asp](http://www.eval.org/Publications/GuidingPrinciples.asp)). The order of these principles summarized below does not imply priority among them; priority varies by situation and evaluator role.

- A. **Systematic Inquiry:** Evaluators conduct systematic, data-based inquiries about whatever is being evaluated.
- B. **Competence:** Evaluators provide competent performance to stakeholders.
- C. **Integrity/Honesty:** Evaluators ensure the honesty and integrity of the entire evaluation process.
- D. **Respect for People:** Evaluators respect the security, dignity and self-worth of the respondents, program participants, clients, and other stakeholders with whom they interact.
- E. **Responsibilities for General and Public Welfare:** Evaluators articulate and take into account the diversity of interests and values that may be related to the general and public welfare.

Studies Association (VSA). Among the approaches being considered are a voluntary registry, where an individual would submit a portfolio of evidence to be reviewed by a small peer group; the registered Visitor Studies Professional would also have to sign off on a Code of Ethics. Interesting idea.

This ‘hot button’ goes beyond technical skills: it’s also about having perspective and “people skills” too.

- *Good communication (the ability to listen well, write well) is so key to the success of a project that, although it may seem trivial to include, I think it is a baseline skill requirement.*
- *... [skills] including conceptual and philosophical perspectives, training or experience relating to museology as well as technical knowledge of how museums operate...*
- *... [evaluators need] an understanding of the institutions they serve—an evaluator who specializes in schools will do poorly with museums and vice versa.*
- *Since we are talking mainly about evaluating museums and cultural centers (as opposed to a commercial product), I think that evaluators need a solid grounding in best practices in museum education ...[including] sensitivity to 21st century cultural issues, [and] understanding AAM’s philosophy of education being at the core of all museum functions...*

**Participating in the planning process:** Some evaluators (myself included), and some people who hire or supervise evaluators, believe there is more to it than conducting studies and analyzing data. Although situations and circumstances differ by project, some degree of collaboration with the rest of the team is desirable.

- *I am forever hopeful that evaluators get to contribute ideas for improving design concepts.*
- *The evaluator should be a key member of the exhibit/program planning team. Based on research on current and potential audiences, the evaluator should be a key advisor on up and coming exhibits and programs.*
- *I subscribe to both the concept of a learning organization and the research/evaluation team as members of a participatory action research group. In a truly effective learning organization, the entire design team feels they are engaged in evaluation.*

There is certainly “a very broad spectrum of practice” as one person said. Still, more people I contacted seem inclined toward participating in the application and implementation process. They favored the idea that ‘Evaluators ...should not hesitate to offer suggestions about how things could be designed to accommodate visitors’ needs and perceptions (24 people); much more than this position: ‘Evaluators ... should not confuse their role with that of decision-makers (because then we start getting into the awkward position of having vested positions about outcomes, or getting our opinions to count in the design decisions)’ (only 4 people). Others agreed that evaluators could offer ideas but they should do it informally, outside of the written report (16 people; a little overlap with the other categories).

But there was a cautionary note added by quite a few people, the most succinct of which was to call this “**a slippery slope perhaps.**” Some other thoughts were:

- *There should be a mutual agreement to have such a discussion or to know beforehand that suggestions from the evaluator are welcomed and/or desired by the institution.*

- *Maybe this idea of participating in the planning process works better with evaluators who know the designers and the institutional culture.*
- *When giving an opinion, we should qualify it by explaining our own biases or perspective, and be prepared to realize that not all of your suggestions will be implemented.*

Clearly, this is a touchy area, and I only asked people who are more-or-less in the evaluation field, not the designers, curators, or exhibit developers who make the planning decisions. Presumably, they would also have a range of opinions about whether they value the opinions of other team members, including evaluators.

**Objectivity:** A common assumption about systematic evaluation is that it is objective in the sense that it delivers unbiased information that dispassionately addresses a set of goals. While some people think that a high-on-a-pedestal version of objectivity is a myth, there are several important points at stake. Things that matter in objectivity are: is an evaluator conducting **quality** work? (why focus on objectivity if it's substandard research anyway?) is the evaluator aware of—and willing to describe—the weaknesses and potential biases in their research strategy and methods? is an evaluator operating with a political agenda too? (e.g., adjusting their results so as to not offend a boss, team leader, or client) and are the details of the research methods and procedures reliable and valid? (avoiding self-fulfilling conclusions, mis-measurement of parameters of effectiveness, etc.—details that require more than just common sense). Meanwhile, there's also a case to be made for the value of good **subjectivity**, especially in a field that seeks to understand relatively intangible phenomena such as perceptions and experiences.

