EXHIBITIONIST

NAME

A Designer is...

E. G.

Conversation Tips for Designers and Evaluators

A Exhibit Developer is...

Armadillo

From the President

Change is coming. The fall is beginning. New patterns are taking shape in my life. The new baby is sleeping through the night. I am beginning to settle into the role of President of NAME. There is a lot to learn. About NAME. About AAM. About the museum profession.

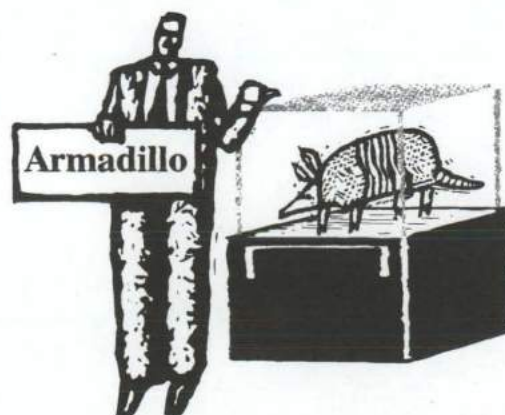Change is coming to NAME. There are new officers and regional representatives bringing new ideas, energy, and expectations. AAM has decreed a new relationship between AAM and the Standing Professional Committees (SPC's).

More Change. By now many of you will have heard about or read of the impending implementation of AAM's requirement that to be a member of a Standing Professional Committee, like NAME, an individual must also be an individual member of AAM. This change has many possible outcomes. Some are relatively easy to predict, like it's going to cost you more to participate in NAME. Others, such as the freedom to create programming responsive to the needs and interests of our segment of the profession are very difficult to determine.

An ad hoc committee of AAM Staff and members from four SPC's have been working to resolve questions and procedures for this process to go forward. An implementation plan has been drafted and presented to the AAM Board where it was accepted. Beginning January 1, 1999, all NAME members must over the next 12 months become AAM members in order to continue as NAME members. All membership renewals, all new member processing will be handled by AAM

AAM will have a larger role in managing and administering the finances of NAME.

AAM will produce a brochure that can be used to market NAME to prospective members.

AAM will work to promote membership in NAME and the other SPC's through its publications and other activities.

This change will have a dramatic impact on NAME. This change will affect you and your relationship to NAME, AAM and the profession. In order for the NAME Board to understand the magnitude of this change on NAME's members, the Board needs to hear from you. Contact me directly or any of the officers and Board members listed at the back of the *Exhibitionist*.

One of the changes that has come to NAME is the resignation of Diana Cohen-Altman as Editor of the *Exhibitionist*. Diana brought the *Exhibitionist,* from being a newsletter, to a magazine of considerable standing in the profession.

Her thematic issues on interpretation, criticism, and the exhibit field have given us thoughtful articles by which we can examine what, how, and why we do what we do. This issue draws on that body of work to provide a look at three specific sectors of the profession as well as the profession in general. Please join the NAME Board in extending our thanks to Diana for her dedicated work on behalf of NAME.

I had the opportunity to represent NAME, Curator's, and the Security Committees at the AAM National Program Committee meeting in Cleveland. The program for next year will have something to offer everyone. There will be nuts and bolts sessions, sessions featuring new ideas, and opportunities for discourse about the future of museums. Look for a listing of NAME sponsored and cosponsored sessions in the Spring issue of *Exhibitionist*. Come and visit the NAME booth and share your ideas and opinions on the profession. NAME will host the best party in Cleveland as well.

Diana and the many authors that contributed to the *Exhibitionist* over the years provided the resources for this issue. Linda Kulik and Beth Redmond-Jones reviewed articles, established themes, chose articles and assembled the pieces into a coherent and useful publication. In addition, Linda Kulik contributed time to layout the issue. These people exemplify the volunteer attitude that has made NAME a successful organization for those involved in exhibitions. Thank you Linda and Beth.

NAME needs your ideas, your loyalty, your participation. I look forward to hearing from you.

Whitney

From the Editor?

Sunday night, eight o'clock! I've been at it all weekend for the third weekend in a row. Each time I volunteer to pick up a job that someone else has been quietly doing for years for NAME, I'm humbled at how much work is really involved. Dealing with the membership after Louise DeMars and Whitney Watson has kept me hopping. Now, just assembling articles from old issues of the *Exhibitionist*, not even generating anything new like Diana did time after time, is making a crazy person of me.

This issue contains what Beth (yes, I'm blaming you too) and I think are some of the best articles of the last fives years, the years that Diana Cohen-Altman reshaped this magazine into a quality publication for the profession. We selected articles that mainly described three roles on exhibit development teams; those of evaluator, developer, and

exhibit designer. We also included some great articles on criticism. I hope that this issue will be one you refer to often. I know that I got a lot out of reviewing these articles.

Please be understanding if you find too many commas or not enough. Some articles—especially *Appelbaum* were edited to make space for other articles.

Also, my apologies to Mark Driscoll and Jennie Zehmer for any graphic strangeness like the masthead not being justified. I was unable to use the original *Exhibitonist* Pagemaker document due to errors and had to rebuild everything from scratch. (What can I say, I'm a Quark person.)

Special thanks to Lisa MacKinney, Membership Chair of CARE (Committee on Audience Research & Evaluation) and a NAME member, who contributed all her back issues of *Exhibitonist,* so we had a complete set to review for articles. (I promise Lisa, I will return them.) Thanks to Beth Redmond-Jones who hand keyed in numerous articles, when I was unable to figure out how to get the *danged* optical character recognition software to work. (I'm now a whiz!) Thanks too Beth, for your advice and organizational insight and thank you Blake Edgar, editor for *California Wild*, Cal Academy's membership magazine, who edited my edit of the Appelbaum article.

Whitney tells me that NAME already has a new editor picked out who will be working on the next issue. Hooray!

Linda

Bulletin Board

Join or renew NAME membership in 98 and save lots of dollars in 99!

The American Association of Museums Executive Board has recently decided that no person(s), museum(s), museum association(s), library(s), or commercial organization(s) can be members of NAME (National Association of Museum Exhibition) without also being members of AAM.

However, the American Association of Museums will honor **NAME memberships taken out or renewed before December 31, 1998** for their full 1999 year duration.

Membership in NAME is only:
$15 for Student or Retired Members
$25 for Regular Members
$35 for International Members

The following membership dues take effect January 1, 1999:

INDIVIDUAL Membership

		AAM	NAME	Total
1)	Trustee	$100	$25	$125
2)	Non-paid staff	$ 35	$25	$ 60
3)	Under - $29,999/year	$ 50	$25	$ 75
4)	$30,000 - $39,999	$ 75	$25	$100
5)	$40,000 - $49,999	$ 95	$25	$120
6)	$50,000 - $59,999	$120	$25	$145
7)	Above - $60,000	$140	$25	$165

INDIVIDUAL Membership continued.

		AAM	NAME	Total
8)	Student-send copy of valid ID	$ 35	$15	$ 50
9)	Retired museum staff	$ 35	$15	$ 50
10)	Librarian/Academician	$ 50	$50	$ 75
11)	Press/Public	$100	$25	$125
12)	Independent Professional			
	Income above $25,000	$125	$25	$150
	Income under $25,000	$65	$25	$ 90

LIBRARY Membership

AAM	NAME	Total
Any library or nonprofit organization.		
$ 75	$25	$100

COMMERCIAL Membership

AAM	NAME	Total
Any for profit organization that is not a museum. Affiliated commercial organizations (covers 2 staff people)		
$450	$25	$475
Each additional staff person		
$100	$25	$125

Murphy's Laws of Exhibition Drawn from Real Life

Duggan's Law: Creative disuse of an exhibit will increase exponentially as a function of the number of moving parts in an interactive.

Duggan's Second Law: Production time is inversely proportional to development time.

It is impossible to make any exhibit foolproof because fools are so ingenious.

Murphy's Constant: Exhibits will be damaged in direct proportion to their value.

No matter what the exhibit's result, there will always be someone ready to:
   a) misinterpret it,
   b) ignore it, or
   c) tell you how they would have done it.

In meetings where people must choose among alternate exhibit ideas, most will choose the worst one possible.

Interchangeable parts won't.

Label readability decreases as the author's level of education increases.

If an exhibit is ready before opening, something is definitely wrong.

Ponder a $2000 typo in the morning and nothing worse will happen to you for the rest of the day.

First Law of Revision:
Information necessitating a change of design will be conveyed to the designer after-and only after-the plans are complete.

Second Law of Revision:
The more innocuous the modification appears to be, the further its influence will extend and the more plans will have to be redrawn.

Corollary to the First Law of Revision:
In simple cases, presenting one obvious right way versus one obvious wrong way, it is often wiser to choose the wrong way, so as to expedite subsequent revision.

Any custom computer program developed for an exhibit will be obsolete by the time the exhibit opens.

Any exhibit development, design, or production plan will expand to fill available time.

Traveling exhibits will always weigh more than a comparable permanent installation.

Label interest is inversely proportional to its length.

Inside every small exhibition problem is a large problem struggling to get out.

You cannot replicate a successful exhibit.

An ounce of image is worth a pound of words.

Volunteers are always available to help in the past tense.

Computer expenses will expand to absorb resources and then some.

When a designer states that something is possible, s/he is almost certainly right. When s/he states that something is impossible, she is very probably wrong.

A great science interactive is nearly indistinguishable from magic.

Designers will act rationally when all other possibilities have been exhausted.

Type size is not proportional to concept importance.

If you think no one will notice the typo, they will.

Complex exhibit problems have simple, easy to understand wrong answers.

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"Why We Need A Visitors' Bill of Rights"

by Judy Rand, Rand and Associates

Visitors are real people, with real human needs. If you think that goes without saying, consider this: when's the last time you walked through your museum, zoo or aquarium and saw it like a first-time visitor does? It's almost impossible; as an expert, you already know too much.

But if you don't know what first-timers need, how do you know they'll return?

Experts in human behavior tell us that unless you plan and provide for basic human needs (i.e., orientation, socializing) the visitors will be distracted, rather than open to learning.

In my 1996 keynote address to the Visitor Studies Association, I used the analogy of a rafting trip through the Grand Canyon (an experience that parallels a first-time visit to an unfamiliar museum, aquarium, or zoo) to introduce and identify these basic needs.

I concluded with an 11 point "Visitors' Bill of Rights," a set of guidelines to help directors, exhibit planners guest services managers and others plan for visitors' needs at the same time they weigh budget, schedule, operations and other issues.

The Visitors' Bill of Rights
A list of important human needs, seen from the "visitors" point of view

Comfort *"Meet my basic needs."*
Visitors need fast, easy, obvious access to clean, safe, barrier-free restrooms, fountains, food, baby-changing tables and plenty of seating. They also need full access to exhibits.

Orientation *"Make it easy for me to find my way."*
Visitors need to make sense of their surroundings. Clear signs and well-planned spaces help them know what to expect, where to go, how to get there and what it's about.

Welcome/Belonging *"Make me feel welcome."*
Friendly, helpful staff ease "visitors" anxieties. If they see themselves represented in exhibits and programs and on the staff, they'll feel more like they belong.

Enjoyment *"I want to have fun!"*
Visitors want to have a good time. If they run into barriers (like broken exhibits, activities they can't relate to, intimidating labels) they can get frustrated, bored, and confused.

Socializing
"I came to spend time with my family and friends."
Visitors come for a social outing with family or friends (or connect with society at large). They expect to talk, interact, and share the experience; exhibits can set the stage for this.

Respect
"Accept me for who I am and what I know."
Visitors want to be accepted at their own level of knowledge and interest. They don't want exhibits, labels or staff to exclude them, patronize them or make them feel dumb.

Communication
"Help me understand, and let me talk, too."
Visitors need accuracy, honesty and clear communication from labels, programs and docents. They want to ask questions, and hear and express differing points of view.

Learning *"I want to learn something new."*
Visitors come (and bring the kids) "to learn something new," but they learn in different ways. It's important to know how visitors learn, and assess their knowledge and interests. Controlling distractions (like crowds, noise and information overload) helps them, too.

Choice and Control
"Let me choose; give me some control."
Visitors need some autonomy: freedom to choose, and exert some control, touching and getting close to whatever they can. They need to use their bodies and move around freely,

Challenge and Confidence
"Give me a challenge I know I can handle."
Visitors want to succeed. A task that's too easy bores them; too hard makes them anxious. Providing a wide variety of experiences will match their wide range of skills.

Revitalization
"Help me leave refreshed, restored."
When visitors are focused, fully engaged, and enjoying themselves, time stands still and they feel refreshed: a "flow" experience that exhibits can aim to create.

Criticism and Audience

by Beverly Serrell

Audience as Critic?

The audience cannot be considered the critic of an exhibition. This is because a critic is a *person*, while and audience is a *population*, and the two are not interchangeable. The charm of a critic (as well as the pain) is that a critic has a singular personality, constructed from that person's heredity, experience, and unique set of skills.

The critic speaks as an individual, mustering up past history and current evidence to build her opinion or pronounce his judgment. The audience, on the other hand, is a heterogeneous mass, with no unified voice or individual skill. There may be audience trends, or a majority of audience viewpoints, but the nature of criticism is in the opinion of an individual, not a group.

Probably the most common misuse of audience as critic is through comment books or cards for visitor feedback placed in exhibitions. Again, the confusion of trying to listen to multiple voices is obvious, because there is not way to know what the visitor's background, bias, and/or reasons for any given comment might be. Anonymous criticism is an oxymoron.

Using Audience as Evidence for Criticism

Consideration of the audience may or may not be part of the critic's arsenal of evidence for making a judgment. Exhibition criticism that totally ignores audience response is incomplete, however, because the assumptions made about visitor reactions in the development of an exhibition need to be checked out. For example, if the exhibition was intended for family audiences, did they use it with social interaction as a family group? If the exhibition contained satire, did visitors get the joke?

Head Counts Are Not Enough

Citing audience response in the form of popularity or high attendance as evidence for critical success is also incomplete evidence, because high head counts alone do not tell you anything about whether people's expectations were met, if they found anything meaningful, or it their reactions resembled those intended by the exhibition's creators. Low attendance or lack of popularity is not the critical measure of failure if it was really due to poor marketing or bad weather.

Audience Effect on the Critic

Audience reaction may, in fact, play a large part in the critic's opinion, and in the case of museum exhibition criticism, this should be the case. When the critic's skills are largely derived from experiences in systematically gathering feedback from visitors to exhibitions, that critical is probably also know as an evaluator. Critics who do not have experience as evaluators use a different set of skills, which may be more idiosyncratic and specialized about exhibit factors (for example, graphic design, color, lighting) than about audience factors (for example, motivation, learning styles, perception). The problems encountered in this realm of more subjectively oriented criticism are discussed in this issue by Harris Shettel.

Criticism vs. Evaluation

At Kathleen McLean's criticism session last year at the AAM annual meeting, panelist Sam Taylor emphasized that when you listen to the speakers give their opinions, you learn almost as much about the critic as you do about the exhibition.

One reason for having the same critics at each session from year to year (a plan that was rejected by the AAM conference program committee) was to get to know the biases and backgrounds of the speakers. (As anyone who has followed a particular movie critic's reviews in a local newspaper or on TV can tell you, "Well, that's the kind of film her would hate!") Perspective and judgments from a know set of skills and prior knowledge are the essential ingredients of criticism.

In contrast, the evaluator, acting as visitor feedback conduit, seeks to collect, analyze, and report data from a perspective that is largely objective (although not entirely so). Rather than relying solely on prior knowledge to make judgments, the evaluator seeks empirical evidence in the form of visitor reactions that can be compared to exhibition objectives set by the exhibition planners.

The evaluator makes use of special tools, such as tape recorders, time-lapse cameras, stopwatches, self-reporting computer interactives, or the usual paper and pencil instruments to gather the data. The evaluator's opinion and bias are evident in the study methods selected, but the overall purpose is to observe, collect, and record what visitors have to say with their voices and with their feet.

Museum exhibition critics and evaluators serve different purposes. In some cases, these overlap a lot, such as when evaluators are asked to speak on the visitors' behalf in the absence of immediate, empirical data from a sample of the audience. Other times, critics and evaluators are quire separates, such as when the critic is speaking from a personal set of skills that does not include visitor studies data. It is up to the listener to decide which is which and then to judge the critic's opinion in the proper light. It is the skills and the knowledge of the critic that should be judged with regard to what is being criticized. Criticism by an evaluator can substitute for evaluation, but evaluation does not substitute for criticism by individuals with specialties in exhibition content (that is, the subject matter specialist) or exhibition design.

What I would like to see is more criticism of all kinds about all kinds of exhibitions, because it would be interesting, stimulating, and challenging to our ways of thinking about what we do as museums professionals. Instead of keeping our personal, critical thoughts reserved to small, whispering, snide groups in the lounges at AAM conventions, let's let it hang out more publicly.

Forums in the form of panel discussions and columns in the magazines, journals, and newsletters should be encouraged to discuss museum practitioners' opinions about exhibitions, why they feel the way they do, and what they think ought to be done. When it comes to actually making decisions, however, about what should be changed to make an exhibition work better, or to judge its educational value to the public, we should not listen only to the critics. We should rely at least equally on the known and evolving skills and tools of exhibition evaluation through visitor studies.

This article will discuss two points: 1) the relationship of the audience to an exhibition vis-à-vis the role of the critic, and 2) the nature of criticism compared to evaluation.

Beverly Serrell is Director of Serrell & Associates in Chicago.

We Need Criticism

by Kathleen McLean

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* the exhibition ... Personal intimacy with the medium is essential.

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 fare 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.

One Approach to Criticism
Before the Exhibition—Your State of Mind

All of us bring preconceptions and prejudgments to an exhibition. You may have heard a glowing review from someone you respect and therefore 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 the 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 sighs that identify themes or subthemes? 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 your 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 kinds 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 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," or 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 attracted 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 intensity the environmental setting of the exhibition? Do they relate to the 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 spotlit? 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 plexiglass 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 exhibitions that allow you to experiment on your own or deal with a top 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 you 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)?

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 relations? 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?

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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 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.

What Can Critics Learn from Evaluators?

by Jeff Hayward

The role of critic should be approached very thoughtfully in these early stages. People who may be affected by the criticism can respect a critic with a clearly defined role.

As I watch the beginnings of an active movement to critique museum exhibitions, I fully expect there will be misperceptions, inappropriate comments, some hurt feelings, and a lot of posturing. The same think happened with evaluation—but we dealt with many of the misperceptions, demonstrated how our work is useful, and now have a generally positive relationship with the museum community.

I thought it might be useful to reflect on the roles of critic and evaluator and to offer some suggestions for the "reviewers" as well as the "readers" of criticism, based on some parallels with the field of evaluation as it emerged over the past couple of decades.

In design arts and communication arts, there are a variety of forms of criticism, ranging from juries for design awards to professional banter in journals and trade publications. Sometimes these professional opinions are insightful, sometimes they seem arbitrary.

In contrast, I believe that public media critics and exhibit evaluators have established roles for themselves that serve a need and that could help to clarify some of the parameter and assumptions for Exhibition Criticism.

Differences & Similarities with Criticism in Other Media

Is it a mistake to lump together Exhibition Criticism with criticism in other media? I don't think so, because the focus in both cases is on the final product as presented to the public. But there does seem to be a dramatic difference in the audience for the critique: for media critics it's the public, whereas for exhibition critics the audience is the profession.

What's the purpose of the review? Who hires and fires the critics? How do people get to know the critic/reviewer? These are all key questions that need to be defined in Exhibition Criticism over time. For one thing—in other media as well as in museum exhibition—the recipients of the review have to agree on its purpose. They don't have to agree with the conclusions, but they must agree with the purpose of having a critique.

Seeing the Negative as Constructive

But let's face one of the central issues: dealing with negative reactions. Nobody like them, but they're an essential part of improving what we do. Just like the reviewers of grant proposals, some critics fell they have to make negative comments because it shows they're independent, and smart enough to find flaws. Evaluators also are expected to focus on negative reactions—in fact we spend much more time discussing things that "aren't working" vs. things that appear to be successful—but the negativity is experienced as part of a constructive process. The evaluator should also point out positive directions and opportunities.

Confronting Image Problems

There was a time when evaluators were about as popular as dentists and auditors. People said we were like the "judge and jury," that we were supposed to be "the expert visitor," that we were a luxury affordable only in good times, that we could do our job accurately only if we were assessing components in the context of the whole exhibition, or that they didn't like evaluation because they thought it interfered with the visitors' experiences. Evaluators had to deal with the grain of truth that supported such misperceptions.

We coped with our image problems by various means. We showed that we could work "up-front," not just "after the opening"; worked directly with designers and developers, not focusing on accountability to funding agencies; demonstrated that one could use evaluation to help with actual problem-solving; and we functioned as team players, trying to avoid power trips and in-house politics.

Doing It Right: Define the Critic's Role

The movement toward exhibition criticism must deal with image problems. I suggest that these can be worked out by trying to clarify the critic's role. Here are some suggestions about how people can shape this role:

For the publishers/sponsors of critiques:
- Find a way to get two or more critiques: opinions from different types of professionals, or perhaps pro and con points of view (a trend in editorials).
- Subject critiques to editorial review: use an indepen dent reader/editor to ask if, among other things, if the tone is appropriate or if the critic distinguishes opinion from fact.
- Provide a forum for response to the critique.

For the critic:
- Emphasize your own opinion as such; don't appear to claim that everyone thinks the way you do.
- Distinguish between professional opinion and public opinion; be aware of the pitfalls of the over-simplified "typical visitor."
- Recognize your biases and limitations (evaluators do this by acknowledging that the sample was taken in only one season, or that a mock-up was not expected to test all aspects of effectiveness)—perhaps providing a context for who you are and where you're coming from.

For the producers of the exhibition:
- If, before opening, you think you might have a problem with critiques, consider making your goals more explicit for visitors, for example, by explaining the rationale for and limitations of the exhibition in an introductory label.
- Take what you can from the review, it's just one other type of feedback.
- Feel free to object to the critique—if the publishers/sponsors don't get feedback, how will they get better at choosing critics?

Respect Must Be Earned

I believe there will be value in professional critiques of exhibitions. But I also believe that the role of critic should be approached very thoughtfully in these early stages.

People who may be affected by the criticism can respect a critic with a clearly defined role, and a thoughtful critic can mitigate the inevitable sensitivity to negative reactions.

	A characterization of **Media Criticism** for communication arts	A characterization of **Exhibit Evaluation** as practiced in the field of Visitor Studies
What is it?	Criticism (a critique) is meant to be an individual opinion from a person who is familiar with the medium and who has experience interpreting the strengths and weaknesses of the creative work.	Evaluation (museum exhibit evaluation) is meant to represent the variety of opinions and experiences of the visiting public; the evaluator does not intend to use his/her own opinions to be the "judge and jury."
Who's it for?	in other media, criticism is for the public; is Exhibit Criticism intended only for a professional audience?	for professional use, not aimed at the general public
What's the purpose?	in other media: to help people decide whether to buy/see/visit something; is Exhibit Criticism just for professional dialogue?	to improve the exhibit so it will be more effective, educational, and appealing
What's the focus?	the "final product" as it is presented to the general public	the "product" and the "process" (shaping of objectives, enhancing familiarity with the visiting public)
Who hires and fires the reviewer?	in other media, a publisher or broadcast organization; who should do this in Exhibit Criticism?	a client: the same people who produce the creative work that is being evaluated
How many opinions?	in other media, there are often several critics offering multiple opinions; this seems important for Exhibit Criticism too	usually only one evaluator works on a project (the results are suppose to represent the variety of opinions of the public, not the one evaluator)
When do you do it?	*after* something is open to the public	*during* the planning process, as well as after opening
How do people get to know the reviewer?	in other media, the same person's reviews are seen regularly, readers can develop an opinion about whether they ten to agree with this reviewer or not	at first, it is partly the evaluator's responsibility to put things in perspective; then, the working
Is the review opinionated?	For mass media, reviewers are expected to attract a following; in that sense, their job is to "sell," to be interesting enough to attract attention. Critics feel pressure (internal and external) to "take a stand" and not to be seen as neutral.	Much of evaluation is descriptive; the challenge is to push the research (and interpretation of data) to focus on parts that could be improved; being "neutral" is a good stance within the team, but having neutral conclusions is not so helpful.

Jeff Hayward is Director of People, Places & Design Research in Northampton, MA. He has worked with more than 50 museums on visitor research and evaluation projects, including all phases of exhibit evaluation as well as audience research for marketing and planning.

Chart by Jeff Hayward.

What Can We Learn from "N=1"?

by Harris H. Shettel

Formal criticism has had a long and contentious history. As far back as 400 B.C.E., a painter named Zeuxis said that "Criticism comes easier than craftsmanship, thus clearly drawing the line between those who do things and those who criticize those who do things."

It is certainly easy to criticize the critics. One need only note that the Eiffel Tower was considered by French architects of the day to be an architectural monstrosity that should be torn down as soon as possible, that music critics walked out of the first playing of Brahms's 1st Symphony, and that Duchamp's *Nude Descending a Staircase* caused a scandal at the infamous Armory Show in New York in 1913, to wonder 1) why anyone would want to be a critic, and 2) why anyone would want to pay attention to a critic.

Standards of Judgment

The essential problem any serious critic faces, it seems to me, is what may be called the "compared-to-what" issue. When one asks, "Is this work of art, building, novel, poem, exhibition, etc., excellent, good, fair, poor, or beneath contempt?" the critic's answer ought to allow one to make a judgment about the standards being applied. When a museum director asked me what I thought of an exhibition that I knew he liked (but I did not), I came up with, "Well, I don't think this exhibit will impede the flow of visitors." Such critiques suffer from a lack of standards against which to judge the judgment.

What Is a Good Exhibition?

When I became professionally interested in informational exhibits in the early 1960s my first questions was, "Is there general agreement among the experts in the field as to what constitutes a good/successful exhibition as contrasted with a poor/unsuccessful exhibition?" In reading the relevant literature I noted any number of statements that said, in effect, "This is an excellent exhibition because...," or "This is a poor exhibition because..." I began to make a list of such statements and ended up with about 350. I made no judgments as to the value of such statements in the belief that those knowledgeable in the field of exhibition development would know what "coherent unity" was, even if I did not. I next broke down my list into 15 major categories (for example, text, lighting, media, objects), culled out the redundant items and ended up with a 74-item rating scale that could then, presumable, be used to judge the "quality" of any given exhibition.

Use of this scale by 25 exhibit designers, museum managers, and curators on up to seven different science exhibitions revealed that the inter-rater reliability (agreement between raters) for any given exhibition was quite low, and in several cases was negative. Many of the individual ratings were at opposite ends of the scale—rater A would say that the labels in Exhibition Y were among the best he has seen, while rater B would say they were among the worst she has seen. (This study was published in *Curator*, 11:2, 1968.)

My conclusion was that there appeared to be no reliable "standard of comparison" against which to judge exhibit "goodness." (Popularity was not on the list.) The complexity and variety of the exhibition medium seemed to preclude using only the exhibition per se as the basis for making such judgments. The only other basis I and other could think of for saying that an exhibition was "good" or "bad" was to find what the exhibition was supposed to do and then see whether or not it was doing it.

Exhibit Evaluation Enters the Picture

But this raised a new and profound questions—what is an exhibition suppose to do?— a question, I might add, that has not been fully answered to this day. But one thing seemed clear even in the early 1960s. Exhibitions, with very few exceptions, are designed to convey some kind of educational message to those who use them, as one can quickly gather from reading the mission statement of almost any museum. A few wise souls also noted the *affective* element of the museum/exhibition experience, including such things as increasing visitor interest, motivating the visitor to learn more (and come back), and changing visitor attitudes.

To the small handful of researchers who were toiling in this vineyard at that time, here, it seemed, was an answer to the "standards" question—a good exhibition is one that communicates its intended message(s) to its intended audience(s)! You don't rate the effectiveness of exhibits by looking only at the exhibitions; you also examine visitors' cognitive and affective responses to those exhibits!

This line of reasoning (which may qualify as a genuine paradigm shift) has generated a large amount of research and evaluation work over the past 25 years. We have tried to clarify and expand our level of understanding and knowledge about the complex (and , it must never be forgotten, *informal*) interaction that takes place between casual visitors of all shapes and sizes and exhibits of endless variety. There are now several books on the subject; there is an association devoted to visitor studies that has more than 300 members and an annual conference (the Visitor Studies Association); there is a peer-reviewed journal that is in its third volume (*ILVS Review: A Journal of Visitor Behavior*); as well as an AAM Professional Standing Committee dedicated to promoting visitor studies (Committee on Audience Research and Evaluation [CARE}). A quarterly newsletter, Visitor Behavior, published by the Center for Social Design, tries to keep its 500 subscribers up-to-date on current developments in this fast-moving field.

Has Evaluation Eclipsed Criticism?

A number of very specific methodologies have evolved over the years that are designed to allow exhibition planners and developers to take maximum advantage of visitor inputs—*front-end, formative, remedial,* and *summative evaluation* all make use of information form potential or real visitors to help shape and improve the exhibition planning preparation process. What have these developments done to the role of the lone exhibition critic? Have they slunk into obscurity? No, for several reasons. First of all, the urge to criticize seems to be one of the basic human drives—right next to sex and food. Walk through any museum with exhibition managers, designers, curators, educators, or interpreters, and listen to the "critiques." (And also note the lack of agreement.) Secondly, doing visitor studies takes time, money, and qualified personnel, and all of these are in short supply in many museums. And thirdly, there are those who are still convinced, despite the reams of data to the contrary, that there is adequate expertise in the traditional exhibition planning and development process that obviates the need for visitor input. This must be the line of reasoning, for example, of the AAM Curators' Committee, which has been giving "best-exhibition-of-the-year" awards on the basis of criteria excluding any kind of visitor input.

(I am excluding from this discussion the very legitimate and useful role that can be played by those professional critics who are qualified to deal with such things as historical accuracy, point of view, bias, and other items related to the subject matter of the exhibition. For example, a very effective exhibition on AIDS may be criticized not because it does not communicate its message to the visitor, but because the message it *does* communicate is not consistent with the museum's mission, is misleading, is factually inaccurate, etc. Such professional critiques can be very useful in the early thinking and planning stages of similar exhibitions.)

Critical Appraisal

Interestingly enough, there has developed over the past several years a "new" exhibition evaluation methodology that has given the lone critic a new lease on life—*critical appraisal*. (What goes around, comes around!) It occurred to a few of us that we have been collection valuable visitor data for many years that point to things that tend to "work" in exhibitions and things that tend not to "work." Why could not this data base be developed into a rating form that could be used to critique any given, completed exhibition? Such a form would have a major advantage over the one I put together many years ago, in that it would be based on empirical evidence gathered from many hundreds of visitors of all kinds, from many dozens of studies carried out on many different kinds of exhibi-

tions. (Most of the categories used in the early rating scale are still in the critical appraisal form.)

Space does not permit me to go into detail on the specifics of this approach to exhibition evaluation, but in all the instances that I know about where it has been used, the results have been very positive. That is, 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, as well as another list of items that should be looked at in a *remedial* visitor study. These latter items are things that are problematic (for example, a complex, color-coded wayfinding system) rather than obviously in need of correction (for example, a badly placed label).

Appraising Critical Appraisals

Is this new approach really better than the personal opinion of a museum director, curator, designer, etc.? Many of us think so because it is based on evidence. But I must admit that there is still an element of subjectivity to the process. My better half tells me that we ought to do several studies in which independent critical appraisals are carried out on the same exhibitions by qualified evaluators familiar with the literature, and then see how much agreement there is between raters (reliability), and how closely such ratings correlate with the results of visitor studies carried out on the same exhibitions (validity). Until this is done, we cannot truthfully claim that we have significantly improved on the "shoot-from-the-hip" kind of critique. (But I'll put my money squarely on critical appraisal to win!)

In any case, front-end and formative evaluations are still the methods of choice since they provide exhibition-specific data, tied to specific objectives, from real or potential visitors form the target population. And, they provide such data while there is time to take corrective action. But there are a lot of existing exhibitions that could be significantly improved by the use of critical appraisal. Combined with remedial studies, critical appraisals would be an excellent way for an institution to upgrade existing exhibitions when it cannot afford to install expensive new ones.

The lone exhibition critic (N=1) has been given a new set of clothes. I think it will be demonstrated that *informed* criticism has a legitimate role to play in our continuing effort to improve the effectiveness of our exhibitions.

Harris H. Shettel is a museum evaluation consultant in Rockville, MD., Past President of the Visitor Studies Association, and Co-Editor of the ILVS Review: A Journal of Visitor Behavior.

Critical Shortage: Can Anyone Help?

by Janet Kamien

I want to
know how
they feel.
I want to know
what . . .
they will
remember . . .
and if
it will have
influenced their
thinking or
behavior
in any way.

I have been looking for a good critique all my life. Or so I tell myself. I know that I am struck by the stunning lack of useful information that seems to accompany the opening of an exhibition. On the other hand, when people do tell me things that they don't like about my efforts, I am usually defensive and must repress urges to punch them in the mouth.

I guess the most annoying thing is that most of what is said is either about 1) things that I know are wrong, but for one reason or another—usually time or money—couldn't do anything about (so then comments feel like salt in the open wound) or 2) choices that I intentionally made and am happy about even though I knew that they would not please people with another view of what exhibition should be.

Rarely do the comments address the questions I am asking myself as the exhibition developer and responsible party. Rather, they feel tangential, redundant, hopelessly optimistic, or sometimes, a little mean.

The question is, of course, what did one hope to accomplish in the first place? And when an exhibition takes years to complete, can one even *remember* what one set out to accomplish in the first place?

I have trained myself not to expect too much. Partly this is self-protective, but partly it's a result of realizing how little I know about what exhibitions actually can and can't do.

But Did You Feel Anything?

For instance, I have come to believe (I may change my mind tomorrow) that a successful exhibition has very little to do with teaching. Rather, its real use is to give order or meaning to half-remembered ideas, offer clarification to ideas only dimly understood in the first place, or provide a first spark of interest in a so-far unexplored topic.

Education, as we generally understand it in our society, really does require day—to—day reinforcement and quiet study—two things that most museums are very short on. So the only things I try to overly teach are those thinks that I hope will help visitors to make associations with all the stuff that is already jangling around in their heads. And at the end, I am much less interested in what they learned; I want to know how they feel. I want to know what, if anything, they will remember about the experience later, and if it will have influenced their thinking or behavior in any way.

Evaluation: One Reality Check

One's best ally in this quest is a good exhibit evaluator. Though the summative evaluation is often the least interesting of the documents produced during the whole process of evaluation, it's still the best bet for a reality against which to text your intention. And it's the best place for laying a groundwork for improvement, if not in this exhibition, then in the next one.

This is because good evaluation is about the way visitors actually use the exhibition and not about wishes, dreams, or axes to grind. However, evaluation is generally better at telling us something about the pieces that make up the visitor's experience rather than what the visitor actually experienced. That is, it's better at describing the cognitive, orientation, and other functional aspects than it is at describing the affective experience. And unfortunately, rarely do we even attempt to use these tools to make possible discoveries about what impact, cognitive or otherwise, the exhibition experience may have had over the long term.

Audience: The Pulse of the Exhibition

The audience, all by themselves, can tell us something about the exhibition and probably will. First of all, do they go to it? Second, what do you observe them doing in it, how long do they stay, and how do they behave? Third, what do they take upon themselves to tell you? Do they write in, leave notes at the front desk, complain to or compliment staff they meet? (If you make it convenient for them to report their feelings and ideas, they may tell you quite a lot, some of it surprising.)

Colleagues: Limited Relief

One would expect one's colleagues to be a great source of information, but in my experience this is only sometimes true. I think there are several reasons for this, among them the following:

• We tend to judge others' work by our own intentions, rather than on the intentions of the maker.
• Because we are ourselves visitors to the exhibition, but insiders to the process or topic, we often tend to confuse these two roles.

We are not open to the experience as most "ordinary" visitors because we are "insiders." But we are not (and usually do not make ourselves) privy to the process to really understand the intentions of the maker because we are, after all, only "visitors."

• Our specializations can blind us.

Exhibitions are complex wholes. I believe few of us fully understand how, and why, the individual pieces do or do not come together to create a satisfactory, exciting experience for an audience. Because of this, we ten to respond to and judge only the parts we know best, and often fail to be insightful about the whole.

• Like everyone else, we tend to be "polite" in public or face to face, and less so in private or other venues we may deem safe to speak our minds.

Real dialogue between colleagues can become difficult. Exhibit makers could help by really asking for criticism, really listening, and if possible, not taking it personally.

• We have little history and few forums for the act of constructive criticism.

There are a lot of people interested in doing something about this. I hope we will be able to create fair and useful vehicles, and not simply a body of criticism with a life of its own that judges exhibition by a "tradition" of its own making.

• Like me, most of us don't take criticism very well.

Like movie makers and novelists, exhibit makers suffer the pressures of the "gate." Unlike them, we rarely have a good conceptual editor at our disposal or the chance to reconsider our choices before the public comes. Few of us have the luxury of an ongoing relationship with our creations in which we can learn more, or the luxury of enough resources to make changes and learn still more. And few of us will ever have a large body of work through which we can grow as exhibit makers.

Rx for Growth

My advice to exhibit makers?
    • Be clear about your intentions.
What do you want this exhibition to do and for whom?
    • Use an evaluator throughout the process.
(This is as close to Max Perkins as you are probably going to get.) Be clear about your intentions to the evaluator.
    • Watch, count, listen to your audience.
They are who you did this for and *not anybody else.*

And counsel to critics?
    • Know the difference between saying that someone's intentions were unworthy or flawed and saying that the intentions were not carried out in the exhibition.
To do this, you're going to have to know what the intentions were.
    • Judge exhibitions against their impact on the audience *or* their impact on you.
Don't confuse these two things.
    • Think past your specialization.
    • Honor experiments, or at least the bravery of the people who tried them.
Experiments—even if they fail—are where we will learn what this medium can really be.

Janet Kamien is VP Science Center, at the Franklin Institute in Philadelphia, PA. Before that she was an exhibit developer and administrator at The Field Museum in Chicago, where she has served as Chair of the Design and Production Department. She developed two major exhibitions there: Inside Ancient Egypt *and* Life Over Time. *Prior to that, she worked at the Boston Children's Museum in similar capacities.*

Honor experiments, or at least the bravery of the people who tried them.

What is an "Exhibit Developer"?

by Sharyn Horowitz and Katherine Krile

According to Spock, an exhibit developer is equally passionate about the content and about the visitor *and* has some sense of how to put exhibitions together.

Exhibit developers should know the content but not be so buried in it that they can't keep their perspective.

Has this early model of an exhibit developer changed? We spoke with several other people to find out.

It's time to acknowledge that from the audience's point of view, the exhibit designer's role is the single most important role in creating an exhibit... An exhibit has its best chance for success, measured by whatever communication goals you wish to set, when the creative effort to bring a topic to an audience is led by an exhibition designer. The designer is often the only person on the team who is able to conceptually understand, organize, and integrate both the physical and intellectual content of an exhibit at all phases of the exhibit's development, design, and production."

-Don Hughes, "Growing up NAME," Exhibitionist, Spring 1996

Substitute the word *developer* for *designer* in the above paragraph and many exhibit developers would nod wisely. Is there a problem here?

In search of what it means to be an exhibit developer in today's museum—exhibit-making community, we approached a range of people in the profession.

First on our list was Michael Spock, since the role and job title "Exhibit Developer" seems to have originated at the Children's Museum in Boston during his tenure there in the early 1970s. When he first came to the Museum there was "a tripartite model of curator, designer, and advocate for the visitor, who was either an educator or an evaluator." There was a general feeling on staff that something wasn't right with this model. Educators, he observed excel at direct interpersonal interaction, but the exhibits process kept educators one step removed from the public. Evaluators, on the other hand, were too specialized; not necessarily skilled in working through the exhibit development process. He and his staff felt that while both of these parties are important to a successful exhibition, neither one really fulfilled the needs of the exhibition team. A new team player—the exhibit developer—was born to fulfill this need.

Phyllis Rabineau, Deputy Director for Interpretation and Education, Chicago Historical Society

I always thought the developer's job was to identify and orchestrate resources—i.e. visitors (accessed through evaluation), the collection, curators and other scholars — to create an effective public learning experience. Today, for cultural projects I'd add the constituency, i.e. the people whose history is the subject of the exhibit.

The developer has to find the main ideas, think of some materials that can be used to express them, and bring these into a collaborative design process. Developers aren't responsible for figuring out how to deliver the message—that's the designer's expertise—but they have to decide what the message should be. Designers are often frustrated by developers, particularly if the developers are fuzzy in their thinking or miss their deadlines. Yes, these are crimes of which developers are often guilty!

It's a lot harder for people to understand what a developer does than it is to understand the role of curator or designer. Not only do you find exhibit developers lurking under all kinds of titles from one institution to the next, you also find many different expectations about what a developer is and does. Sometimes the title of developer' appears to be given to the project coordinator or to an interpretive writer.

Under Mike Spock's leadership at the Field Museum, the exhibit developer was not only responsible for the content of the exhibit, s/he was also the project director. The reason for this was that Mike saw the developer as the primary advocate for the audience, and he wanted the projects to be rigorously 'client-centered.' The important issue was always, 'How will this work for the visitor?

Marquette Folley-Cooper, Project Director, **Smithsonian Institution Traveling Exhibition Service (SITES), Washington, DC**

An exhibit developer believes firmly in the art of collaboration. Like a conductor who works with trumpet players, saxophonists, and other musicians to create long moments of magic, an exhibit developer relies on individuals with different talents to tell an honest and intelligent human story.

An exhibit developer must learn how to stay with the vision for an exhibition. The message developed by the team at the beginning becomes the developer's mandate. Collaboration with others leads to a refinement of that vision. Within a climate of mutual respect fostered by the exhibit developer, nearly every idea has a place in that process, even if it is to wonder about the genesis of the idea. The act of answering allows the idea to test itself.