I can say that I've given out plenty of bad news about exhibits or museum concepts that we've tested, so does that make me objective? Not necessarily, but I would hope it suggests that I don't feel social pressure to deliver results to please a client. I think what really matters here is the good conscience of evaluators, and a commitment by those who commission audience research to care about the quality and sensibility of those who conduct visitor studies. I personally don't think there's a big difference on this issue between in-house evaluators and independent evaluators, although the appearance of objectivity is important to funders and an independent outside-of-the-organization evaluator is usually their preference.

**Naming the role:** Some researchers are ambivalent about the label of 'evaluator,' hoping that other museum professionals will continue to transcend the negative stereotypes mentioned earlier (common alternatives that my colleagues say they use are 'audience researcher,' 'researcher,' 'exhibit evaluator' or the creative answer someone suggested, 'information alchemist'). However, another issue that inevitably surfaces when discussing evaluators' roles is whether there is a difference between evaluation and research, evaluator and researcher (28 of my reference group thought these terms are very different, only 8 thought the difference is semantic). I'm clearly in the camp that blends these terms. I take the position that although formal evaluation is needed when a sponsor requires feedback about a project's outcomes, much of what we do in front-end, formative or summative evaluation can also be called research—it's exploring and defining visitor experiences, not applying standards of accountability. And as we help museums understand their audiences, we may also be

## Canadian Evaluation Society

A thorough overview of principles about the practice of evaluation is presented on their website, using three headings: Competence, Integrity, and Accountability. ([www.evaluationcanada.ca/site.cgi?s=5&ss=4&\\_lang=en](http://www.evaluationcanada.ca/site.cgi?s=5&ss=4&_lang=en))

## CARE Standards

(AAM's Committee on Audience Research and Evaluation)  
This document defines general guidelines for the competent and responsible support and practice of visitor studies, defined as the process of systematically obtaining knowledge from and about museum visitors, actual and potential, for the purpose of increasing and utilizing such knowledge in the planning and execution of those activities that relate to the public. Three major topics are: responsibilities, capabilities, and institutional commitment. [CARE website will be launched soon]



(continued from page 81)

### Visitor Studies literature

Steve Biggood wrote in *Visitor Behavior*, Winter 1993 (Vol 8 #4):

"Visitor Studies: The discipline concerned with the study of visitors in leisure and informal educational settings.

Chandler Screven's *Visitor Studies Bibliography and Abstracts*

(4th edition): Visitor Studies - the systematic study of visitors to museums and other public educational settings and how content, design, and other features in these settings affect changes in visitor's knowledge, attitudes, involvement level, and understanding. The field of visitor studies helps planners and designers take into account the varying needs and abilities of visitors and, therefore, broadens the appeal and the impact of educational exhibits and programs.

From the Visitor Studies Association, there is a working definition by the Professional Development Committee:

- Visitor Studies is the interdisciplinary study of human experiences within informal learning settings.
- Visitor Studies follows rigorous research methods that adhere to the standards of social sciences.
- Visitor Studies draws from and contributes to the theory and practice of the social sciences.
- Visitor Studies improves informal learning practice.

analyzing potential audiences, the museum's image in the community, visitor orientation in a complex building, and other topics that would not typically be called evaluation.

### Last Words

Whew! Evaluators can be wordy, right? Maybe so, but we see it as a responsibility to be thoughtful and expansive rather than being impressionistic with quick-and-easy answers that turn out later to have been too quick and too superficial (especially when significant design decisions have rested on the evaluation findings).

Seriously, there are some common features to the practice of audience research and evaluation in the museum field, and you might think of these as "the basics:"

- designs studies to investigate and describe visitor experience in ways that can inform planning and management decisions;
- uses social science practices and principles to collect, analyze, and interpret data about visitors' use, perception of, and learning from exhibits, programs, etc.; and
- guides or participates in the process of understanding and applying evaluation findings to improve exhibits and experiences designed for visitors.

Beyond these conventional and expected tasks, there are extra benefits that the evaluator role usually brings to the project:

- a sense of being current in the field, contributing insights about visitor experiences when possible;
- the capability of facilitating the process of defining your goals and setting your expectations for visitor-related outcomes of your exhibits; and
- a resource to the team for applying results and brainstorming options.

I hope I've addressed many of the issues that are on the minds of my colleagues when someone raises the question of "what's an evaluator?" To all of you who contributed your comments and passions: thank you for collaborating! ☀

<sup>1</sup> By 'museum community' I mean to include all types of cultural and interpretive sites that present exhibits, programs and experiences for public audiences. For ease of reference in this article, I will just say 'museums' but I mean to include aquariums, botanic gardens, zoos, etc.