Jennifer Thissen, Project Director, **Smithsonian Institution Traveling Exhibition Service (SITES), Washington, DC**

Exhibit developers seem to me a lot like film producers, ensuring that everyone on a project has the information, resources, and intellectual environment necessary to craft a work of art. They must be acutely aware of the goals of the curator and other collaborators, the needs and interests of museum visitors, and find ways to forge a link between these groups.

Probably the most critical period in creating an effective exhibition team is the "brain dump." This is the curator's opportunity to educate the exhibition team on the topic, and for the team to respond with questions and ideas for the exhibition. This process not only informs the team about the subject but also introduces the curator to the possibilities and limitations of museum exhibitions.

When an exhibit developer has done the job well, the exhibition team can make the best possible use of their creativity and expertise.

Karoline Lane, Exhibit Developer, **Gerard Hilferty and Associates, Athens, OH**

Exhibit developers are conceptual designers—what is the information the client wants to get across? How is that information best shaped for communication? How can we successfully communicate all that information through exhibits?

There's very little difference between an exhibit developer and an excellent exhibit designer. The biggest difference may be that we don't draw. We're also like evaluators because we have to know, for whom is this exhibit? But we depend on evaluators' expertise in

gathering information and tweaking our work. We're also like curators, because we've got to become mini—subject—experts.

Working with big teams, everybody does a little bit of everything. All our efforts seem to overlap, but we all have something we're especially good at: aesthetics, materials, function (designers); scholarship (curators); visitor identity and biases (evaluators). All of us are concerned with communication, but perhaps that's the thing developers are especially good at.

As developers, we have to understand the medium, the possibilities of the medium; what it will and will not do. And I think we have a responsibility to help our clients understand. Ultimately it's about communication. To visitors. To clients. To in-house team members. It's up to us to see both the forest and the trees. And to have the skills (and patience) to bring an exhibit from concept to reality.

Stephanie Ratcliffe, Sr. Exhibits Specialist, Maryland Science Center, Baltimore, MD

Exhibit developers at my institution wear many different hats, taking them on and off at different points in the process: team facilitator, translator, broker of information, evaluator, project manager.

You're often the one who synthesizes the team's ideas into writing, so you have to figure out how to get the information you need out of the group. You bring your own ideas, but you must also tap into all perspectives on the team. Documents you produce must represent "group think" or you will run into many problems later. It is important that the team trust you to communicate the group's collective vision.

You may also be the one who gets to know the subject matter best, and you're probably the liaison to out side content experts. In this role, you have to translate the sometimes complex information for the visitors. Even before that, though, you often need to synthesize an immense amount of information for the rest of the team.

Traditionally here, the developers have been responsible for formative evaluation, but designers are participating too. It's good for the designers to see with their own eyes how visitors react to the prototypes, but it's right that the developer is the primary champion for the visitors.

In our process, you might be the project manager at the beginning, but at a certain time the ball gets handed to the designers. But still you're part project manager in that you manage the editorial aspects. You're responsible for creating enough of the script and for making key decisions to keep everyone else on track. When there's a problem, you do the things you need to do to get the team unstuck, whether it's interpersonal or content-related.

In my case, I'm working with a team that's been together for a long time, so these issues have shaken themselves out. But defining roles is part of the rules of the game, and the definitions may change because of lessons from other projects. I've found it useful (and entertaining) to read and learn more about team process. Most of these models come from the business world. It is both frightening and funny to realize how predictable people can be when presented certain tasks. A recent reference I have found useful is *The Wisdom of Teams*, by Jon R. Katzenbach and Douglas K. Smith."

Darcie Fohrman, Independent Consultant, Monterey, CA

I don't really know the definition of an exhibit developer. It's very important to have people on the team that are professional exhibit planners that understand how to be the liaison to the public. I'd like to think that the whole team is doing that and has that goal.

I don't call myself an exhibit developer. I feel that my skills have to do with developing team dynamics, determining who will do what, why it should be done, what is our main theme and messages, coming to consensus, then developing the appropriate media, always keeping that big picture.

I'm not necessarily a project manager, though there is some involved. I try to have someone else keep track of all the logistics. I do concept design and help plan the space, but I'm not an exhibit designer. My degree is in education. I think of myself as an interpreter.

Doug Worts, Educator: Gallery Enhancement and Audience Research, Art Gallery of Ontario, Toronto

I'm not quite sure what you mean by exhibit developer. I'm an educator and visitor researcher. In the mid 1980s, we started to take an audience-oriented approach to exhibits: lots of interactives, different room environments, different interpretive techniques to appeal to visitors of different backgrounds. The technology is integrated with rather than separated from the artwork, which is unusual.

We had been doing some experimental exhibitions, and we caught the eye of the senior curator, who asked us to work with him on the reinstallation of the Canadian galleries. He had modest ambitions about rearranging the artwork and putting up new labels. We asked him about his assumptions about how the galleries were used, and did baseline testing of the experience. This made it clear to him that the public perception had no relation to his intentions. We turned it from a traditional installation to single room with seven focal areas, inter active computers, and digital audio systems. Subsequent evaluations suggest we succeeded.

Portia James, Historian, Anacostia Museum, Washington, DC

I heard a curator at a conference say, "We don't have a community of people to whom we feel responsible because our focus is on guns." No matter what you're doing, you're doing it for a group of people. Most people want to be responsive to the people in their neighborhood. Often for a particular exhibit, there's a community that has an interest in the subject matter. The neighborhood and the community should be a part of the exhibit development process.

That doesn't mean evaluation, which usually involves bringing in people to react to your work. Few people understand what goes on in order to realize an exhibit. That's disempowering. To ask them to give feedback is not effective. To get the community involved, you need to be more proactive. It's to your own advantage. They've got insights that you won't have. Go after them. And build their participation into the process.

Katherine Krile is an exhibit developer with SITES. Sharyn Horowitz is an exhibit developer for the Health Museum of Cleveland and a regional editor for the Exhibitionist.

The dirty, little, secret of exhibit developers is that any of the tasks described in the adjacent listing could be done by somebody else on the exhibits team.

Some share Darcie Fohrman's ideal of exhibit development, that is, that everyone on the team is an exhibit developer.

Is our mission to propel the field toward this ideal? Is our mission to make ourselves obsolete?

Spinning Fish Tales: Telling Marine Biology

by Eileen Campbell, Melissa Hutchinson, Jenny-Sayre Ramberg, and Jaci Tomulonis
"

Sharks!

Our temporary exhibition *Sharks!* presented two major challenges. How could we counter visitors' misconceptions about sharks? JAWS is a myth; most sharks are small and harmless. And how could we change visitors' attitudes from fear and loathing to respect and concern? People are far more dangerous to sharks than they are to us: we've fished some species to the brink of commercial extinction—and sharks need our help.

Mating Games

The ways animals find to reproduce are amazing, inventive, fantastical; we wanted to present all this in a positive, open, and even playful way.

Ordinarily, we rely on labels to tell most of our story. But using labels to state, then counter misconceptions seemed risky. Visitors might read the misconceptions, then gloss over the true statements that countered the myths. We feared visitors might leave the exhibition with their misconceptions more firmly in place. (After all, if they'd read it in a label, it must be true!)

And while labels seemed capable of communicating the fact that sharks were in danger, we weren't sure they could move visitors to care about the sharks' plights. We needed a more compelling medium.

The medium we chose was video, but video of a different sort—what Judy Rand (our master exhibit developer, until recently) dubbed "environmental video." Environmental video integrates an exhibit's elements. It can give visitors a sense of time and place. And when you add people to environmental video, it can convey attitudes and emotions—as well as information.

For our sharks videos, we created a tour group of six characters. The characters appeared throughout the exhibition on monitors next to displays of living sharks. This setup gave the impression the characters were in the exhibit space (or at least in a parallel-universe version) viewing the sharks in real time. As visitors progressed through the exhibition, they kept meeting up with the video characters as *they* progressed through the exhibit.

Wherever visitors met our characters, they could listen in on the group's conversations. It was clear that some characters knew more about sharks than others—here's an except from the script:

Rap: *So where's the shark?*
Perfesser: *Right there. Look. That is a shark.*
Rap: *C'mon. I may not read all your books, little brother, but I know what a shark looks like. Where's the teeth?*
Perfesser: *You mean the big jagged ones? Forget it. Says here [reading from the book he carries everywhere]: "Eighty percent of sharks have small crushing teeth like the epaulette shark; or slender grasping teeth like the ... "*
Rap: *But it's just lying there. Everybody knows sharks gotta swim to stay alive.*
Perfesser: *No—"nearly half of all sharks"—just like this one—"move slowly or lie on the bottom."*
Rap: *Come on. Where's the real sharks? Like in Jaws.*
Perfesser: *Most sharks are like this one! [reading] "Harmless, timid creatures—more likely to flee from a swimmer than to attack."*
Rap: *Sounds like you. So where's the big ones?*
Perfesser: *[Reading} "Eighty percent of all shark are under six feet." Like you.*

Our video characters let us state misconceptions, then contradict them quickly—while we still had the visitors' attention. And they allowed us to model behavior we wanted visitors to engage in: looking closely at the living sharks, making comparisons, making discoveries.

We also used our characters to model changes in attitude. Each character started with a different point of view. But as they went through the exhibition and learned that overfishing threatens sharks, each character—in its own way and at its own pace—became concerned and resolved to take action to "save the sharks."

Environmental video did what we feared labels couldn't do: address visitors' misconceptions and changed their attitudes towards sharks (summative evaluation confirmed this). But we still used our trusty storytellers to do what they did well: interpret the sharks themselves.

Mating Games

Like all our exhibitions, *Mating Games: Reproduction and Survival in the Aquatic World* had to work for a broad range of visitors: families, adult couples, school groups; people of all ages and persuasions. With a sensitive topic like reproduction, we needed to find an interpretive level and style that nearly all these visitors would be comfortable with. Our approach was two-pronged: avoid offending, but find a way to celebrate the subject.

Surveys and focus groups with our visitors helped us identify the parts of the topic most likely to cause alarm. It became clear that people weren't as worried about animal reproduction *per se* as about its connection to human sexuality. When we showed them sample label text, they reacted to what they considered "human terms." They were concerned both about explicit language—*penis, copulate*—and emotion-laden or humorous language—alligators "embracing," turtles "grunting and groaning."

We also discovered that how the information was presented was more important than the content itself. Not surprisingly, provocative writing *provoked*. But if we used a straightforward tone, even words like *sex* and *sperm* were acceptable to people.

Based on these results, we developed a label tone we felt would offend few of our visitors. Because people were so sensitive to comparisons between animals and humans, we made no overt references to people in these labels. We also stayed away from humor—the wealth of puns we could have used were all based on human sex. We covered the fact of copulation, like this:

Sea hares mate with whomever they meet. Sea hares, like most animals, mate to reproduce. A male inserts sperm with a special organ, so it combines with eggs safely inside a female's body. But unlike most animals, each sea hare makes both sperm and eggs, so each can mate as male, female—or both. Sea hares often form long mating chains, each fertilizing and being fertilized at once.

While we needed a straightforward tone to convey reproductive information, we didn't want our text to be heavy or dull.

This is not a staid exhibition. Various exhibit elements encourage visitors to get involved: to listen to animals' mating calls, try to do a seabird's courtship dance, talk to a docent while peering at live shark eggs, and feel the warmth of an alligator's nest.

Our interpretation needed a matching flair. What we gave up in humor we tried to make up in warmth and friendliness. There is a strong conversational voice behind the labels—as if someone you knew and liked were telling your these animals' stories. The stories themselves have a natural human appeal; they're full of high drama, great weirdness, deep mysteries, and appealing characters.

> Eels breed once in a lifetime.
> Eels this age lurk on murky river bottoms.
> But when the time comes to spawn, they wind their way toward ocean waters. They journey with great purpose, sometimes even slithering over land. When they reach the sea, they swim up to 2,500 miles to the middle of the Atlantic. Having returned to where they were born, they'll reproduce, then die.

Stories like this, told well, make their own case for reproduction as a wonderful fact of life, worth revealing and celebrating.

Ocean Travelers

The prospect of a whole exhibition, dedicated to the topic of marine conservation presented some new and some familiar challenges. We usually start exhibits with a topic and a list of animals, and animal stories, but we started this exhibition with a topic and a desire to change how visitors felt about it.

We knew from evaluation that had been conducted on other environmental exhibitions that visitors generally felt overwhelmed by environmental problems, and that the issues themselves were confusing.

The exhibition needed a focus—one that would limit the number of environmental problems we addressed, and allow us to interpret them well, balance the severity of some problems with more hopeful environmental success stories, and, finally, link global issues to Monterey Bay.

We decided to interpret widespread environmental problems by telling the stories of animals that visit Monterey Bay on their travels through the world's oceans. Four animals were selected: California gray whale, brown pelican, leatherback seaturtle, and the albacore tuna.

We decided to represent each as a large, visually compelling cutout that served as an anchor, both physically and intellectually. Each cutout became the center of a "kiosk" that included an interactive and seating with a book that covered topics in greater depth. Each animal's story provided a link to global issues such as whaling, chemical pollution, coastal development, and overfishing.

Our four animals also helped strike a balance between the depressing and the hopeful. While albacore and leatherbacks are still in danger, the gray whale and pelican made comebacks after people took action to resolve the problems that threatened these animals.

Finally, to combat visitors' feelings of depression and helplessness about unresolved environmental issues, we created a "take-action" center. Here, visitors learn about specific actions they can take to better protect the ocean. Like mail a postcard to their senators about ocean issues.

Family/Kids Exhibition

This topic presented us with a new kind of exhibition challenge. Our topic—marine mammals of the Monterey Bay area—was one we'd dealt with before, but we'd never done an exhibition just for kids and their families.

Our design/development philosophy was largely guided by the work of Howard Gardner at Project Zero and a strong belief that play is the serious work of young children. One of the goals was to provide experiences that would engage visitors and offer them exhibit elements that would appeal to their different learning styles.

Our primary goal was to provide an overall learning experience that would encourage and enable families with kids aged four to seven to use the exhibition together. Ten interactive components were developed and we were able to test most of them. We worked closely throughout the design/development phase with Jeff Hayward of People, Places and Design Research. We soon got a feeling for who our audience was—what they could or couldn't do and what they cared about.

Our greatest challenge reared its head early on in the design/development process: Were we going to put labels in this exhibition, and if we were, who were we going to write them for? Through our early interactive testing, we learned that generally kids in our target age group didn't read labels even when they were readers; they wanted to use the interactives instead. With this in mind, we set out to develop an instrument and a testing situation that would give us information about: vocabulary, placement, amount of text, graphic symbols, pass-along messages (we assumed that parents would read labels and then verbally "pass on" messages to the kids in their group), and readers vs. nonreaders.

We observed 83 families using our baleen/toothed whale feeding interactive. Three different label versions were prepared to represent different graphic styles and different amounts of text. We looked at several aspects of label-reading behavior: who in the family group read; how much they read; and whether they read text out loud or read and then passed on messages to the rest of the group.

Our study proved clearly that parents read and children do not, but children do interact with exhibit elements. We found that most adults read labels to themselves rather than aloud for the group. But when labels contained less text, adults were more likely to read them aloud. When parents read label subheads, they almost always read both lines. Adults did not always read from the top down. A number of parents said they skimmed the text for "grabber" words or words that caught their eye.

Over all, parents preferred the label version with the least amount of text; they also liked having more images to help them visually understand the concepts being presented. An interpretation of our findings suggested that if parents can read text quickly, and if the information relates directly to their childrens' interactions with the exhibit elements, they'll find the labels useful.

After analyzing the information, we decided that we needed to come up with a new kind of label for the family/kids exhibition. We decided to write labels in short, two-lined chunks with one or two facts about the featured animals in a format that would appear easy to use.

Ocean Travelers

While we had integrated conservation messages into animal-based exhibitions such as *Sharks!*, this was our first exhibition completely focused on an abstract topic without any animals or artifacts to anchor it.

Eileen Campbell, Melissa Hutchinson, Jenny-Sayre Ramberg, and Jaci Tomulonis are exhibit developers at the Monterey Bay Aquarium.

Developer to Evaluators:
How Are We Doing?

by Linda Deck

For the most part, developer is

used here in its broadest sense, to include all members of the exhibit development team.

I met with Minda Borun, Director of Research and Evaluation at the Franklin Institute Science Museum; D.D. Hilke, Director of Exhibits at the Maryland Science Center; and Randi Korn, Principal of Randi Korn and Associates, an evaluation firm, to talk about the relationship between evaluators and exhibit developers . As a developer who has been a part of evaluation efforts, I was particularly curious to find out what we developers have learned from evaluators in the past decade. And I wanted to give evaluators a chance to talk to us through the *Exhibitionist*.

Has the work of evaluators had an impact on exhibition design and development?

MB: It's had a significant effect on exhibition, even though perhaps not as much as we'd like. There has been a significant change in the past ten years, particularly in the conceptual accessibility of the exhibition—things are clearer and simpler. The idea that the exhibit is for visitors, not just our peers, is more accepted.

DDH: Yes, now the visitor experience is a valid criterion for assessing the success of an exhibit. The work of evaluators is at the heart of how we do exhibits and our criteria for success.

RK: A good example of how things are changing is what is happening with the Curators Committee [of the American Association of Museums] and their annual exhibit awards. Typically judges made decisions after reviewing slides, a script, and other documentation. Visitors' experiences were never considered. But the committee recently approached CARE [AAM's Committee on Audience Research and Evaluation] and requested we provide them with evaluation criteria to add to the criteria judges must consider when selecting successful, or award-winning, exhibitions.

MB: Yes, there is an openness for change. At the British Museum of Natural History there was a tremendous change in atmosphere when Roger Miles became head of their exhibition program. He hired exhibit professionals: designers, educators, and psychologists; the curators provided the academic information. Roger recognized that exhibitions were for visitors and were not a scholarly statement. Science centers led the way in this thinking in the United States, but there is still a lag in history, natural history, and art museums, which have a strong curatorial tradition.

This sounds like change was from the impetus of the exhibit professionals, not the evaluators

MB: Yes, but Roger empowered the evaluator to have a significant effect on exhibit development.

With respect to the exhibit practitioners, is there a difference in the relationships between the evaluator and different members of the exhibit development team?

RK: Yes. I think an educator's priority is communication with visitors as learners. Designers begin with aesthetic goals. I know they say their goal is also communication, but their perspective is different from educators.

DDH: Look at where each begins as the core of her job: curators begin with content and always look from that perspective. Educators always start from who is the learner, so they have a natural affinity with the evaluator. The designer is interesting; I agree and disagree with Randi. Yes, designers worry about aesthetics, space, accessibility, codes, drawings, money (sometimes they are also the project manager). But historically designers have often taken on a role similar to the audience advocate. When I worked on audience advocacy for the Information Age project at the Smithsonian, my stronger allies were often in the design firm. I also found an initial conflict and competition with designers, in that they felt it was their role and job to worry about communication and complete the loop between audience and curator. The traditional dyad was the designer and the curator.

Yes, I've heard this traditional relationship referred to by a curator, as "me and my designer." The curator provided the content source, and it was left to the designer to ensure communication, successfully or not.

MB: This dyad did exist, putting the designer into what is now the developer role, of structuring the messages and meanings. One of my most important jobs is to get the team comfortable with visitor input. My experience with designers—mainly graphic designers—is that they are much more visually literate than the general visitor. Educators, on the other hand, are often too verbal and didactic. Educators think that if you say the truth to visitors, they will soak it up like a sponge. We need to think in visual and spatial as well as verbal terms, which is how visitors will experience the exhibit. It's useful to have the different learning styles on a development team.

RK: I agree with your statements on graphic designers; architectural designers seem to be very good at both visual and verbal communications for the masses.

How about this new role —exhibit developer—particularly?

RK: My experience has been that they are people who are good at getting at the kernel of the idea. They work well with the evaluator because they know how to be both advocates and consumers.

MB: Yes, they are left-and right-brained, comfortable with both verbal and the visual, and skilled at synthesizing information. I've had the most success as an evaluator working with exhibit developers.

RK: Yes, they have special skills for understanding difficult ideas and making sense of them.

MB: This seems appropriate to the exhibit medium. If they also have project and management skills, its an even bigger plus.

Describe the dynamic of the evaluator and the exhibition development team.

DDH: I can't stress enough how important it is to have developers out there with visitors doing interviews and surveys, getting first-hand experience with their audience. We did this at the Maryland Science Center for the Mathematics exhibit. It was not only excellent staff training, but it served as the core of our initial formative evaluation of efforts.

MB: I think one of the first jobs of the evaluator is consciousness-raising with the exhibit development teas.

RK: I find I act as the team's conscience. I become part of the team and force team members to set up goals and objectives. And I 'm the one who remembers them and brings the team back to them during the process.

MB: Yes, I agree with the ideas of science, it's always part of my role, being the reality check. I don't want the goals and objectives written up and then just left in a drawer. I also teach the team how to formulate goals, translate them in to objectives, and how to check progress against them.

RK: And also to broaden how to think about goals and objectives; that visitors' experiences are both cognitive and affective.

This, in particular, has been in the literature for a long time, but from what you're saying, it sounds as if it hasn't gotten in to practice. Does this suggest that developers don't make good use of the body of work already produced by evaluators?

DDH: I think evaluators used to see their role as solely the purveyors of evaluation, but now they are taking on the added role of audience advocate. They hold the team accountable to the visitor-related objectives they've set. They're the repository of evaluation information, so having an evaluator on the team adds additional expertise in this area. The team can have someone who knows how to get information from visitors and who can also offer a critical appraisal of how they're doing. And evaluator can give information opinion as a quick assessment based on years of research and can also check it with the project specific evaluation.

BMB: The last issue of *Exhibitionist* defined criticism as different from evaluation. A "critical review" is one person's viewpoint of an exhibition. They may be informed and base it on experience, but it's still just a personal view. Evaluation is the assessment of a group reaction. There is also a middle areas called "critical appraisal," which is critical review by a trained evaluator which brings knowledge of years of visitors studies to bear on the review. It can be very valuable as an introduction to an evaluation: glaring problems can be found easily by the experience the evaluator beings to an exhibit to eliminate the gross errors. But the danger is the tendency to take the voice of the visitor. This is contrary to how evaluation works! There are differences over time: perspectives, situations. You are always need direct input form visitors. I say to the exhibit team, "Think of me as a thermometer; I'm a measuring instrument, not the voice of the visitor.

RK: I am actually amazed at how many people who call me think that this is what I'll provide. I want to do an evaluation, and all they want is my opinion!

This brings us to the question, do developers know what they want from evacuators or from an evaluation?

RK: Lots of times they don't know what they want; It's what their supervisor, or NSF, or NEH wants. They fall short of really knowing what they want.

MB: There is a trend to want to use front-end on a small sample. That's not good—it provides the semblance of an evaluation, but no the substance.

RK: It's the evaluator's job to help the team articulate what they really want—there will probably be some misunderstandings on terminology. The evaluator must go beneath the surface conversation to dig out what they really want.

MB: And go beyond what they think they want, to encourage a more useful study.

DDH: That's another change over the past ten years. It used to be that the focus was on summative evaluation, but now even the funding agencies are more interested in formative and front-end : they want to make the product better and aren't as interested in a final report card.

RK: Yes, I believe Harris Shettel said that a dollar spent on front-end evaluation is worth five dollars of formative. I think front-end is catching on, but people are still afraid of formative and the concept to do a mock-up. But mock-ups can be out of cardboard with markers, on that simple level.

DDH: Formative evaluation can make the product better, but it can also make the process of exhibition development go faster. This is a hidden value of evaluation. It acknowledges that the visitor is the ultimate arbitrator. If the designer disagrees with curator, take it to the visitor. This stops the dissent, puts the issue behind the team, and lets the team move forward. What would make developers better consumers of evaluation?

MB: They need a better understanding of what evaluation is and does. There are as many misconceptions; for example, there is no simple answer to the question "How much evaluation is enough?" They answer is project-specific; it's a judgment call which depends on how much time and other resources you have available. Another misconception is that evaluation gives the audience what it wants and results in exhibits that cater to the lowest common denominator. Evaluation actually allows you to find out enough about your visitors to help move them from their starting point to the experience you meant them to have and the concepts you like them to understand.

RK: Another misconception held by developers is that visitors will make exhibit decisions for them; not so! Exhibit practitioners still have to make hard decisions.

MB: Sometimes people ask how much evaluation is enough to satisfy the sponsors?—I always say two pounds! Seriously, though, I tell them they are asking the wrong question. Instead, they should ask how can evaluation help the team make a better end product and make better decisions during the process. So they need to think about how evaluation helps them answer their own questions.

RK: It has a lot to do with helping exhibit practitioners understand what evaluation is, and the power and usefulness of the visitor's voice in the process.

MB: It's important to realize that an evaluation is not a judgment, it is information to help you make a better product. When the exhibit is done, no one will say "Look what a wonderful evaluation you've done"; they will look at the exhibit and praise the developers. Sometimes this argument is successful in convincing exhibit developers to try evaluation. Other times control issues come up, such as, "It's my process," "I'm in charge," and "I don't want to find out that what I want to do won't work." I think the agencies that are requiring evaluations are helping it to gain ground. They represent the public, not the curatorial voice.

What would make evaluators better providers to developers?

RK: We need to understand them, and they us. We need to communicate effectively—on all levels.

So is it important for evaluators to have experience in the exhibit process?

MB: Yes, but the evaluator doesn't have to be a professional designer or developers themselves.

RK: I think understanding the time it takes to do formative and front-end —and when in the process to do each—is very important.

MB: Evaluation is definitely needs to be in the timeline and budget of the exhibit, or it just won't work. It needs to be planned for at the proposal stage so that time and money will be built in for evaluation.

DDH: Evaluators also have to use techniques that are flexible enough to fit the process. While they may need to stand firm on the need for formal studies in some circumstances, they also need to be responsive ve to short time frames. Sometimes and issue of visitor reaction comes up, and a decision needs to be made in a week. Evaluators have to know how they can provide useful information under these circumstances.

RK: We need to write reports that people can understand, not just all verbiage, but also have charts and graphs and table for more visual people. And I need to ask myself, "What does the museum need?," "What can I give them that will be most useful to them?" I will give recommendations for change if people ask for them—this is part of my job.
How much familiarity does an evaluator need to have with an institution to make useful recommendations?

RK: You need to have a feel for the institution; most of the time people want consultants to tell them what to do with the information. They want concrete recommendations based on the data, I also think that developers and even fellow evaluators need to recognize that this is a

Evaluation Terms:
Selected Basic Vocabulary

evaluation: A systematic approach to data collection to determine the impact of an exhibit or program to visitors.

front-end evaluation: Evaluation undertaken during the plannning stages of an exhibit or program used to find what the potential audience knows and feels about a topic and to help establish the goals, objectives, and content of the exhibit or program.

formative evaluation: Evalaution implemented during the development stage of an exhibit program; involves trial testing successiv e version of inexpensive mock-ups. summative evaluatiaon: Evaluation of the extent to which a a completed project is successful, usually in terms of goals, objectives, costs, time to complete, etc., with no attempt to change the exhibit or program.

remedial evaluation: Evaluation designed to improve an exhibit or program after it has been installed or implemented.

critical appraisal: A critique of an exhibit or program conducted by a professional who applies knowledge of visitor studies literature to assess the obvuioous and potntial strengths and weaknessess of the exhibit or program. This procedure should not replace or be confused with an actual visitor study.

mock-up: An inexpensive simulation of an exhibit or exhibit component, often used during formative evaluation to assess effectiveness before final exhibit is fabricated.

Adapted with permission from Bitgood, Stephen, "A Glossary For Visitor Studies." Visitor Behavior, 8/4.

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journey we're all on to understand the visitor experience. We don't have all the answers, and we don't have all the right methodologies; we're still trying to understand which question need to be asked, and we're still experimenting with methods, to understand how we can do our work better and understand the visitor better. We need to be open about the process.

Has evaluation changed the way institutions view their exhibits?

DDH: There have been lots of changes in the past ten year since evaluations and institutions. Today there is much stronger visitor focus. I remember when visitor-related criteria for success were considered strange. Now I work for and institution that values evaluation so much that evaluation is done at every level of the institution. And they hired me—a psychologist and former evaluator—to direct the exhibits department because they wanted to make visitor focus even stronger. We need to recognize that this trend isn't just result of evaluator's efforts but had been promoted by external forces, such as people with disabilities who have pushed to have their needs met. And I'm not just referring to physical disabilities, as cognitive and cultural accessibility. Demands for access feed off each other, as so the societal pressures that reinforce them.

RK: Yes Also, evaluation has been promoted on the management level. Museums have recognized that they are market-driven and that they want to know their audience. Evaluations studies are a byproduct of the competitive for resources.

DDH: Also, local, state, and federal funding is more competitive. Museums rely on the visitors that come through the door for some of their funding. They must give them a valuable experience, and you don't know if you have achieved your goal unless you do evaluations.

MB: There's been a change in the paradigm; now museums rely economically on the visitor instead of the donor. It 's not top-down, but gate—revenue—driven, so their perspective has shifted.

DDH: I'm always facing tough decisions on where to put my money, in evaluations or in exhibits. I'm always balancing time and money invested in researching ideas., developing vehicles to create the learning environment, and testing to make sure you're on track. Early in planning you decide to set periods aside for evaluation, but sometimes you rely on the quick-and dirty answer that aren't even written down. If a small institution continually does evaluation, it can learn from its mistakes so that, over time, formal evaluation can be reduced in that institution. You develop and institutional state of mind and memory that serves for the next exhibit.

MB: But we never outgrow our need for evaluation: the world, the audience, our knowledge base grows and changes.

DDH: Yes, it's a spiral curriculum. You never get off the spiral, you just meet challenges again and again with a new audience and new subject at a new time.

> If a small institution continually does evaluation, It can learn from its mistakes so that, over time, formal evaluation can be reduced in that insitution. You develop an institutional state of mind and memory that serves for the next exhibit.

Linda Deck is Exhibit Developer and Project Manager for the permanent paleontology and geology exhibits at the National Museum of Natural History, Smithsonian Institution. She worked with evaluators on two exhibitions; a revision to the introduction to The History of Life *and the* Janet Anneneberg Hooker Hall of Geology, Gems, and Minerals. *Each has involved front-end, formative, and summative evaluation. She is looking forward to a remedial evaluation of* Life in the Ancient Seas, *her previous major exhibition project.*

A Designer Is . . .

by Virginia Mahoney

Whatever does not happen by design, happens, by chance!

I thought it might be worthwhile to try to define what texture, spatial relationships, volume, light, and dark, a designer is and isn't-what role(s) best suit(s) designers.

A designer is a decorator, NOT!

I dislike the term "designer," since it conveys to some people a frivolous, decorative function. Design is more than a "surface treatment." Good exhibition design is a visual solution that supports the form of an exhibit, organizes its contents, and makes that content accessible to the exhibition visitor. In addition, design aims to produce an exhibit that is aesthetically pleasing.

A designer is an artist, NOT!

Designer and artist share some terminology (such as composition, lighting, and color), but an artist's work is an expression of a very personal vision that originates primarily with and for the artist. It is often of no consequence whether or not the artist's message is accurately communicated to anyone else. A designer works with content supplied by others. The measure of success for the designer is in how well that individual has visually interpreted and communicated that content to others.

A designer is... a visual problem-solver.

A graphic designer is... a visual problem-solver specializing in two-dimensional communications.

An exhibit designer is... a visual problem-solver specializing in communications that are both two- and three-dimensional.

Through training and experience designers learn to apply various aspects of a visual language, such as color, texture, spatial relationships, volume, light, and dark are taught during the first year as "Basic Design." From this common basis, students pursue specific design pro sessions (such as interior design, industrial design, package design, and theater design). Each area of specialization requires further technical training specific to a field.

A majority of exhibit designers have traditionally come from backgrounds in architecture, graphic design, or industrial design. Although some schools have offered an occasional course in exhibit design, it only in recent years that increased interest has created a number of comprehensive exhibit design programs. Other designers have entered the field through serving an apprenticeship.

The Role of the Exhibit Designer

The experienced exhibit designer brings to a project specialized training and practical experience that emphasizes expertise in the following areas:
- Decisions affecting visitor flow patterns.
- Selection of type style and general handling of typography.
- Selection of colors and general visual tone of exhibit.
- Visual organization of exhibit content.
- Distribution of two- and three-dimensional panels and cases within space.
- Choice of fabrication materials.
- Selection of final visuals (photos, drawings, charts, maps).
- Layout drawings.
- Fabrication Drawings
- Final art for production.
- Oversight of fabrication for quality control.
- Oversight of installation.
- Involvement in any follow-up evaluations for adjustments.

When Things Go Wrong

The same things tend to go wrong from project to project. Following are some of the main problems—and their consequences—I have noted that affect designers:
- Designer is not included in initial planning phase. *Sacrifice of early design input and designer's early input on practical aspects of the exhibit plan, timeframe, and budget.*
- Roles and responsibilities of team members are not clearly defined at beginning calls, we generally *Confusion and loss of time.*
- Designer is erroneously included in time-consuming meetings dealing with content development and refinement. *Loss of time.*
- Not enough concrete information is available (such as rough text and specimen list) at start of design phase. *Confusion and loss of time.*
- The designer, working with incomplete information, will have to revise drawings and plans to incorporate late information. *Loss of time and dollars.*
- Major changes in content or design are requested after approvals have been received. After design approval, the designer sets in motion the many details needed to fulfill the exhibit. Late changes also consume the designer's quickly compressing time. *Loss of time and dollars.*
- Deadlines in planning schedules are not met. When this happens, all the late submissions of text, artifacts, and approvals snowball, compressing time that had been scheduled for the design and produc tion phases. *Loss of time, dollars, quality, tempers and occasionally final deadlines.*

Virginia Mahoney is an independent designer living in Washington, D.C

An Exhibit Designer Is . . .

by Sharyn Horowitz

To understand what it means to be a designer, one must understand how designers are seen by the nondesigners who work with them. I posed that question to a group of professionals at the Association of Science-Technology Centers conference in San Diego. Granted, as any good science center professional would tell you, this is a biased sample.

The discussion grew beyond the bounds of the original question, as we dug into the institutional issues connected with exhibit design.

Good designers are . . .

Designer: Good listeners.

Developer: For me, a good exhibit designer is a good visual communicator, and that word "communication" is important to me. They don't belong to the "decoration" school of thought, nor do they think that the aesthetic is more important than communication. But they're talented at finding a way to meet the aesthetic needs and the communication needs. The second aspect is that they not have the desire to put their own personal mark or style on a piece. They can find some kind of organic design solution that arises from the communication problem, from the particular institution, and from the audience. The third thing applies to developers too, but I see it more in design: they're not self-indulgent. They don't come up with design solutions because they're bored of doing the same thing, the same way, every time.

Supervisor: We deal constantly with [employees] coming in wanting things to be just so, and exhibits don't work that way. Print designers and industrial designers on their first few exhibit projects are extraordinarily frustrated with how messy and loose the exhibit process is. I think that a tolerance for a fair amount of chaos and disorder is essential.

Developer: For me, it's important that the designer cares about the visitor experience, what happens to the people who come there, and whether they learn anything and enjoy themselves.

Supervisor: [Interactives are] intended to teach a concept. You don't have any control over the previous knowledge visitors bring. You may think you've got a wonderful interactive to teach a wonderful concept, but you get it out on the floor with a variety of visitors and in reality it's teaching the opposite of what you wanted, or it's implanting more misconceptions. That's a real struggle for designers. There has to be a lot of communication among the evaluators, the audience, and the designers.

Builder: "Doability." There are designs out there that, while they're very creative and wonderful, are not within the budget or time frame.

Developer: I think actually it's the ability to move between that practical, get-it-done- within-the-budget, and the creative, "The most exciting way to do this is . . ." That they can make those flights of fancy, and then find some way to craft that into something that is doable.

Let me share one more idea on this topic. I was talking to an exhibit developer last night. This is what he said about designers: "The evil soul inside me wants the designer to be my little slave. Output my input; take my raw data and extrapolate. Of course, they're people, not machines."

Producer/developer: As a designer, I spent a lot of time becoming the person that I am with the knowledge base that I have, and if you don't want me to contribute, then do it yourself! I've also been a producer who has had to corral and fight the inclination of a designer to add to or subtract when they don't necessarily know your goal. I think one of the real tricks to smoothing that water out is including designers in the development process so they feel they have the same mission, the same point to make.

Marketer: That almost never happens with a marketer. I try to dig for information and figure out what it's going to look like. And, it turns out to be fairly unclear, at least from my point of view, until quite late in the process.

Developer: The flip side of that: at our institution, we always include marketers in the beginning, and I've never had a single marketer who's been there by the time the exhibit opens, because the museum world was a stepping stone to a better job.

Who should be heard?

Marketer: At my institution, we're in the process of planning a major permanent exhibit, and so far, from what little I've heard about it, it's not very interesting. I'm getting worried about how I'm going to market this thing. I want to be heard now. Maybe some of my insights can help make the it more interesting.

Supervisor: I think one of the tricks about this is getting people to understand that they should come to the process with their problems rather than solutions. "I as the marketing person am concerned that I'm not going to be able to market this. I'm not going to tell you how to do this exhibit any more than you're going to tell me how to do marketing." I think you have to train people to bring you the problem and not the solution.

Supervisor: I think the team has to keep in mind that the reason you're doing this is to educate people. In my experience, a person outside the design process will say, "I think you need to put this in because I can market it because it's sexy." And the designer will say, "We need to do this because it will be beautiful." So you'd better keep bringing everybody back: What's the point of doing this exhibit? The point is to educate people. And yes I will try to balance needs; I'll try to leave as much money as possible for prettiness and add-ons to keep the funder happy.

Supervisor: That's right, but you can also ask, what is it you're worried about? Nine times out of ten what the designer is worried about is what other designers think.

Who's in charge?

Supervisor: The most entertaining and frustrating moments in our projects are when we're all saying, "I can't, because . . ." to each other. The developer keeps saying, "I need to know what space I have before I can . . .," and the 3D designer is saying, "I have to know what the story is before I can . . .," and the graphic designer is saying, "I need to know where the graphic surfaces are going to be before I can . . ."And it goes around and around and around. Well, it's tremendously irritating, as the owner of the company, to sit through these meetings.

> As people challenge themselves more, they contort themselves more, and they pull through. . . . There's an awful lot of ingenious, compassionate, people involved.

> In what I have observed so far, consensus means you're gobbling up time.

Illustrations by Jennie Zehmer

The culture simply won't accept an honest, grounded in experience, estimate of what it's going to take.

But it's exhilarating because it tells me it's working. If we're in tension with each other, then the roles are balanced, and ultimately it produces a good product.

Supervisor: But there is a different model out there: somebody else in this mix who has to write the schedule, set up those milestones, and insist that those kind of chicken-and-egg discussions stop.

Supervisor: Was that your role?

Supervisor: At my last institution it was. This way, those other sets of people could go off and do what they knew how to do.... It seems to me that nobody who's in the project should be held responsible for creating that balance between [creativity and practicality] or how much time it's going to take. I think that's an administrative role, to say to the scientist, "If you don't get this label copy done, on time, on the schedule we gave you, guess what? There's another scientist."

Supervisor: Do you pull the plug, I mean, honestly?

Developer: You have to.

Supervisor: See, I get the call from the chief scientist and, "We're changing copy"—this is true changing copy on an exhibit that opens next week. And I sit there, and my body says NO! and my brain says YES!

Designer: You should be saying, in your next contract with them, I'm going to have a disclaimer about changes... This is the first time I've been to the conference. I came from the aerospace world... Decision by consensus drives me up a wall. Where we come from, the schedule means something; it is hard, budgets are real. Coming this way, you can't cut a budget, you can't stick with the program. In what I have observed so far, consensus means you're gobbling up time. I am looking for a leader that's got the vision, and he's a decision maker. Get rid of the time that's lost in indecisive emotions and action.

OK, why can't we be more like for profit it?

Developer: Because we pride ourselves on being thoughtful, creative evangelists for science. I think as people challenge themselves more, and pull through, they pride themselves on pulling through. In a certain way, it's almost a creative statement about what we are and what we're doing for the visitors. You don't actually want to erase all that from the situation.

Supervisor: There's a difference between reaching consensus and being indecisive. We drew a team of people together solely so they can together create something. And if what I do is say, "UK, I'm the project director, I know what this exhibit is going to look like—all I do is tell them—that doesn't make a better product. On the other hand, if we sit around and say, "Oh yes that's such a good idea," and "Oh yes we'll have to fit that in," it isn't possible to do something like this and come in on time and budget. There's a time in when seeking consensus is over, and if consensus hasn't been reached by the deadline, then somebody is going to have to make that decision... It's no service to the visitor to continue to "persevorate" over your own ideas. The whole point of an exhibit is to have something together, so that you can test it with visitors.

Evaluator: Comparisons to industry break down because what we're doing is creating one single thing that's never replicated. So, it's not an assembly line, it's a completely creative process. It's more like art than industry. And yet, because it's a material thing, the industrial models get applied to it.

Why isn't there never enough time?

Developer: There's this aspect of the creative process where you just want to keep working on it.

Supervisor: We all pretend that it's possible to do these projects under budget. We bid on projects, and we come in in the range of six other firms. We're all lying. Every one of us is lying. We're either undervaluing our work or charging too much for our time, pick one... None of us would ever admit to the amount of time it takes.

Developer: And none of the clients in house or out of house want to accept it. My former institution does exhibit design and development in house. Every year, although everyone loved the final product and thought the quality was unsurpassable, [people] would say, "How can it take that much time—or money?" We did a comparative study of institutions like the Field Museum that we felt did comparable quality and discovered we were about exactly in the middle. But every year there was still the denial, wishing it just wasn't so. The culture simply won't accept an honest, grounded—in—experience estimate of what it's going to take.

Supervisor: I think that's something that's got to go.

Developer: This thing can only persist as long as everybody lies.

Developer: People will say, "OK, we know you have less time, and we know you __ ~ - __money, so it's OK to do less." And on opening day people say, "You know, this one isn't as good as the last one." And we say, "Wait a minute, we sat down with you and asked are you going to drop your standards, and you said yeah, yeah, yeah, we'll drop our standards, just please get it open." And they say, "Yeah, I know, but couldn't you have some more interactives?" So when people don't drop their quality standards, in tandem with dropping time and money, I think everybody gets caught in this vise.