<sup>2</sup> In my experience, 'audience researcher' has a broader meaning to more people, and avoids some of the stereotypical negative assumptions about evaluation.

<sup>3</sup> This does not add to 100% because increasingly, it seems, some members of VSA are interested in visitor studies but do not do it themselves.



# Million Dollar Pencils and Duct Tape: Some Thoughts on Prototyping

by Paul Orselli

**"The more creative and flexible an organization is, the cheaper, simpler, and more numerous are its prototypes."**

*Michael Schrage*

To be a prototyper it helps to be a great gatherer (and editor) of ideas. Developing successful prototypes can often be a systematic process, but not always! So, how can you jump-start the prototyping process where you work? A good starting point is to clearly identify the message or idea you'd like to transmit. "Mushy" ideas make for vague prototypes and even vaguer exhibits. Can you sum up the idea you'd like a component to get across to the visitor in one meaty sentence? Prototyping involves both brains and materials, but the more brains you use at the beginning of the process, the less materials you'll need to use later on.

**"You can't just wait for inspiration. You have to go after it with a club."**

*Jack London*

Once you've gathered an initial set of pithy and profound ideas together — RUN! Get out of your offices, or worse yet, meeting rooms! Nothing stifles prototyping creative and off-the-wall ideas more than a bunch of exhibit "experts" endlessly speculating about how visitors will act, or what is mechanically feasible. Instead, put together the two essential ingredients for testing prototypes: curious people and cool junk. And do it as soon as possible. Mixing people and junk together often produces explosive bursts of creativity in both the testers and the prototypers. Putting prototypes into real visitors' hands unearths ideas and ways of using (and misusing!) components that would never have come out in a month's worth of stuffy development meetings.

Make sure to gather together a wide demographic range of prototype testers (young and old, school groups and families, etc.) Some built-in prototype testers that are often overlooked include museum volunteers, but also co-workers from outside the exhibits department. Some of the most telling insights can come from co-workers who don't develop exhibits every day.

**"To invent, you need a good imagination and a pile of junk."**

*Thomas Edison*

One advantage that 21st century prototypers have over Edison is the Internet. Many online sites provide inspiration for prototyping tools and techniques, not to mention access to real stuff. Three of my current favorite "inspirational" websites are:

*Boing Boing:* <http://boingboing.net/>

*Make Magazine:* <http://www.makezine.com/>

*Cool Tools:* <http://www.kk.org/cooltools/>

As a bonus to Exhibitionist readers, I've assembled a list of Prototyping and Exhibit Resources and Supplies, divided up into categories. Go to: <http://www.orselli.net/sources.htm>.

Beyond "virtual junk" any good prototyper needs ready access to duct tape, tools, wood, and mechanical bits and bobs to give form to initially formless exhibit ideas. CAD programs and computer-generated elevation drawings are great, but it's hard to beat the timeliness of duct taping a panel to the back of a chair to try out the placement of an exhibit button or label with a real live visitor.

*Paul Orselli is President and Chief Instigator of POW! (Paul Orselli Workshop). He may be contacted at [paul@orselli.net](mailto:paul@orselli.net).*

**"'Mushy' ideas make for vague prototypes and even vaguer exhibits."**



A young tester tries out a simple duct tape and plywood prototype. © Paul Orselli

(continued from page 83)

**"Plan to throw one away — you will, anyhow."  
Frederick Brooks**

One danger of the curious admixture of imagination and junk is the tendency for a prototyper to start falling in love with their clever solutions for shaping ideas into exhibit components. Make sure that your prototyping solutions are really providing the best platforms for the main ideas of the exhibition or component you're working on. It is very easy to get seduced by the siren song of technology. Do you really need a computer-controlled device when a simple mechanical interactive might be more effective? Remember that during the heyday of the Space Race to the moon NASA spent millions of dollars developing writing implements that could function in zero gravity. The Russians, on the other hand, merely gave their cosmonauts pencils!

Good prototyping should be both an iterative and reductive process. If your initial ideas don't keep getting better and simpler—elegant, in both the scientific and artistic senses of that word—then something is wrong. Clever prototyping ideas never really go away, but it's important to know whether you're creating carefully crafted solutions that dovetail nicely with exhibition content, or merely making million dollar pencils.