Developer: I've been on both sides of the equation. I've been in situations where I put things out to bid, and sometimes a design firm will come back and say, "You can't do what you want to do in the financial range you've asked for. This is my counterproposal—I can do this for you." I've had half a dozen firms bid on the same project. One firm came back with a counter proposal, and the other five say, yes, we can do it for that amount of money. I chose the higher—priced firm because they were honest.

So everyone in this room has realistic expectations for time and money, right? Then who is it who is living in this fantasy world?

Developer: Let's face it, it's the people who have the money. We are playing and working with other people's money, and the people with the money have the right to be nervous. We'd like them to trust us completely and not be nervous, but they don't.

Supervisor: We may have a realistic understanding of what the actual cost is, but still a lot of the overrun is self-imposed. I fall to the floor in front of my graphic designers. I say please honey, you've been at that computer for four days, please leave this. She says, "No, I want it to be right." The thing is, we're all doing it for ourselves.

Developer: In-house is either worse or better, depending on your point of view. At some point, a consultant goes out of business. A staff member works the nights, works the weekends, is on it all the time, is passionate. And then, guess what, this exhibit meets the expectation.

Sharyn Horowitz is the Exhibitionist's *Regional Editor for the Mid-Atlantic and New England regions.*

On Being An Exhibit Designer

by Dan Tomberlin

A sampling of designers across the country were sent a series of questions. The excerpts that appear here only skim the surface of what might have been-could become a rollicking debate.

What are the pressing concerns for designers today and for this generation? What motivates you?

Abrams: I am motivated by the need to communicate. I am arrogant enough to think that the particular way that I choose to interpret a subject will amuse, enlighten, or entertain whoever sees it. I enjoy visualizing concepts and communicating ideas-I probably should be making movies, but I started at the Field Museum and not Warner Brothers. I don't think that anyone provides a valuable service to society—except maybe doctors and garbage collectors... Design is probably as useful, if not slightly more so, than many other occupations.

Dyer: When the product is good, yes, I have provided a valuable service to my institution and our visitors. Visitor experience is very important to me.

Taff: I suspect not much is different today than yesterday, that's what working in a history museum has taught me. Being a designer has a popular sound that wasn't necessarily there twenty-five years ago, but it's still a misunderstood and under utilized profession. Motivation. Paycheck, of course ... but, working everyday with interesting stuff ... that's it, and being able to share that with others. If you have no desire to share with others, you shouldn't be in this communications business.

Haizlip: Thankfully, the design process remains intact; the will to create is a passionate force, and my "concerns" are of external forces. I am concerned about the overwhelming fascination with computer technology and the pursuit of information for information's sake. I am concerned with the general devaluation of time and the resulting diminishment of quality. I abhor the undervaluation of architects and designers and the scale of compensation (yes, even on the independent side). I am concerned that designers have learned by repeated experience of our poor value and low contributions, and give away services to encourage business, thus cyclically weakening the value of our ideas. Motivation. The urge to create. The sensuality of new ideas, the weightiness of the possibilities, assessing the real and the unreal. Making it happen. Building it. Testing it. The physicality.

Pendleton: The excitement and challenge of creating something satisfying for myself and hopefully meaningful to others, is my prime motivation.

Summerford: I think designers should be concerned about the learning styles of visitors, audience needs, and the "Disney" style of entertainment versus the didactic content of exhibits. I am in the position I want to be in, at the museum I want to be in. I'm having a ton of fun.

Do you think the basic knowledge, skills, and abilities of designers have changed much over the year? How will they change? How are you actively re-inventing your job?

Abrams: The basic knowledge designers need has changed drastically over the last ten years and can be summed up in one word: Computers. Unless you have a computer and know how to use it in your daily work, you are no longer a designer. I suppose some exceptions may be allowed for ... but, for the most part, the computer (along with certain we-know-what- they-are software applications) is the one piece of essential basic knowledge that all designers must have. Having said that, design skills are probably pretty much the same as they always have been: The ability to communicate your ideas visually and to ensure that those ideas are executed properly.

Dyer: I find myself guiding or contributing to more than just the design of physical spaces. I influence or participate in thematic concept and content development; identifying project and educational goals and objectives; proposals and presentations; budgets and schedules; interpretive direction and script writing; evaluation; graphic design; as well as taking a leadership role, when requested, in division management.

Taff: I don't know if skills, etc., have changed... The basic skills of the designer is the ability to see... It's a vision thing... So what's to change? The tools? Brain implants?

Haizlip: A designer's skills remain the same —problem solving and invention. Information changes, tools develop, technologies are enhanced. We use that stuff. However, the change I most detect in our profession is specialization. Individuals, groups, companies specialize in particular aspects of design or technology management. I re-invent my job by providing services of value to exhibit-related institutions. For example, we have added a fund-raising component to our services to create... renderings and models for capital campaigns. While at one time this was an out growth of the design process, it was of such value to certain institutions that we redefined it as a separate service. I cannot allow re-invention to "happen" to me—it would spell the end of my business.

Pendleton: Obviously, the technology revolution is changing the knowledge and skills required by designers today. My own work (as a mural painter) has not been as affected, yet. Perhaps I will eventually have to adapt and embrace the computer world, or be "left in the dust."

Summerford: I think that all designers will always be able to manipulate points, lines, planes, colors, and textures. Translating those basic skills into good exhibitry is another matter.

How important is technology? We deal rapidly with massive amounts of information, fed to us using technologies that discourage reflection. Do you feel that you are expected to make decisions and solve problems with the same speed and lack of contemplation?

Abrams: Yes, exhibit designers must embrace technology. However, technology is expensive, and however much we would like to have many technological toys in-house, this is not always possible. But designers should be knowledgeable about what's out there, and you can always hire someone that knows all about the latest steam- powered pencil. Read *Wired*.

> **Unless you have a computer and know how to use it in your daily work, you are no longer a designer.**
>
> **As I stay in one place, I can shape positions to fit my interests, talents, etc.**
>
> **I am concerned with the general devaluation of time and the resulting diminishment of quality.**

Dan Tomberlin was Exhibitionist *Regional Editor for the Mountain-Plains and Southeast regions.*

We can engage, hold, and educate visitors as effectively with "low-tech" approaches as with the latest in expensive, flashy technology.

The Designers

• *Cliff Abrams, designer, Abrams Teller Madsen, Inc. Planning and Design, Chicago, IL.*
• *Jenny Dyer, ex. designer/team leader, Denver Museum of Natural History, Denver, CO.*
• *Cavert Taff, exhibit designer, Mississippi State Historical Museum, Jackson, MS.*
• *Reb Haizlip, designer and architect, Williamson Haizlip Pounders, Inc., Memphis, TN.*
• *Kent Pendleton, independent exhibit designer and muralist, Denver, CO.*
• *John Surnmerford, exhibits manager, Museum of Flight, Seattle, WA.*

There is still a place for pencil and paper. Traditional drawings will always be an important tool to communicate ideas. But, once again, computers have become a very important tool. Given time, the repertoire of tools available to the designer will sort itself out, and designers will be able to choose the appropriate communication tool without too much of a big deal being made about it. These kinds of questions have just become so important because we are in a transitional period where a lot of talented, trained professionals do not know as much as they would like about the most popular (and very useful) tool du jour.

Except for a few superstars (mostly crossover graphic designers or architects), we do not ride the "trends" wave. The reason for this is pretty obvious. Print is ephemeral, and the volume is great. There's always room for another fad. An exhibit is meant to last. What museum director wants to make a million-dollar investment in an exhibit having labels that are absolutely illegible-but trendy?

Generally, I feel that the new technologies do, in fact, discourage reflection. We're getting to the point where overnight is not fast enough, and I feel that this increased time pressure has left less time at the creative end. I want more time within a project to develop a creative solution or an innovative approach.

Designers use knowledge to manage information. Always have, always will.

Dyer: I do not think technology is our glass ceiling. I think it is wise for a designer to use any medium available that meets the needs of their visitor. Our experience here has shown us that we can engage, hold, and educate visitors as effectively with "low-tech" approaches as with the latest in expensive, flashy technology. Not that we don't take advantage of technology, but we are careful to not include it just for its own sake.

Must we "embrace" technology... as it relates to the tools of our "design" trade? I guess my answer would be the same. Do what works. I love my computer for word processing, project and schedule planning, budget tracking-I wouldn't attempt these things without it. But I don't understand how it works and frequently have to call on our systems person to bail me out. All our print and exhibit graphic designers use computers, and some of their output is in the form of digital imaging. Our exhibit design team has a CAD system, but we are only beginning to scratch the surface of its capabilities (very steep learning curve!).

I definitely feel there is still a place for pen-and pencil design. There is a magic that can happen in the creative design process that is stimulated by the feel of pencil on paper and the accidental possibilities that are revealed through successive overlays. There are certainly parts of the process that can be vastly simplified using the computer, but I don't, at the moment, feel that computers can provide the spontaneity and reflection that often produce the heart and soul of a good exhibit experience.

I hope exhibit designers are not on the same "wavelength" as designers in the editorial, market, and commercial design world. Because visitors do not use our products in the same way as they do those of those other disciplines. Their solutions would not be successful in our settings. Riding trend waves is not the same thing as knowing your visitor and providing an accessible product secured through a thorough development, design, and formative evaluation process.

As an exhibit designer, I am constantly using prior experience and knowledge to assess and "manage" new information. This new information "informs" my previous knowledge. It is through this process that I am able to create new solutions. Since I find myself unable to deal with the massive amounts of information available in the world today, I am selective about what I expose myself to. Somewhat of a recluse, I guess, but I usually wait until I know what it is I need to find and then seek out and open myself up to the "information" that will meet those needs.

Taff. I don't understand the electronic highway crap. I'm a designer. All that stuff are tools. They might help you, but they can't make better design; they cannot synthesize. Our profession is one of visionary folks who are problem-solvers. It is our brains that have to figure out the problems and solutions, to see the answer and move everybody and everything toward that solution. We learn pretty quickly that our solution isn't always the only solution, and hopefully we learn to adjust; to recog-nize and articulate why other solutions are workable or not.

Haizlip: Everyone wants to know how to manage technology in our professional and intellectual lives, yet the technology changes faster than our ability to comprehend the bulk of its applications.

My company struggles with this question as we seek to strike a balance between what we need for production and what we think we want for growth, an argument that not coincidentally divides largely down age lines. Technology is however an undeniable and permanent aspect of our lives. Yet it is extremely important to view technology as a tool through which we enhance our design skills. It is not artificial intelligence, it cannot replace the activity of creative thinking and problem-solving.

Designers, particularly exhibit designers, have to contend intellectually and emotionally with the virtual worlds of Disney, Spielberg, and other companies who bring enormous financial resources to the technology table, and who create amazing feats of environmental simulation. And as ours is a visual and largely environmental world, it is impossible to ignore these advancements. They are seductive and desirable, but unobtainable for most of us.

Pendleton: I think there is an information overload in general. Personally, I'm saddened and frustrated by the faster and faster pace expected to produce work for every project-and for less money!

Summerford: Technology is very important to exhibits. It is only a matter of time before visitors will expect to have some type of "virtual" experience. Electronic tools... help design. I find that they enhance my capabilities, however, I still start with pencil and paper. I think that because the pace of change in museums is so slow that trends are not as prevalent as in the mass market. Electronic tools are just that; they don't necessarily force you to make a bad decision. But to be savvy in their use, you must know how to manage the information they convey.

In many museums, exhibit design is moving from thematic, iconographic, or chronological development to interpretation based on issues, agendas, ideas. What new challenges do you see? Are there other design trends that are encouraging or discouraging?

Abrams: Yes, it's valid. The organization of an exhibit should be flexible, according to the goals and objectives

of the exhibit: What do you want to accomplish? There ought to be no conceptual barriers as to how the goals are realized. The most discouraging trend in museum design affects all other areas of museums as well: Lack of adequate funding.

Public institutions will only continue to suffer as the public perception of the arts-and-most education continues to be regarded as superfluous—if not dangerous. In purely visual, interpretive, and aesthetic terms, I think that the further development and use of computers in exhibit design work will help make museum exhibits more visually interesting and serve to strengthen interpretive strategies. We have already seen that the median level of all design work is raised by the possibilities inherent in using the computer as a design tool. Exhibits will probably be designed much the same way they are now for the indefinite future-although the tools may change drastically. I am assuming, though, that people will continue to get out of their homes and onto the street. Given that assumption, actual objects and experiences will continue to allure.

Dyer: I don't know whether or not that is an accurate assessment of trends in museums, but I have produced an exhibit recently that was thematic [as well as] specimen —and issues—based. It was very challenging and has been very successful. Just the realization later on in the development process that what we were doing was an issues—based exhibit was pretty exhilarating.

Probably the greatest challenge for the team was to explain that it was issues—based to Administration and help them to understand why that was different and what that difference meant in terms of our approaches and solutions. It was also a challenge for us to fairly present all sides of the issue; to not take sides or get on our natural history/conservation soapbox. I'm not saying bias should not be evident in an issues or agenda exhibit, but we made the decision that it should not be in ours if we were going to be successful in stimulating thoughtful discussion between our visitors and between visitors and the institution.

For the design and interpretive staff, the trend toward "out sourcing" is very disturbing. We have developed an excellent in-house product that we don't feel can be duplicated by outside vendors who are not "tuned in" to our institution or our visitors.

Taff: During the sixties we wanted to integrate everything and set about at this museum to be all-inclusive-as best we knew how—only to find today that the subject matter "needs to be" separated, polarized, identified on its own. We are a little confused; we wanted to have everything in the mainstream museum... everything to be mainstreamed, subjects looked at as part of a whole, and the whole looked at, too. It's a little confusing. [designers can]... set the agenda by providing the vision—that is a consensus-plus. Consensus alone isn't enough; it must have a little extra something to inspire, to strive for.

Haizlip: I have over time grown to resent the perception of vulturism that is often associated with consultants and independents. I immensely dislike the suspicion of our out stretched hand, seemingly only solicitous of institutional dollars. At one point the Association for Youth Museums denied consultants and independents access to its membership list and mailing addresses. It was presumed I suppose that we would harass the members by asking for work and advertising our services... While it seems to be changing as cultural facilities downsize and "out-source" services, it still perceptibly exists. I would like to change that.

Pendleton: I prefer to work as a contractor in most instances. My experiences in a staff position have led me to conclude that many institutions, especially larger ones, are mired in bureaucracy and ego conflicts, which stifles individual creativity.

Summerford: Designers can set the agenda for their institution by being advocates. As long as advocates are articulate, people will listen.

Does the "team approach" work?

Abrams: The jury is still out on the team approach. I am leaning toward the idea that less is more. An exhibit should probably be done by one subject-matter specialist (curator, developer) working closely with a designer. The problem we ran into in following up on exhibit teams for the Kellogg Seminars was that, not infrequently, after the team had done their work, the director, or other powerful individual, would thwart what they had accomplished — either arbitrarily or by withholding funding. Additionally, new teams tend to be assembled for each new project. This leads to a lack of cohesiveness and unity of conceptual vision apparent in the weakness of the final product. At the very least, in the absence of a single, strong project director, the team should have had some experience working together.

Dyer: Parts of it work, parts of it don't. We use the team approach to interpretive development consisting of a curator (scientist), an educator from the Public Programs Department, and an exhibit developer from the Exhibits Division. The process is cumbersome and fraught with senseless turf battles. The expertise in informal education and exhibit content and design development (in our museum) lies in the Exhibits Division. Much of the time and energy of the interpreter and designer is spent in the painstaking process of diplomatically "fighting" with these other team members over what is or is not appropriate for the exhibit medium and how to best deliver content to our visitors. (We are fortunate to have a full-time in-house evaluator, but her findings are often dismissed by the curator or educator if they don't agree with their bias.)

Time commitments are always an issue since no work may be done without the other team members, and they are almost never available to work on the project (since doing exhibits is not their primary function.) But when everyone is on the same page, and good ideas are being born and nurtured, its a great process. The teamwork that often occurs among members of the Exhibits Division accounts for a good deal of the reasons why we continue do this work!

Taff: We were invited to be part of the "team approach" groups. I had hoped that my colleagues would start to "own" the exhibits... I don't think it worked out that way. It does open some folks up to other perspectives, but I suspect that's a personality thing. On these museum teams, the designer, remember, is the one trained in problem-solving, synthesizing (whatever that is), and ego-burying, [and] therefore is often the real leader.

Haizlip: Clients expect us to lead, manage, and design in an atmosphere of consensus -building and responsibility for budgets and schedules. The key for us is consensus -building, as we thrive on a reputation that is erected on trust. We do not work in a vacuum but collaborate on projects to build the greatest spectrum of support with clients. The team is composed of the client and the designer. Trust is the issue

Pendleton: I've been involved quite a bit in the "team approach." It works well as long as there is a spirit of cooperation; otherwise, the most aggressive, assertive personalities often prevail.

Summerford: I used the team approach in graduate school for my thesis exhibit, and it has been the only chance for me to use it. At this museum, the team approach is the preferred mode, and I find it to be the most effective — provided that all team members are team players. It doesn't take much to sabotage a team, the team leader must not let it happen.
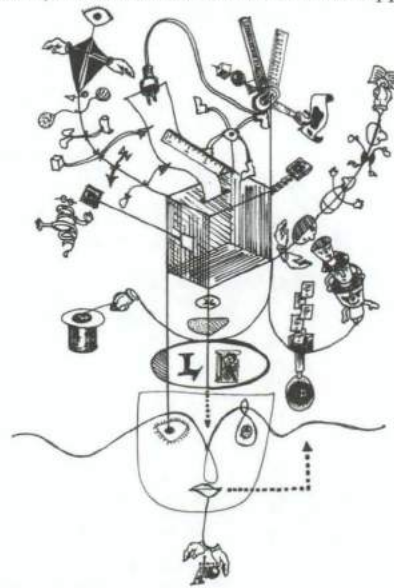
The exhibition design process.
Illustration by Dan Tomberlin.

A Designer Looks at Interpretation

by Diana F. Cohen

Putting together this special issue of the *Exhibitionist* on "exhibit interpretation," I thought about how wide open for interpretation that term really is.

For my own inspi-ration, I looked to my longtime friend and colleague KennethYoung.

Kenneth Victor Young started his career as an exhibit designer in 1964 at the Smithsonian's Office of Exhibits, assigned to the National Museum of American History. He then spent 20 years at the Smithsonian's Office of Exhibits Central. A celebrated painter, Mr. Young has shown his work nationally and internationally.

Why don't we assume, for the purpose of discussion, that "interpretation" refers to telling a story using the exhibit medium. Let's see where that takes us.

How do you see the designer's role in exhibit interpretation?

KY: Everything the designer does is interpretation. The designer has to grasp whatever information is being delivered and find ways by which that information can be communicated to its audience through several levels of information. Interpretation changes to fit subject matter, and the designer has to be sufficiently flexible and knowl edgeable to create an environment that is appealing and accessible to the exhibit's audience.

What do you mean when you say an exhibit has to be "appealing"?

KY: I mean having a space that is recognizable-say, as an entrance to an exhibit, well lighted, having the traffic flow under control-with punctuating interest points along the exhibit trip, or story.

Are "appealing" and "accessible" linked?

KY: Let's define "appealing" as that which makes one want to enter; which makes one feel comfortable. "Appealing" sets the mood for what's on display. Along with color, texture, typography, juxtaposition of size and forms, and so forth. Do some things big for emphasis, use a triangle, a square...

What is an example of how design has set the mood for the display?

KY: In the Washington installation of *"Degenerate Art"*: The Fate of the Avant Garde in Nazi Germany, Smithsonian's Office of with which I was involved, Frank Gehry designed these heavy oak-library-type cases that one could lean on. These cases, because of their robust-ness, somehow made you feel the heaviness of the story, in space, along with the gray tones of the walls, the predominantly black-and-white of the didactic panels.

Contrast that with the *Louis Armstrong* exhibition I did last year for SITES: I used a lighter, more elegant library-type case using fabric in the background and inside cases and a rosewood detail from a framing sample.

What about an example of the process of making interpretive choices?

KY: Years ago I did a *Gandhi* exhibition at the National Museum of American History. I went to India, which gave me a whole new way to think about interpret-ing the material I had available. I found a folk motif in the wheel, or *mandela,* that in particular inspired me. I shifted the emphasis of the exhibition to the people of India-which is after all what Gandhi is all about. I physically made the room round by having a round kiosk in the center, which was filled with common objects found in India—stuffed elephants, puppets, textiles. On top of this I used slide projectors with lap-dissolving units to show India's peoples and landscapes in a way that made you feel you were there. With the help of Richard Conroy, the exhibition's writer and co-developer, we made a timeline around the room with black-and-white photographs fit into the proper time sequence of Gandhi's life.

How did you manage to avoid the pitfalls that timelines can present? How did you use words and pictures to your advantage?

KY: By keeping it focused—on only Gandhi's life. Orange and black, dates in large type... We strove for a synthesis between words and pictures so that, together, they interpreted ideas.

Did the Gandhi exhibition work?