**"It isn't that they can't see the solution. It is that they can't see the problem."**

**G.K. Chesterton**

How do you know when your prototyping is finished? The prosaic answer is that prototypes, like exhibits themselves, are never truly "finished". The practical answer is that the initial prototyping is complete when the project schedule and/or budget are exhausted.

However, I've found that many times prototyping solutions and exhibit improvements don't come until months, or even years, later. The advent of new materials or technologies, or just the sheer impact on your brain of informally seeing visitors use an exhibit hundreds of times, can often suggest that one little "tweak" that can push a good exhibit into that rarefied category of wonderful exhibits.

One example from my own experience taught me that the questions that visitors ask about an exhibit during the prototyping process aren't always the ones we expect.

In developing a math interactive about conic sections, I started fussing around with some simple wooden turntables, plastic bottles, and epoxy (cool junk!) to test out some hands-on ideas with visitors. We soon found out that viscous fluids created more satisfying parabolic shapes than just water. A trip to the local grocery store later, we realized that ordinary yellow cooking oil had the right color and thickness to create amazing shapes. Game over, right? Wrong!

By shifting that one variable, substituting oil for water, visitors suddenly became much more concerned about discovering what the "magic



"Mixing people and junk together often produces explosive bursts of creativity in both the testers and the prototypers."

fluid" inside the containers actually was, as opposed to studying the shapes that they were making. In a moment of both desperation and serendipity (pushed along by a looming deadline) we tried epoxying an actual clear plastic bottle of cooking oil (with the label removed) onto our turntables.

Because of the distinctive shape of the cooking oil bottle itself, as well as the now familiar amber color of the oil inside, visitors became even more delighted to find that a material that they were familiar with could be used to produce such cool mathematical shapes.

The final version of the "Parabolic Spinner" exhibit with the cooking oil bottle. © Paul Orselli



So, focus your ideas, gather together your junk, and keep prototyping! If you feel the need for inspiration, get out your Sharpie marker, and write this quote from Edison on a piece of duct tape to stick above your work space:

**"Just because something doesn't do what you planned it to do, doesn't mean it's useless."** ✨

Prototyping on the street at a recent Association of Science-Technology Centers (ASTC) Conference. © Paul Orselli



# NAME — Sponsored Sessions at the 2006 AAM Annual Meeting in Boston

## Thursday, April 27, 2006

### Roundtable

10:00am - 2:00pm

- NAME Exhibit Development Roundtable

### Single Session

2:15pm - 3:30pm

- 2106—Looking Back at the Last 100 Years of Exhibition

### Single Session

3:45pm - 5:00pm

- K-12 Curators: What Kids Learn by Making Exhibitions

### NAME Evening Event

6:00pm - 9:00pm

- National Association for Museum Exhibition (NAME) 25th Anniversary Dinner (Event #07) \$40.00

## Friday, April 28, 2006

### Single Session

9:00am - 10:15am

- Trying to Reach a Family Audience? Children's Museums Can Help

### Single Session

2:15pm - 3:30pm

- Traveling Exhibits: The Nuts and Bolts of Getting Started

### Double Session

2:15pm - 5:00pm

- Exhibitions That Changed My Life

## Saturday, April 29, 2006

### Business Breakfast

7:30am - 8:30am

- National Association for Museum Exhibition (NAME) Breakfast (Event #34) \$19.00

### Single Session

9:00am - 10:15am

- Silverbacks and Young Bloods Debate the Future of Exhibitions (Centennial Session)

### Single Session

10:30am - 11:45am

- Designers, Creativity & Evaluation

### Single Session

2:00pm - 3:15pm

- BYOD: Guest-provided Devices in the Museum Experience

### Single Session

3:30pm - 4:45pm

- The Latest in Exhibit Trends: From the Designer's Perspective



**Sunday, April 30, 2006**

*Single Session*

9:00am-10:15am

- What's Going On VIII: Hot Topics in Exhibition Development

*Issues Luncheon*

12:30pm - 2:00pm

- National Association for Museum Exhibition (NAME) Issues Luncheon (Event #56) \$29.00

*Single Session*

2:15pm - 3:30pm

- Let's Assess: The Framework for Assessing Excellence in Exhibitions

*Single Session*

3:45pm - 5:00pm


- Art, History, and Science Museums: A Cross-Cultural Conversation

**Monday, May 1, 2006**

*Workshop*

8:00am - 12:00pm


- Prototyping and Testing for Hands-on Family Learning! (Workshop #102) \$25.00




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Back issues of *Exhibitionist* may be purchased for \$12.50 each on our website, [www.N-A-M-E.org](http://www.N-A-M-E.org).

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*Exhibitionist* is published by the National Association for Museum Exhibition (NAME), the Standing Professional Committee on Exhibition of the American Association of Museums (AAM). NAME enhances the cultural landscape by advancing the value and relevance of exhibitions through dialogue among individuals, museum leaders and the public. NAME promotes excellence and best practices; identifies trends and recent innovations; provides access to resources; promotes professional development; and cultivates leadership. Opinions expressed in *Exhibitionist* are those of the authors, and may not represent the policies of NAME and/or AAM.

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**Fall 2006** – Best of the 2006 American Association of Museums (AAM)

**Spring 2007** – Request for Proposal (RFP)

**Guest Editor:** Paul Orselli, [paul@orselli.net](mailto:paul@orselli.net)

**Fall 2007** – Best of the 2007 American Association of Museums (AAM)

### Correction

On page 27 of the Fall 2005 *Exhibitionist*, the photograph was incorrectly identified. The image caption should have read "Design rendering of dinosaur hall for *Evolving Planet*. Photo © American Museum of Natural History."

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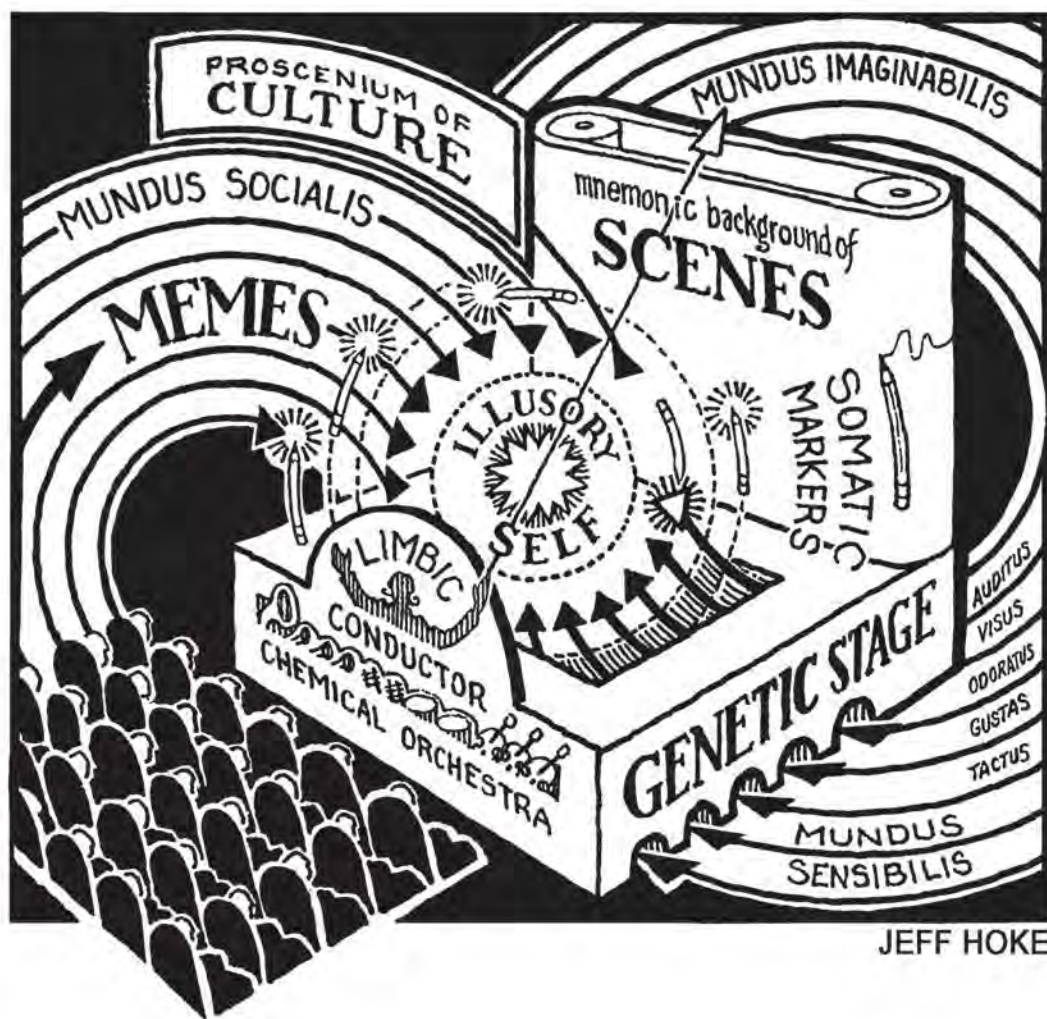
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