KY: Yes—people stood and read every word as they went around and heard Indian music, smelled incense burning. We didn't limit ourselves to just the visual sense in our approach. The then-Ambassador of India told me that as he took in the exhibition he felt he was in India.

What do you say to people who say that designers' overriding concern is to "make it pretty"?

KY: The designer has to take an almost scientific approach to addressing this misconception. The designer must persuade the client that the designer's concepts enhance the content, not the other way around. Aesthetic concepts do not exist in a vacuum, for their own sake. That is, in a heavy machinery exhibit you would not use delicate cursive italic type, which might be appropriate for a lace exhibit. You'd use a bold typeface, reflecting the bold/heavy lines of the machinery, the subject of the text. You'd also use your aesthetic sense to make accessibility judgments. If an exhibit is not physically, visually, and conceptually accessible to its audiences-then you have not succeeded.

How can a designer successfully pull off *a "point-of-view exhibition"; one in which provocative subject matter is handled in an unabashedly subjective manner. How can the designer facilitate an understanding of the "author" and of the author's point of view?*

KY: Hollywood. Disney. Why not a mannequin with a picture flashing or his face, make him talk, contextualize his point of view, his tone of voice, the clues that his demeanor and his speech give about the person who is as much a part of the exhibit as the exhibit itself.

On the other hand, contrast this with the 19th century printing presses at the National Museum of American History. How does one show these massive machines? One way is to set them on a platform out of context... *or* one can build a room in which these machines were actually used, create a period setting. Get involved with architecture, interior design. Promote the feeling that existed when these machines were used. These machines worked. The American History Museum hired a person to work these machines. The exhibit's been at American History for 25 years.

Do you ever think about interpretive choices you might *have made in a particular exhibit?*

KY: Sure, sometimes I fantasize... Choices have a lot to do with budget and with individual visions of what a particular exhibit should be. Sometimes I come up with a plan, and the curator has a different interpretive vision. So I go with the curator's vision, to keep the project moving. But then I don't always buy into the final product. The compromise is not always a good one.

What are some other thoughts about what you personally bring to the exhibits you design?

KY: As an African American I bring to the table certain experiences and feelings. This was true with the *Gandhi* exhibition. And I was sympathetic to Louis *Armstrong.* We all do bring certain cultural ties. This is a good thing—but that doesn't mean that only black people can design "black shows." On the other hand, making a proposal to the National Civil Rights Museum at the Lorraine Motel in Memphis, Tennessee—it was politically expedient to have a black team do the presentation.

Beyond expediency, what do you think are some effects of cultural ties on interpretation?

KY: Cultural and social ties affect your decisions. I don't think there's any way to get around that.

Have I had trouble being an African American designer working in a predominantly white institution? Not much. Because I think one has to be intelligent enough to negotiate. (That's a whole other article.)

I can tell you about *Music Machines American Style* at the National Museum of American History. The curator wrote a label that she entitled, "Coon Songs." Although that was the original term for this musical form, I objected to its contemporary use. I "tested" the label by showing it to a black security officer. He reacted poorly. When I relayed this feedback, the curator grabbed the label, threw it at me, and said, "Do whatever you want to do." Well, that label got changed. And—after 20 years—the curator and I are still friends.

Diana F. Cohen, Editor of the Exhibitionist, *has been an exhibit editor at the Smithsonian Institution for 12 years. She was on assignment at the National Museum of American History as part of the exhibition team for* Land of Promise.

interpret— to explain or translate to construe, as in "to *interpret* a silence as contempt" to give one's own concept of, as a role in a play to translate.

Ralph Appelbaum on Being an Exhibit Designer

by Willard Whitson

One of the country's best known figures in exhibition design speaks out on the role of museums and the role of museum-exhibit designers.

It is sometimes too easy to say, "I want to accomplish this, let's do an exhibit."

Illustration by Willard Whitson

So why don't we start at the obvious place? How did you get into this profession?

RA: I was trained at Pratt for industrial design. Product design, environmental design. In '64, when I graduated... the Peace Corps had just been announced. I was lured to a program that took me to the Andes in South America... and spent two years there working and went back for a third year in southern Peru. My job, as a volunteer, was working with indigents who were producing things for entrepreneurship. They had trouble selling because by the time they got the ceramics to the coast, they were all broken. We got involved in teaching them how to pop corn and use it for shipping. We were able to increase their ability to deliver [intact] ceramics from about forty to eighty or ninety percent.

[We] worked in everything from weaving to rug making. Along the way, [I] started to see what happened to material culture, particularly in indigenous cultures. Some of it ended up in stores... some in museums. But all of it is laced with fascinating tales of its process of manufacture as well as stories of the people that made it. Because it was working in an essentially pre-technological society, it was extremely basic. One could see how that country utilized its cultural patrimony... and it got me into the museums in Peru. And when I got back from three years in Peru... in the late sixties, early seventies. I got a position heading up an organization that worked with design schools and with the IDSA [Industrial Designer Society of America] to design products that could be made by handicapped people in sheltered workshops. This was part of the Great Society programs. I spent two years doing that, developing again strategies of how people lived. Then the programs were cut, and I got into Robert Gersin's office.

Robert Gersin's office was wonderful. It produced lots of interesting people: Louis Nelson, Larry Porcelli, and Murray Gelberg. I spent three years with Gersin then went with Loewy for a few years heading up his Bicentennial exhibition projects.

We've been in [my own] business for about 25 years. It has grown from a couple of students. I was teaching at the time at Pratt... and went off with a few students to a loft in Soho... and we were able to get a couple of commissions. The very first one was *Gold of El Dorado* at the [American] Museum of Natural History. From there [we] did a number of projects at the museum. We received a few other commissions that started to be recognized by the NEH. Modest exhibits. They all tried to use kind of an immersion approach. Creating a strong environment that was heavily metaphorical to a story and the message of that story.

Give me an example.

RA: *The Treasures of the Temple of Myor*, was a series of wraps and canted walls and literally put you in almost an archaeological site and allowed you to move through the space... getting new vantage points to the objects. Some of the vantage points you see if you visit the [actual] site, which is where a lot of these ideas came from.

Much of my experience has been to concede to the oracle process of revealing or collecting materials. That became part of the environmental metaphors. And then also trying to boil out the extraneous in a certain way, both in terms of structure and in terms of information, but in fact the information got denser... it got more focused. I started to surround myself with people from different disciplines. What this office finally grew into 75 people; there may be four or five industrial designers and four or five architects and four or five writers and four or five technologists and four or five childhood learning specialists and four or five editors.

All of a sudden, it ended up becoming a collaborative group focused on a number of major philosophic themes. The kinds of museums that require at lot of interpretation, are usually not the art [museums]. We rarely do art museums. Only museums that seem to rely on the power of their experience to create a positive link to the visitor.

What do you mean by that?

RA: That it is not just encountering the real, it is encountering the real in context. In [a] context that would support the story. We started to think a lot about story, about narrative, about image and about other arts that utilize structure to tell a tale; performance art, theaters, movies, dance, even moving through a city. What kinds of events happen to you and how to package that into experiences that often were sequential. Often integrated into a multiplicity of voices of victims, perpetrators, witnesses, observers; of scientists and users so that the omnipresence of the curator could somehow be mediated by other voices. And the notion that it was essential to utilize the unused space in most galleries.

Looking at museums, most gallery spaces really tend to be generic. The hallways, the passages, the linkage spaces. When you think about what museums are... the stewards of shear acreage, it seems that half of [the space] was devoted to the public and half of it was related to stuff. The public half was not infused enough with information and a sense of environment to help support the story behind the stuff. So we started to look at ways to activate the interiors, which meant a reshifting of how resources are used. We started spending money on literal and abstract metaphors or even contextual elements that made the whole environment actively support storytelling. We started to call [ourselves] interpretive designers. We were experiential designers. That it was for us to make the field better so that folks... could see in exhibition design, a way to engage their intellect and knowledge in [creating] these highly complex, whole environments that really separated us from treating exhibition as furniture... or as objects. Instead treating it as an interior architecture that supported the overall theme of a story. As those shows became more and more popular, we started to get more commissions. And we also decided not to take any corporate [projects].

Do you ever turn any projects down?

RA: We have never been in that position. Our thought was, let's take the very smallest projects and the largest projects in the field. The small ones almost act as practice to the large ones and give us a chance to train people in... a broad-based approach. A broad-based collaborative approach where we act as facilitators and catalysts, and really try to let the project grow. Where at the end, everyone has a real investment in it. Not just the designer. What we have tried to represent is a resource museums can essentially graft onto their staff a team from our organization. We devoted ourselves not to a dialogue with style or fashion... but rather a creative dialogue with information, so that the exhibition environment and physical presence was in service to science and information rather than in service to design.

So you would not say there is a Ralph Appelbaum style?

RA: It became a style because no one else could afford to invest much front-end work in the development of the content, which we did under normal conditions... kind of avoiding the natural propensity to design, which is what we are all trained to do. The one thing that we are trained in, [in] industrial design, is to give you twelve different ways from Sunday how to make a hair dryer look. And to justify every one based on it being ergonomic or good for production. There are all sorts of ways of making design make sense. And so we said no, we don't want to respond too quickly. We would much rather that the designer sit down and read a book than start sketching... just yet. And if they do sketch, they sketch as agents. They bring stuff to the table, but as agents of the collaborative team.

How do you respond when somebody says, "I don't want to get involved with the process, here is a bag of money?" Do you attempt to educate them or dissuade them from that approach?

RA: We educate them because everybody wins if they simply refocus on their resources. You end up in fact getting a much more solid design that is rooted in the developmental team. Everyone knows how it got to be the way that it is. That has produced projects that worked.

We found that [what] we constantly talk to our clients about is quantitative and qualitative measure. Because we need to know how our success and how their success have been measured by their management. Coming at a time when where there is less and less access to money, and old-style philanthropy is drying up, and the typical sources of funding are gone. It becomes even more critical that we don't birth form too quickly because of the costs of creating it. Not just the designer costs, but the carpenter's costs, the physical costs. The costs of cutting trees. The cost of it all requires that it be a much more deliberate process. And so we focus very much on the process.

Over the years, [we have] developed a process that is eleven phases with hundreds of target points that serve as a guide to our designers and our clients about what they can expect when. So over time, we stayed within the cultural, natural history, and physical sciences. We did not move away from those kinds of exhibits. We did not do trade shows. We did not go anywhere else other than museums. From pro bono services to multimillion dollar five-six year contracts.

All of which are tied around the idea that there is a way of reaching a consensus that can produce this kind of

public communication with very specific goals. The goals are to make sure that people are focused on the idea of having a lifelong love of learning in public environments. That they find it; a satisfying experience.

And that we hope that clients understand what the limits are to the experience because it is limited. You won't remember the dates of the Battle of Hastings, but you can walk away with a deep, understanding of the way things evolved and the way that people adapt to environments. Because, you in fact, engage with it as almost a member of the community that the project is about. We tried to do that in the dinosaur halls [American Museum of Natural History]. We try to do that on the planetarium pictures [American Museum] to maybe turn the visitor into a journeyman paleontologist or astronomer. So that they understand what science is.

The dinosaur halls at the American Museum and the Holocaust Memorial, both in a sense are emotional topics. Obviously the Holocaust Museum because of its horrific stories. The dinosaur halls are emotional in another sense if you think in terms of passion that people have for dinosaurs. . . certainly with young visitors. The style of both of those exhibitions are, I think, wildly dissimilar. The dinosaur halls seem very clinical and rigorous. You opted not to do large-scale reconstructions of dinosaurs. You lead with the fossils. Most visualization is either small models, small line drawings or in some multimedia. At the Holocaust Museum there are profoundly moving objects, for example, the large railway car. The experience of encountering that object is emotionally powerful. How were the decisions made in taking those two approaches?

RA: To me they are done in exactly the same way. I don't see the separation.

Well superficially, stylistically, they seem different.

RA: They both present evidence of the event. The reason why you don't see any reconstruction in either place is because we only tried to work with evidentiary materials. We tend to believe that either most institutions don't have the resources to create more contextual things, and also philosophically, it seems wrong to create things that are not real.

We tend to think that the only currency that museums really have are encounters with the real stuff. It is the [one] thing that makes them different from most discretionary time or leisure time activities. Encounters with fantasy and fiction through movies and through other forms of fictionalized engagements as opposed to the museum, which presents you with a nonfictional engagement. Real materials, real stories. In fact, what we know or don't know about real stories, about real events.

So the Holocaust, just because it happened fifty years ago, we were able to go out and find objects that can tell the story of the chronology of events. We also wanted that project to be, in fact, not so much about what Germans did to Jews, but what human beings do to each other. We wanted it to be a trigger for discourse. In fact, we see all of our projects as essentially agent provocateurs. They are not ends unto themselves, but mechanisms by which the public can either engage more in the museum, buy something in the shop to take home and read, buy a CD-ROM, pick up a book at the library, and ideally talk to their children about.

In fact, we see all of our projects as essentially agent provocateurs. They are not ends unto themselves, but mechanisms by which the public can either engage more in the museum, buy something in the shop to take home and read, buy a CD-ROM, pick up a book at the library, and ideally talk to their children about.

And I was going to say have a discussion.
RA: Exactly. We describe both those projects as being triggers for discourse. In the case of the dinosaur halls, they are real triggers for ethical discourse because it is filled with ethical decision making that comes out of the work of science. That is why every time there was a controversial aspect of the information, there is kind of a "warning label" to the public that this information is still being talked about. We are unclear about its full meaning.

The same thing holds true for the Holocaust Museum, where it is a trigger for moral and ethical discourse. That is what we hope that parents talk to their kids about on the trip home and on the weekend. They are about human culture and human society in both cases.

You mentioned the labels that talk about what you don't have, you can't have. I have had some conversations with curators who don't like that. Who feel that it is in some way apologizing. How would you respond to that?
RA: [The labels] only came about because of curators, if they can't agree among themselves, we surely did not want to take sides. I think, part of going through the Museum is not just seeing the materials; it is seeing the work of people who often are invisible to the public. What we have been hoping to do in all of our projects is, to have people see people that we think are heroes, which are people of science, people who really think about where we have been, who we are, and where we are going.

So any opportunity that we can let the way they think come out, we encourage. So much so, that in the dinosaur hall, even though the main paths were written by a popular writer, the writing in the alcoves is the writing of curators. And it is filled with all of the curatorial vagaries that are necessary to get people to understand the extraordinary process that science is about. We thought that was a way to open up the museum from being a dead, didactic, array of stuff and turn it into a lively, intellectual dialogue.

So I am surprised if scientists feel that we should have been a little more hard about that. I think it is healthy to show all that. All of that stuff is screened on the back of glass which could be scraped off and changed [laughter].

I think that they felt any acknowledgment of fallibility is somehow undermining the mission of the museum.
RA: Well I would think that the mission of the museum is to have people truly understand how science works. What science is. One of the problems that young people have with science is feeling that science has the answers. They are so humble to the face of this solid-body of knowledge that if they are in anyway uncomfortable they simply don't answer it. They don't enter the dialogue. They don't enter the information. So our view is every time a

scientist says, "I think this, but my peer thinks that," we may never know the answer. This makes science human.

That is one of the consistent themes of Stephen Gould's writings. I think one of the reasons he is so popular is that he constantly stresses the human aspects of scientific inquiry. That scientists are people and they are subject to all of the prejudices and biases as well as the wisdom and the insight of anybody else.
RA: There is a great view of humanism that I think museums have not tapped into, that I think would allow them to tap into a much broader audience.

Speaking of tapping into the audience, how do you feel about focus groups and the whole evaluation process. Audience surveys. Do you have evaluators on staff?
RA: We do evaluation. We just finished a project where we used national focus groups. We actually hire firms to go out in twelve key cities around the country, and put together a group, and pose certain questions. I think all things are fair to help understand how a museum works. Over the years I have seen focus groups and information used in different ways. Museums are essentially political institutions. Potentially everything is political.

I was going to say that all institutions are political.
RA: And museums, particularly museums that touch so deeply into who people are and how they think about the world. Especially natural history museums, where you are dealing with time, and evolution, and approaches to culture. Especially when it is a museum that is a western construct dealing with constructs in a society that has become so diverse. Unless the focus groups have a very strong and solid position within the museum, [the situation] can once again fall into the political complexity of the museum environment. So we have been fairly careful in how we use the information.

I think it is because we are really at the first generation of the integration of museum education in the public programs and the exhibition programs. Most museums that I go to pay a lot of lip service to their education department. But in fact, many education departments are simply not empowered to have real effect in terms of true public programs. They do fine with the schools. They do fine in the program part of the museum. I think that until museums really can integrate the education, along with design, along with formative evaluation in a truly collaborative way... Like all Information, it needs to be vetted seriously during the course of the project. When it is done, how it is done, who does it. All of that has to be looked at.

This is why when we do a project, the

people that we want to talk to most are the board. We want to know what the board is thinking... how the board has empowered their management. We want to know what the management is thinking. We want to know what their mission, goals, and strategies are for their institution before we even advise them to do an exhibit.

You asked a question before about have we ever turned down a job. We have not turned down jobs, but we convinced people not to build exhibits as the best mechanism to reach their strategic informational goals, because it is sometimes too easy to say "I want to accomplish this, let's do an exhibit." Sometimes we recommend that they do a television program, or a teacher package, or kiosks distributed around the community. We don't know yet what the right way is in terms of an expenditure. We don't think it is always exhibits.

So what has happened to us as initially starting out as exhibit designers is to keep stepping back from the actual exhibit design product and look more closely at the broader motivations of the institution in terms of what it wants to do. Then try to develop a program where what an exhibit can do, what its true costs are, and what it should be, are balanced with other ways of reaching the goals. Sometimes it is an exhibit. Other times it is not.

You're working with me on the biodiversity exhibition. When we [the American Museum] were first developing this project, it was going to be a temporary special traveling exhibition. When the decision was made to make it a permanent hall, a number of curators objected. . . feeling that if this was to be permanent, it needed a narrative structure, which is difficult in a permanent hall. That it is a topic better suited for other media— specifically television, or film, or a book. Some felt very strongly about this. They felt that it was an impossible topic because it is a topic that changes continually and deals with abstractions rather than a collection of objects. How do you respond to that?
RA: Well you must have made a decision to do both because you also announced the creation of a biodiversity center.

That actually preceded the exhibition.
RA: I think that because of that and also because of certain components that you are thinking about... dealing with real-time information, dealing with the ability to create product from the experience of being at the museum, in terms of public opinion, in terms of access to information that can be taken away. Access to information that can be shared outside of the museum environment. This hall is a new paradigm of what a natural history museum could do, which is information. And it is about real-time information.

Which seems to me to be a real trend in a number of projects that we are doing. All of which are seeing themselves not just as exhibit galleries but as points of convocation... points of form and dialogue. All are being wired for capabilities to create forms where people can take home the product of that dialogue. Can bring down information from a data stream... package and edit that information in ways that make it usable and distributable to schools. So that you are not just handing out paper teacher guides or products that people can take home. But you are possibly even handing out media—and not canned media, but media that really reflects the current week of their visit, or in one project, even the current day of the exhibit.

So if museums are going any place in that direction, the biodiversity hall will be one of the great examples of a facility that can engage the public in as diverse a way as their natural proclivities lead them. Museums are so competitive for people's discretionary time [now] that they can't afford to preach to the choir. They must address the audience in the broadest levels of diversity. And not just physical diversity, but cultural diversity and intellectual diversity so that we have a chance of becoming a natural and normal part of people's leisure. Not a special event to go to the museum. But a natural place to go to find out what's new. In the same way that you would turn on a news program, you had better go to the museum to really see where people who work in these fields are taking our understanding of ourselves.

Any disappointment? Any outright failures without giving away projects or clients names? Have you had projects that just did not work or you feel is not what you should have done?

RA: No. We have been involved in projects where we did not have enough control and where the philosophy of doing the project was not well founded amongst the various partnering groups. Or we felt that a project did not really represent our, at least, philosophy or approach. We are hoping that [our approach is] broad and general enough—that it becomes integrated into the educational process. Our ambition is for the field, not for projects. We have great ambitions for the project, but in fact, they are examples, we think, of what would be an important new field.

There are only one or two schools in this country where you can get a degree in exhibition design. What I would like to see happen is that what we do, what all of us do that is part of the field, is to develop a program with certain values and ethics that are not [just] exhibit-related.

But step back from that and look broadly on what our contributions can be to help people. To be part of the measuring device of social evolution. Because we would like to see

museums, museum exhibitions, and museum experience as part of the cultural products that we make for ourselves. It is part of literature, music, and the arts. It is a way of taking the barometer of where we come from and where we are heading.

With that in mind, part of the motivation for doing this issue of the Exhibitionist *about designers had to do with people continually asking,* "How do I become Ralph Appelbaum? How do I get into the field?" *So to carry that further, what kind of advice do you have, since there are so few schools where one can get training in this field? What do you recommend? How should one school oneself?*

RA: Read, travel—literature, human experiences. Engage yourself in what the world is like. One of the first questions that I ask people is about what they read. I mean the one thing that we, as an office, can get are people with technical skills. It is what they are trained to do in school. They are trained to move abstract design elements around and are good at it. There are a lot of really good designers everywhere. The difference comes in really understanding what one should design and how that destiny meets the diverse requirement of the institution.

It always goes back to the museum for which we are only temporary stewards. The museum will go on forever. We have this great opportunity to help it become more of itself. One of our big jobs, as designers, is to hope to keep museums centered; to show that out of real information you actually can make it entertaining, exciting, and a wonderful experience. That you don't need the tricks and tools of the entertainment industry to lure your audience. That your audience is going to come if you are true to yourself.

So a lot of our work is trying to preserve great ideas. Preserving concepts from being chipped away after the developmental process. Preserving the clarity of the individual contribution that everyone makes to creating this kind of communication. And hopefully, helping each institution become more of itself and more rooted in not just conserving and preserving the cultural patrimony. And not just in sharing it, but sharing in ways that are deeper. In ways where people have a sense of [a] shared social experience that is profound. Where people have a reverential experience with human accomplishment and the work of nature. But ultimately it is all in human accomplishments. What we come to know about ancient structures—what we developed.

Now we are in this second generation of natural history museums, where the first hundred years was systematic organizing. We now have this chance to really tell stories about how [we] come to know it and what it can mean. Which is of course the theme of the three halls [Planetary Science, Earth Processes,

and Biodiversity Hall] at the American Museum, which are in many ways groundbreaking. We have placed the three of them together as the intellectual construct of... What we have come to know about the origin of the place that we live and everything on it. It is an amazing experience of storytelling, but it also has deep social and ethical reverberations if we do it right.

What are you reading right now?

RA: A book on... the first three minutes of the universe and the last three minutes of the universe. They are two separate books. I am sort of curious of what happened and what is going to, even though there is a lot of time in between. I look at a lot of things. I try to scan a lot of stuff. We pass around a lot of things in the office, we share a lot through magazines, media, surfing the Internet.

Speaking of the Internet; has technology changed the process of developing exhibits for you and also the product itself?

RA: Yes, of course... in profound ways. Last night I had a chance to look at some of the earlier ideas of the plans which we are going to be doing for your hall on a Silicon Graphics machine, and I was able to walk through it virtually. We are deeply devoted to modern measurement. We have lasers cut a lot of the parts so we can speed up model making.

I would say that the biggest difference is that we are able to compress a lot of information and provide it on the gallery floor or near the gallery floor. Information compression [allows us to] access to a lot more information. Particularly the issue that you talked about before, which is being able to make museums seem more on top of what is happening. We are currently completing a project where they have their own dish; the museum will be taking in live feeds from a geosynchronous satellite, and basically creating their own exhibit overnight. That is part of the project... part of the exhibit. That they will be creating the media that the public sees the next day.

Where is this?

RA: In Washington D.C. at the Newseum. So here is a project that will deal with science, sports, public events—world events, and politics and it will be doing it in real-time. And many, many channels of it. You won't see the pre-canned, the already canned.

Why have a museum? What is the advantage? You are already getting edited feeds, which you get in your living room.

RA: The real difference is that we are taking the raw feeds, and pointing out the kinds of decision making—professional, ethical decisions—that have to go on in choosing pictures and laying out front pages and writing

headlines. Because the news industry is such an avaricious processor that we need people to understand, and they want people to understand the multiplicity of ways that it is processed. The different kind of lenses a single story can go through.

For instance, one of the things we are doing is providing visitors with the morning newspaper from every state in the union. It never could be done before. No one has ever seen it before. Even people in the field. More and more papers are being digitized, which means that before it even gets to a printing plant, we can have it over the telephone lines and have full-color output. To hang on the wall, every morning, how a single story plays regionally is great interpretive stuff.

The same will hold true for the news wall, which contains these dozens and dozens of feeds that will show what is out there. Now a lot of it is boring. It is a camera being left on live at the White House until someone walks through a door. So it is not doing anything. But in fact, what it will put on one surface is a 130-foot-long screen, 12 feet high. Almost a city block long. It allows us to talk about ethics, and about journalism, and what journalism is. It gives, I think, the public an insight that you don't get out of the canned news.

This project was interesting to us because it was the first attempt at trying to make essentially a national museum of news and journalism, mainly because most of the stuff is on floppy disks these days, and is washed away, you don't get reporter notebooks anymore. It is all on the Powerbook, and so it disappears.

So we thought here is something to really try to preserve, which was the process by which we come to understand the world. We are doing it. We have it today with the electronic news service. With its promise fully revealed, it is virtualism as it should be. It should be virtualism. It is not, but it will be. It is just like all technology: people's expectations are way ahead of reality.

I don't usually think of your firm doing art exhibits per se other than within the context of natural history museums. How did the Whitney project come about with the Hopper exhibit?

RA: It's an interesting story. Well, we were asked to bid on it. I went and said, "You know what, we really don't want to, we are not [the firm for this job]; we are interpreters." And we got a letter back saying that you said so many bad things about why you should not do it, we realize that you should do it. So give it a shot.

It came about because the museum wanted a new audience. We have been very lucky, most of our shows have, most of the time, almost all of the time... surpassed... attendance numbers. They were willing to do a cultural exhibit on art history. So the museum really had the idea. So it came to us as interpreters and culturalists

to do something, that was very different from what the Whitney normally does. They thought it would be a way to bring in a new, younger, audience. They did not know about film noir. They did not know about the thirties and the feelings of America.

So the show was entitled, *Edward Hopper and the American Imagination.* The centerpiece of the show was a film about his cultural connections. Writers who really affected him. He loved Raymond Chandler and Robert Frost. We took quotes from those writers and set up three sinks within the gallery where curators laid out paintings that in a way had qualities of human experience touched upon by those writers he read.

We developed a new brochure concept. Normally they hand out three-paneled folders that we were able, with careful shopping, careful design to produce as a shirt pocket-sized booklet with color pictures of his art and an essay that would fit into a T-shirt pocket. Because it was a summer show, we wanted people to take it home and remember the experience. That is what finally happened. We produced this little giveaway.

We thought it would become something that the museum would do all the time: produce a miniature version of these books. But we were soundly trashed in the press. Not all of the press, but *The New York Times,* and Robert Smith is very conservative, and Hilton Kramer who is wildly conservative felt that this is the worst thing to happen to art museums—to bring a mediator in between the viewer and the art. However, the crowd attendance broke all records. It was mobbed.

So on one hand the museum was not unhappy, but the stuffed shirts of the art community felt that this was a no-no. That you don't provide context. And they complained about the chairs. We took out the museum benches and put in nine chairs that were from his paintings. Well, they were new chairs, that had been built for many years, that you see in all of his work. Kind of very stiff chairs. And they thought that was ridiculous. The walls were not white—the walls had a very subtle cast of colors.

We opened the wall to reveal one of the windows. And try to give a view of an anonymous apartment house across the street that was sort of odd. We let the window open. They usually have that window sealed. We tried to empower the exhibit as much as we could so people could find hope. So that we could encourage a new kind of audience for the museum. We think that is where other museums, art museums, could go as well.

Do you think it's where they should go?

RA: I think there shouldn't be any rules... it isn't that there shouldn't be any rules, but the rules need to be made in the best interest of the museum, as reflections of the society, and as, ultimately, entrepreneurial facilities. I worry for the museum if it comes to control particular constituencies, the audience—that is the past of museums.

And by particular constituencies do you mean boards of trustees, curators?

RA: The particular points of view that the museum, should reflect, refract, and respond to, are the cultures they are in, in the institution's best interest. Museums know what their mission is. When there's a war, they take the stuff and go to a salt mine and no one hears about it for five years until they come out and start sharing it. They know what their bottom line jobs are, which is to conserve and preserve the stuff. But the ways that they share it, the mechanisms that they use to share it, must [be] broader, easy, logical, good.

Because they don't have their allies anymore. Museums have to find their own road, and they have to find it in a society that is not attuned to museum life. People say, "Why aren't there more African Americans in our museums? Why can't we bring people from uptown back to our museums?" It is because we don't advertise to them. We don't nurture that market. We don't bring them in and work to get them in our museums.

Sometimes it is intentional.

RA: So if we truly design for our true audience, and we truly design for diversity, it means we market for that diversity. It means we promote those people to come to us and don't just leave it up to the schools.

Willard Whitson is Vice President of Education at the Philadelphia Academy of Natural Science and NAME's Technical Advisor. Formerly he worked as an Exhibition Developer at the American Museum in New York.

Critical Thoughts About Design

by Kevin Coffee

If we assume that there are such things as good and bad exhibitions, are there qualities that are found among all the good ones, or all the bad ones?

If the opinions found elsewhere in this edition of the *Exhibitionist* are indicators, the answer must be an equivocal maybe. Undeterred, I am going to share a few observations of my own about design features that might be considered during your next critique.

Objects Are the Thing (We Came to See)

After all the supplemental and interpretive material has come and gone, the knotty reality of the museum's collection is where the subject resides.

Without a doubt, the deadliest exhibitions I have seen are those where storytelling is being attempted without any or any significant physical examples. Even if authentic specimens are unavailable, re-creations may be crucial to drawing the connections a museum exhibition may be presumed to intend.

There are certainly a variety of methods that can be used to present display collections or their reproductions. The placement of these within the exhibition are central to making it work.

Graphics and Text We Can Understand

Interpretive graphics and text are supposed to translate to subject at hand for the audience. Successful translations do not simply convert from one language to another. Graphics should attempt to reveal hidden aspects of a display and contribute to a comparative analysis.

Decorative treatments should not be confused with interpretation, just as an abundance of words should not be assumed to be an explanation. Of course, it's also silly for developers to contrive an unnecessary severe limit to the number of works used in a block of label copy, but exhibit developers are not incapable of silliness.

The best method for developers to review interpretive graphics and text is, simply enough, to do so during development with members of the intended audience. Conscientious summative reviews of interpretive materials can help you fix whatever is broken.

A Welcoming Demeanor

What is the first thing you see as you approach the exhibition space? What kind of feeling do you get as you enter the gallery? Do you gradually get lost in a maze of inner rooms? Are you overcome with claustrophobia? Are you ever anxious to find the exit?

At some point in the development of museum programming as "public education," responsible parties began to design pathways in exhibition spaces in order to organize a story. Chapters work well for books, why not exhibition halls?

Whether every visitor is conscious of it or not, experiential learning is fundamental to a museum visit. Part of our experience is the feeling we get when we put ourselves in rooms full of Egyptian art, or articulated skeletons of dinosaurs, or wonderful collections of life-size habitat re-creations. The spaces we build to house these displays should be as evocative as the displays themselves. Why create interior architecture that acts as a trap, physically or emotionally?

If you design your gallery as a forced march for visitors, they will inevitably attempt to escape.

Noise We Could Do Without

Sound is an important sensory ability. You can design an interior to amplify ambient sounds to maddening levels, or to suppress the hubbub and create the contemplative surroundings your exhibition deserves.

Since audio reinforcement has become so inexpensive to deploy, electronic components are perhaps the greatest contributors to second-hand noise in contemporary exhibition design. It's not just the placement of speakers or reflective surfaces, it's as much the unnecessary use of sound tracks for every damn little gee-whiz.

Carpeting and other soft materials used as surface treatments can be important solutions to limiting the noise in an interior space. So can the judicial treatment of audio reinforcement. You don't have to design narrow passages or hard surfaces into an exhibition, and you don't have to put a sound track on every single module either.

Lighting and Glare

Add to the list of deadly unintended exhibition techniques the Hall of Mirrors effect achieved when you combine brightly lighted displays with lots of polished surfaces. For the less attentive, here's a bit of advice regarding glare: the angle of incidence is equal to the angle of reflection.

A Seat with a View

What's wrong with people sitting in an exhibition?

The cruelest logic used to defend the lack of seating in a gallery is that visitors will sit on it and never leave. (You wish!) This justification coincides well with design schemes that treat exhibitions as rat-mazes or cattle-runs.

Assuming that your exhibition is neither and that many of your audience may just get tired from walking around all afternoon, please provide benches. Preferably, you can design seating that allows visitors to actually view your exhibits.

Designer, Heal Thyself

Don't spend all of your day, every day, sitting behind a desk, drafting board, or computer terminal. Spend some time observing how visitors actually use and respond to your exhibits. Develop an interest in what visitors think about your displays. Develop a questionnaire and record some responses. You may even use what you learn to design the next project.

The deficiencies listed in this essay can be found at museums with large endowments and at museums with limited operating funds. None of the problems I've defined are due primarily to lack of money, and all are remediable. The most egregious mistakes at those that are repeated.

> If you design your gallery as a forced march for visitors, they will inevitably attempt to escape.

Armadillo

Kevin Coffee says he does not belong to any 12-step programs for exhibit designers. He is, however, Exhibition Manager at the American Museum of Natural History, New York.

Conversation Tips for Designers and Evaluators

by Jennie Alwood Zehrner

In the exhibition profession we talk a lot about interactives. As in, What makes a good interactive? How long do people spend at each station? How do people using interactives interact with each other? What was the quality of the interaction? And so forth. I would like to propose a different spin on the topic of interaction in the museum environment.

For Openers

What if we consider the interactive notion from the point of view of "conversation." Presumably, an interactive is based on the idea of engaging an audience, exchanging information, and sparking ideas. Interactives can also be a type of "conversation starter." Think of the difference between a lecture and a public forum and you'll get the idea.

In addition, I propose that the types of conversations, or interactions, we have in the process of making exhibitions affect the final exhibit experience. A strong look at the way we conduct our meetings, phone calls, "lunches," memos, letters, and contracts will show how the process reveals itself in the final exhibition. If our process is lecture-like, for instance, there is a good chance our exhibits will be of the same nature.

It Takes at Least Two . . .

In July 1997 I had the opportunity to open up discussion about these ideas as the session chair of a NAME roundtable for the Visitor Studies Association's Annual Conference held in Birmingham, Ala. Panelists were Diane Oliver, an independent designer specializing in zoos and outdoor exhibitry; James Jensen, VSA student representative and graduate student at Pennsylvania Academy of Fine Art; Rhonda McKay, project developer at McWane Center; and Susan Ward, independent consultant and head of Heritage Communications. The theme of the panel and of the discussions that followed was the quality of conversations in the exhibition process, in particular, the conversations between designers and visitor evaluators.

Thanks to the probing of panelists and audience alike, we came up with some perhaps unexpected and revealing results. What follows are a selective account and my reflections on the roundtable.

Bad Words

Applying a technique designers use to gain an understanding of the experiential qualities of an exhibition, we came up with adjectives that describe typical conversations we have had. Then we listed adjectives that describe the kinds of conversations we would like to have in the exhibition process.

Our first list-the adjectives we came up with to describe typical team conversations-included *clandestine* (big issues are talked about in the bathrooms), *reporting,* *inconclusive, incomplete* (people left meetings without a clear sense of what they were to do next), *cryptic* (there are all types of "insider" conversations in the museum culture), *paralyzing, uptifting,* and the lastly, *adversarial.*

Since teamwork is a major part of our exhibition process, *adversarial* seemed to be an important word to explore. One panelist noted that she had participated both as a designer and as a visitor evaluator on exhibition teams. She found that the teams received her quite differently depending on which hat she was wearing. As a designer she could comment on all parts of the exhibition, yet as an evaluator she was not allowed to comment on design. What goes into such a situation, making it uncomfortable for us to talk freely with each other?

We explored the possibility that designers can feel bombarded or attacked. They hear unsolicited design solutions like, "Make it wider" or "What if you made it green?" One administrator in the audience actually stated that a good part of her time was spent protecting the designer from other members of the team! We acknowledged that evaluators might use their data unfairly as a weapon or as a justification for certain demands.

The reason for bringing all this up is not to place blame for, or to "fix" something that isn't working or to pit professionals against one another. Rather, it is to help us to distinguish the kinds of conversations we are having in the process. Why do we have conversations that are adversarial or disrespectful or inconclusive? Becoming able to distinguish the quality of our conversations opens doors to creating a process characterized by affirmative interactions. That brings me to our second list.

Good Words

Operating under the premise that we are in the business of creating interactive exhibitions-that all exhibitions are intrinsically interactive-we panelists asked, What are the kinds of conversations we envision ourselves having with our visitors, with our administrators, with designers? How can designers see evaluators as a contribution to exhibitions and how can evaluators speak so that designers will listen? What do designers need from evaluators?

One panelist spoke about hearing a designer actually request more research from his team's audience evaluators. He described that conversation as *evolving from fearful to trusting, from forgetful* (filing an evaluation report away) to *applicable* (reading it and using it), from *closed* to *open.*

Other adjectives the panelist wanted to have apply to our conversations were *respectful* ("authentic" respectfulness as opposed to "polite" respectfulness), *conclusive* (decisions are made, and they are made by consensus), *inclusive* (have the visitor and community representatives as part of the exhibition team!), *nonjudgmental, secure* (people, including visitors, are safe to speak and be heard), *directive, fulfilling* (people's questions are

answered, and they know what to proceed toward), *progressive* (we have fresh ideas and are moving on them), *proactive, energizing, exciting,* and, lastly, *creative* (not the sole domain of the designer the whole process can be collaboratively creative).

Setting the Stage for Conversations

How can we set the stage for productive conversations to happen?

Panelist Susan Ward encouraged museums to engage in conversations that build structure and proposed three conversations that could help to accomplish this, as follows: **1) Talk about internal communications.** That is, talk about how we hold discussions and about how we manage accountability for doing what we said we were going to do. Embrace politics, that is, be open to shifting one way of thinking to another. **2) Talk about systems and process.** Because museums are in a sense a unique culture, we often think that systems can't apply to us. Yet systems that address people issues can be immensely liberating. 3) **Talk about the big picture and how your exhibit fits into the greater planning of the museum.** Ask, what makes the exhibition, the visit, and the museum successful.

Tossing around Dialogue

As a tool for achieving these ideal dialogues, I would recommend using the word-association techniques we used during the panel. Also, consider this when you are in your next meeting: What if we conducted exhibition teams like baseball teams, with our conversations serving as the baseball (yes, like tossing an idea around!)?

In baseball there are clearly defined players with defined roles, e.g. pitcher, first baseman, outfielder. These players throw the ball back and forth to each other for their fans' enjoyment and for the love of the game.

In baseball there is a clear sense of teamwork. When the first baseman goes out to catch a pop-up, the pitcher covers first base. If someone "drops the ball" it is an error and the whole team doesn't advance.

Baseball has great statistics, from RBIs to batting averages to success against a left-handed pitcher. Managers use the statistics by deciding which players to put in at various points in the game, e.g. pinch hitters, base runners, new pitchers. Statistics also serve to keep the players from taking the game too personally. Lastly, no matter what baseball's outcome, win or lose, there is generally a sense of having played hard and played fair and that tomorrow is another day, a new game. (Otherwise, who would want to keep playing?)

A Conversational Challenge

Now that the ice is broken, I'd like to know your thoughts on these issues. Please be in touch with me by e-mail me at whorledpeas@worldnet.att.net. Or let the *Exhibitionist* editors hear from you.
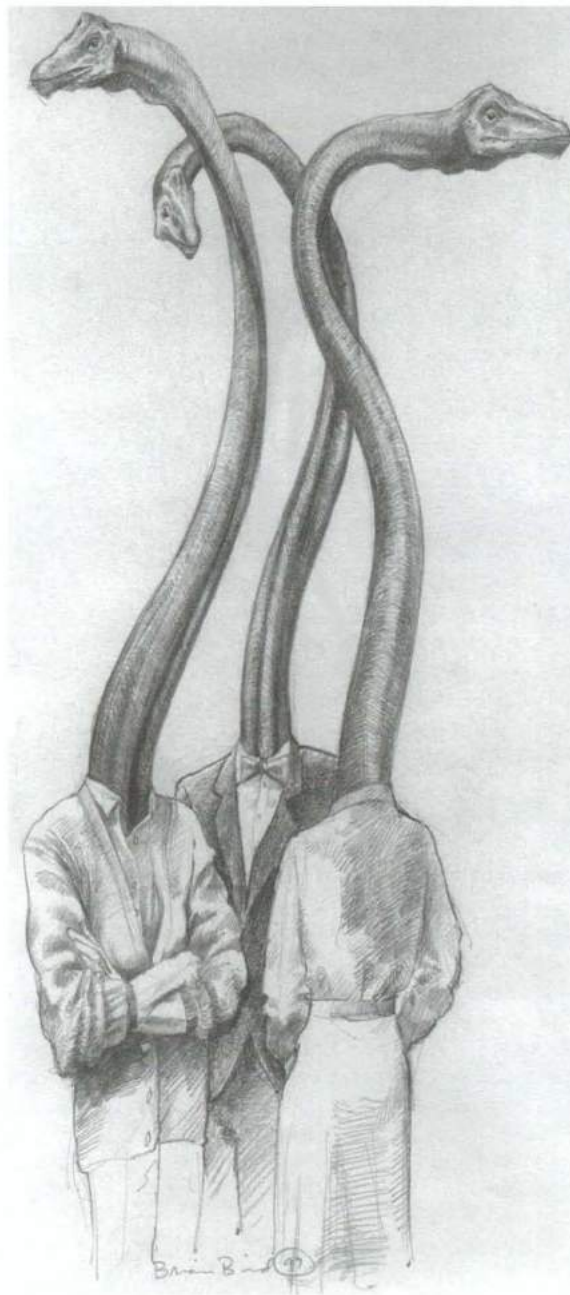
Illustration by Jeannie Zehmer.

Jennie Alwood Zehmer is an independent museum professional currently working as Exhibition Project Manager for McWane Center and as a freelance designer. A version of this paper is under review for the 1997 Visitor Studies Proceedings.

Growing up NAME

by Don Hughes
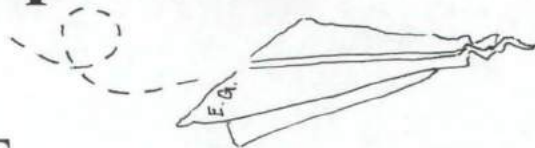
Today I'm afraid our organization is so diverse that we are not addressing many of the issues that originally brought us together, and exhibit designers are still largely undervalued, underpaid and definitely under represented.

During the past 20 years, exhibit designers seem to have become willing co-authors of a destructive self image. We helped create and then buy into the flaky artist/ designer stereotype.

Twenty years ago the American Association of Museums (AAM) and the museum profession at large rarely addressed issues about exhibit design. In the late 1970s, a small group of designers who found that unacceptable got together to work to change that condition.

We wanted the exhibit design profession to be respected both nationally and back at our home institutions. We wanted the design portion of creating an exhibition to be recognized as an important part of the process. And we wanted to be fairly reimbursed for our labor. We did not make a distinction between in-house and out—of—house designers; we just wanted to meet and exchange information with others who cared about exhibits.

Recognizing that there is strength in numbers, we organized around our issues, and our membership grew. We were the National Association for Museum Exhibitions before we became AAM's largest standing professional committee.

In those early days, since exhibit design was not considered an important part of the process, many of us saw the emerging "team approach" to exhibit development and design as a way to become involved. When individuals with expertise in subject matter, and individuals with expertise in interpreting that subject matter for an audience, work together, the project is more likely to be successful than if they had not collaborated.

The team approach seemed to make sense, and we eagerly learned to think and act inclusively rather than exclusively. Following this philosophy, we felt that designers, developers, writers, curators, administrators, and damn near everyone that had a role in the process should be included in our organization.

We broadened NAME's focus from just exhibit design to all aspects of museum exhibits, until we had become so widely focused by so many different constituencies, that we actually lost sight of our original intention to support exhibit design. Today I'm afraid our organization is so diverse that we are not addressing many of the issues that originally brought us together, and exhibit designers are still largely undervalued, underpaid and definitely underrepresented.

Most of AAM's standing professional committees, such as the curators', educators', administrators', registrars', are all advocates for their specific disciplines. NAME, on the other hand, does not currently promote any single discipline. We advocate for the entire process of exhibits. Our mission statement spells it out:

> "To foster excellence in museum exhibition and to aid in the professional enrichment and advancement of all those involved in the exhibition process."
> —NAME mission statement

That's a hell of a job description, but should it be ours? Doesn't that description belong to AAM? It's their job to be the mother of the exhibition process and to represent all the players in the process. By trying to fill the void created by AAM's inability to serve all of its members, NAME has left the exhibition design profession without strong representation. Exhibit designers deserve (as do others in their unique professions) an out-and-out advocate for their domain in the exhibit process, and that's what NAME should be doing.

Some NAME board members are afraid that by focusing only on exhibit design we will lose members and power. I do not agree. We may or may not lose members, but a clearer focus will only help. Most exhibit design issues and general museum issues are not mutually exclusive. I believe that museum folks are interested in the educational, financial, and philosophical issues of our times as well as the development, design, and production of exhibits. So even though NAME will be focused to benefit exhibit design, most of its programs should still have a wide appeal in the museum community.

It's time to acknowledge that from the audience's point of view, the exhibit designer's role is the single most important role in creating an exhibit. In fact an exhibit has its best chance for success, measured by whatever communication goals you wish to set, when the creative effort to bring a topic to an audience is led by an exhibition designer. The designer is often the only person on the team who is able to conceptually understand, organize, and integrate both the physical and the intellectual content of an exhibit at all phases of the exhibit's development, design, and production.

In the past decade good exhibit designers have \learned and grown, and today many of them are ready to be the kind of leaders that museums so desperately need. NAME must be their advocate. If the next generation of exhibit designers are to become tomorrow's leaders, they must understand the evolving "business" of exhibits in museums, and NAME should be their teacher and their advocate.

In these times of shrinking budgets and increasing expectations for new audiences, exhibit designers are, and should be, the backbone of a museum's exhibit effort. NAME's primary tasks should be to give exhibit designers the tools they need to succeed and to show the museum community that it is in everyone's best interest to invest heavily in today's and tomorrow's exhibit designer. What follows are some footnotes and outtakes-a kind of NAME coming-of-age story.

The Gay 90s: Old News

The *Enola Gay* exhibit fiasco is just another signal to us from our not—so—changing world. Haven't we all suspected that our major institutions were so close to the heart of the establishment that there was no way for them to deal objectively with important issues? The canceled *Enola Gay* exhibition was just an uncharacteristically loud reminder that we were right. In the past the pressure and the compliance has been more subtle and quiet.

We seem to be surrounded with plenty of evidence that we are living in desperate times, but before you consider assembling that evidence into an exhibition, remember the *Enola Gay*. If you are a big institution, you will not be funded but you will be criticized and politicized. If you are a small institution, you might be able to acknowledge a prejudice or dispel a misconception or two, but nothing major, only small low-profile stuff

that will not interfere with institutional walletsucking. If you are a public institution that dares to takes a position on an important issue, the *Enola Gay* mentality will somehow make you pay for it.

The traditionally safe path is to continue polishing the art of not asking to make exhibits about topics that might be controversial. Which means we choose topics so large that they don't mean anything. Like, Is it art? Or, Is it global warming? Either that, or we choose topics that are so small that they are trivial.

The *Enola Gay* incident is frustrating because it forces me to confront my feelings of helplessness. Most of the time we don't even need Jesse Helms in our face, we self-edit and self-regulate ourselves into mediocrity. We remind ourselves that it's not really our business to try to teach right from wrong, or try to help visitors understand lessons that may be learned from the past. More and more, our business seems to be entertainment with a little education stirred in. Not education for the visitors' benefit, but to placate the museum's staff.

Today *Enola Gay* says, "Don't talk about this." Tomorrow *Enola Gay* may say, "This is what I want you to talk about." I know museums have the tools to make "crap" look good. With our not—yet—totally bankrupt reputations, with color and dramatic lighting, and with a variety of media that creates just the right environment, we can make the contents of a toilet bowl look great. So what will you do when you are asked to take the next step and not just make "crap" look good, but to use your skills to make visitors think "crap" is good?

What Exhibit Designers Really Need to Get Ahead

Of course NAME should feed the design body with all the traditional two- and three-dimensional design skills and work to validate design's sometimes nonacademic approach to seeing, understanding, and communicating. But perhaps the greatest challenge is to find some way to improve, or at least mitigate, the negative impact of our historically weak language, writing, and interpersonal communication skills. (The NAME Advanced Professional Retreat on Grammar and Punctuation, God help us.)

Foolish Exhibit Team Leaders

Any team leader who does not recognize and fully incorporate the contributions from all the members of an interdisciplinary creative team is a fool. Historically, fools have come from all museum disciplines.

The "Ell in Museum History (Not Exhibits)

When a recent issue of *Museum News* identified the big deals as excellence and equity, they overlooked the really big "E" word that shapes our work life: Ego. Lofty topics such as excellence and equity seem to pale next to our egos. In the past 20 years, not much is new in the world of egocentric museum exhibitions, although we may have defined and filled some new niches. At the top we still have the architect Kings (no Queens) who only work with the executive director and board and rarely seem to know or care about the exhibits. Then there are a handful of princes, such as Ralph Appelbaum and the Kennedy spouse [Edwin Schlossberg]. Then about a dozen heavy-

and middle-weight companies and individual designers that give their customers a variation of their last exhibition so they can bring the new job in on budget (It's OK, it's not high concept, but it's a living.) And at the bottom of the in-house phylum—that egotistic potpourri where exhibits used to be the domain of the curator who has been replaced by a developer who will soon be replaced by the PR and marketing folks is the one true constant of museum life. The in-house designer, always complaining about not getting any respect for his/her ego.

Creating Original Exhibits

The way to avoid cookie-cutter exhibit designs that look like every other exhibit in the world is to support an in-house creative team whose concepts grow from clearly articulated communication goals and whose exhibit designs serve those concepts.

Getting in Touch with Our Inner Designers

During the past 20 years, exhibit designers seem to have become willing co-authors of a destructive self-image. We helped create and then buy into the flaky artist/designer stereotype. We schizophrenically love the role of the uninhibited creative, while at the same time we are desperately trying to prove to management that we can be trusted and we are not an out-of-control creative menace.

The Complete Interpretive Exhibit Designer:
A Partial List

- They love to tell stories, a highly valued skill in primitive societies such as museums and Hollywood.

- They think of themselves as an interpretive exhibit designer whose work serves the main message of the exhibit rather than their own.

- They have a theatrical flare, but they seek simple solutions.

- They have a sense of devilishness and irony.

- They have a sense of humor and are likable.

- They are invigorated by, not tired from, working on a project.

- They know how to use negative space and how to sell negative space to a world of well-meaning co-workers who see a wall without objects as empty.

- They have screwed up one or more important jobs in their career and have been bruised but not broken.

- They have had some formal training and know how to use space, color, shape, and texture to support the objects and not overwhelm them.

- They can communicate their vision to a team.

- They are able to keep the big picture and hold on to the overarching design concepts while paying attention to the details.

- They know all details are not equally important.

A longtime NAME activist, Don Hughes directs design at the Monterey Bay Aquarium.

Of course NAME should feed the design body with traditional 2D & 3D design skills and work to validate design's sometimes nonacademic approach to communicating.

But perhaps the greatest challenge is to find some way to improve, or at least mitigate, the negative impact of our historically weak language, writing, and interpersonal communication skills.
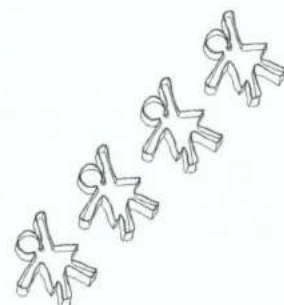
ELEVENTH ANNUAL EXHIBITION COMPETITION

The eleventh annual exhibition competition is the joint project of the Curator's Committee (CURCOM), the Committee on Audience Research and Evaluation (CARE), and the National Association for Museum Exhibition (NAME). This is the second competition in which these three SPCs have combined efforts in evaluating exhibitions. In addition, it is the second time that the judging is based on the document "Standards for Museum Exhibitions and Indicators of Excellence".

Eligibility: The competition recognizes outstanding achievement in the exhibition format from all types of museums, zoos, and botanical gardens. There are two categories for exhibition entries: those with project budgets up to $50,000 and those with project budgets above $50,000 (both excluding staff salaries and benefits). Each winning exhibition will be featured in a Marketplace program at the AAM Annual Meeting in Cleveland and will receive national recognition in the AAM publication Museum News. Staff from winning exhibitions will be expected to present overviews of their exhibitions at the Marketplace on Monday, April 26, 1999, at 3:30 p.m.

Entry Fee: The fee for each exhibit entered is $50.00

Deadline: Entries must be received by January 9, 1999.

How to Enter:

*Complete the enclosed entry form.

*Attach your check, made payable to the AAM Curator's Committee, to the form.

*Include 4 copies of each of the following materials to be used in judging:

1. Set of slides (not more than 15) depicting a walk-through of the exhibition. The purpose is to give a sense of the exhibit as a whole and not to highlight individual objects. Videos that supplement the exhibit may be submitted as a fulfillment of the "optional materials" category. Each slide should be labeled with the institutions name.

2. Narrative (not to exceed 10 double-spaced pages) that addresses the appropriatepoints in the enclosed document "Standards for Museum Exhibitions and Indicators of Excellence," which cites the criteria for judging entries.

3. Label text. Include the whole text, if brief; otherwise, the major concept labels and samples of subordinate labels.

4. Brief description of associated educational programs and publications.

5. One-page exhibit budget with total cash costs and major subcategories. Do not include staff time.

6. One floor plan of the installation.

7. Evaluation materials. What methods were used to gauge the exhibit's effectiveness in presentation of concepts to the intended audience? Include results. This may be incorporated within the ten-page narrative.

Award Criteria: The exhibit will be judge based on the document "Standards for Museum Exhibitions and Indicators of Excellence."

Optional Materials (please also include four copies if possible)

Exhibition reviews from media.

Publications, such as catalogues, visitor guides, educational materials, promotional brochure(s), exhibit-related programs, and videos, not to exceed five items. Please label each item with the museum's name and the exhibit title.

Please separate the materials and collate into four sets. Send entries to:

CHRISTINE C. NEAL, COMPETITION CHAIR
TELFAIR MUSEUM OF ART
PO BOX 10081
SAVANNAH, GA 31412
TEL. 912/232-1177; FAX 912/232-6954

FED EX/UPS TO
121 BARNARD STREET
SAVANNAH, GA 31401

Please note: The SPC sponsors are not responsible for lost or damaged entries. All entry materials become the property of the Curator's Committee and cannot be returned. Entrants agree to allow AAM and the SPC sponsors to use photographs of winning exhibits, at no charge, in AAM publications. Entrants warrant that they have the right to allow such use. Institutions will be credited in any published reference to winning entries.

ELEVENTH ANNUAL EXHIBITION COMPETITION ENTRY FORM

Museum Name: _____

Museum Address: _____

City/State/Zip: _____

Phone/Fax: _____

Exhibition Title: _____

Contact Person: _____

Budget Category: _____ up to $50,000 _____ over $50,000

Exhibition Category: (circle one)

Anthropology	Art
Children's	Natural Sciences (including zoos, gardens)
Physical Sciences	History
Other (describe): _____	

AAM Region: _____

MEMBERSHIP INFORMATION

Statement of Purpose

The National Association for Museum Exhibition—the Standing Professional Committee on Museum Exhibition of the American Association of Museums—was established to provide an organization which can aid in the professional enrichment and advancement of all museum exhibition professionals and further the goals of the museum community. NAME was designed also to provide a source of broad dissemination of information on the conception, planning, design, conservation, fabrication, installation, and maintenance of museum exhibitions and to serve those sharing these concerns.

MEMBERSHIP BENEFITS • Two issues of the *Exhibitionist* • Two issues per year of *From the Prez* • Six issues of *Exhibit Builder* magazine* • Representation of professional interests • Exhibit-related workshops and seminars • Products and services information • Participation in future programs and projects

Your membership can make the difference!

Please fill out the application on the reverse and return it along with your annual membership dues check *made payable to NAME*. Please send your application and check to:

NAME has three **membership categories** each of which entitles you to all the benefits of membership listed here. The categories and annual dues are:

Regular—$25.
(this is most of us)

International—$35.*
(because it costs a lot more to mail)

Student / Retired—$15.
(you know who you are)

Please check your category in the appropriate box on the reverse.

Exhibit Builder magazine not included for International members ▲

N   A   M   E
1220 L Street, NW • Suite 100-270• Washington, DC   20005

MEMBERSHIP APPLICATION

I am using this form to:	❑ Change address or survey information only (no dues)	❑ Become a member	❑ Renew membership #
My membership category is:	❑ Regular member **$25.00** dues enclosed	❑ International member *Exhibit Builder magazine not included* **$35.00** dues enclosed	❑ Student or retired **$15.00** dues enclosed

I wish to support NAME programs in addition to my dues. My contribution of $ ⬚ **is enclosed.**

Name	Title
Organization	
Address	
City	State Zip Code
Ph ( )	Fax ( )	E-mail
Credit card # (Visa or MC)	Expiration Signature

❑ **I am an AAM member • #**   ❑ **My organization is an AAM member • #**

❑ I am an in-house museum professional   ❑ I am an independent museum professional

For all members: The information you provide in the survey below will be part of the NAME member directory, an important vehicle for sharing information within our profession. Please use the survey to indicate those areas in which you would like to be listed as an information resource or commercial provider. **Choose up to four**, number 1 (most important) to 4 (least). Note that the most general areas in the survey—such as Architecture / Interior—may include design, consultation, production, materials, products, equipment, and/or information.

Up to four areas of your expertise and/or business endeavor

AI ❑ Architectural / Interior	ET ❑ Exhibit Development	LA ❑ Live Animal Facilities	SF ❑ Security / Fire
AV ❑ Audio-Visual Presentation	EE ❑ Exhibit Equipment	MA ❑ Mannequins / Automata	SG ❑ Shipping / Packing
CO ❑ Computers in Design / Office	EV ❑ Exhibit Evaluation	MU ❑ Murals	SI ❑ Signage
CE ❑ Computers in Exhibits	EF ❑ Exhibit Fabrication	MP ❑ Museum Planning	SN ❑ Special Needs / Accessibility
CN ❑ Conservation	EI ❑ Exhibit Installation	MS ❑ Museum Studies	SP ❑ Specimen / Artifact Preparation
CS ❑ Crafts	EM ❑ Exhibit Materials	OD ❑ Outdoor Exhibits	SR ❑ Specimen / Artifact Replication
DM ❑ Dioramas / Models	EP ❑ Exhibit Production Management	PC ❑ Photography / Cinematography	ST ❑ Storage / Handling
ED ❑ Education	GF ❑ Grants / Fundraising	PE ❑ Planetaria	TA ❑ Taxidermy
EN ❑ Environmental Controls	GR ❑ Graphics / Illustration	PR ❑ PR / Advertising	TI ❑ Technical Information
EX ❑ Exhibit Design	HO ❑ Holography	PB ❑ Publishing / Printing	TE ❑ Traveling Exhibitions
	ID ❑ Industrial Design	RG ❑ Registration	VS ❑ Visitor Services
	IN ❑ Insurance	SH ❑ Safety / Health	OT ❑ Other _____
	IT ❑ Interpretation	SD ❑ Script Development	
	LI ❑ Lighting	SC ❑ Sculpture / Casting	

Send application and check **payable to NAME** or credit card information to: **NAME, 1220 L Street, NW Washington, DC 20005**

Alabama, vacant
Alaska, vacant
Arizona
Larry R. Warner
Museum Exhibits Designer
Arizona Museum for Youth
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602 644 2468, 602 644 2466, fax
Arkansas, vacant
California, Northern
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Kentucky Historical Society
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Layfayette Natural History
Museum & Planetarium
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cdeal@linknet.net
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Maine State Museum
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Baltimore Museum of Industry
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Baltimore, MD 21230
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410 727 4869, fax
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Dearborn, MI 48124
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projarts@compuserv.com
Minnesota, vacant

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rsipes8471@aol.com
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406 728 3476, 406 543 6277, fax
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Nevada, vacant
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New Mexico, vacant
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North Carolina
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Schiele Museum
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North Dakota, vacant
Ohio, vacant
Oklahoma
Brent Beall
Omiplex Science Museum
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Oklahoma City, OK 73111
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Society
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Medford, OR 97501-5926
503 773 6536, 541 734 4939, fax
exhibits@sohs.org

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& Pounders, Inc.
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703 550 9766, 703 550 5065
Washington
John Summerford
Museum of Flight
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Seattle, WA 98108-4097
206 768 7118, 206 764 5707, fax
Washington DC
Carol Garfinkel
PO Box 11461
Takoma Park, MD 20913
301 563 6978, 301 563 6979, fax
carolgarf@aol.com
Wyoming, vacant

Thought about joining AAM?

The American Association of Museums (AAM) is the national organization that represents museums and museum professionals. Founded in 1906, the association is dedicated to promoting excellence within the museum community. The AAM's commitment to excellence has led to the development of a variety of programs, meetings, and publications.

NAME, the National Association for Museum Exhibition, is one of the Standing Professional Committees (SPC's) of the American Association of Museums.

For more information about AAM membership contact:
Kathy Maxwell, AAM
1575 Eye Street NW, Suite 400
Washington, DC, 20005
202 289-1818

About the *Exhibitionist*

The *Exhibitionist* is a **forum of the National Association for Museum Exhibition (NAME),** whose mission is "to foster excellence in museum exhibition and to aid in the professional enrichment and advancement of all those involved in the exhibition process."

Submission Format

Queries are welcome.

Articles must be typed, double-spaced, in paragraph form, and checked for accuracy and completeness before submission. Include captions and courtesy lines for artwork. Conclude article with preferred by-line.

Artwork (preferably black-and-white glossies or illustrations) should be enclosed with manuscript. Incorporate caption/credit material in manuscript. Please label each piece of artwork with your name, and article title. Include **self-addressed stamped envelope** to have material returned.

Computer diskette submission, accompanied by hard copy, is encourage. Please identify format.

Positions-available and positions-wanted listings are free of charge. Please submit in concise paragraph form to the editorial staff by Jan. 15 (spring issue) or July 15 (fall issue).

Editorial Policy

Opinions expressed are not necessarily those of NAME. Material may be edited for purposes of clarity and space.

To Contribute

Contact **Whitney M. Watson, President,** Missouri Historical Society, PO Box 11940, St. Louis, MO 63112-0040 314 746-4592, fax 314 746-4548, wwsqrd@aol.com or **regional editor**—see inside back cover.