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Preparing An Exhibit at the Smithsonian, 1884
The AAM Annual Meeting is only a few months away. With that meeting my term as President of NAME will end. I want to take this opportunity to recognize the efforts of the Officers and Board Members that have helped keep NAME a vital organization for the museum profession.

Developing programs for the AAM Annual meeting along with directing efforts in producing regional workshops have been Greta Brunschwyler’s principal responsibilities as 1st Vice President/Program Chair. In the last two years, NAME has had a tremendous presence at the AAM Annual meeting. Each year there have been a dozen or more sessions addressing new ideas, providing nuts and bolts information, and offering opportunities to critically assess the work of our profession. This past year, Greta has added to her duties by taking on a major role in organizing and running the Exhibition Competition.

The tasks associated with keeping track of NAME’s members have been frustrating and often repetitive. Despite those drawbacks, the job is critical to the success and vitality of NAME. Through the efforts of Linda Kulik, NAME has been able to track membership during the transition to AAM maintaining the membership database. Linda has also produced the last several member directories and stepped in to edit an issue of Exhibitionist.

Without a record of the discussions and decisions made at the meetings, NAME would not have a course to steer by as the organization moves forward. It would also be without a map of where it has been. Dave Denney, NAME Secretary, has provided those resources for the organization in an exemplary manner.

NAME has been extremely fortunate to have had Kristine Hastreiter as Treasurer. Kristine has worked extremely hard to keep track of the financial resources of NAME. This is another task that is often frustrating and requires attention to detail. She has established a high standard for the organization of commitment and leadership.

Over the past few years there have been many invigorating and challenging discussions about the future of NAME. Michael Pierce has contributed many ideas and offered analysis critical to the growth of NAME. It has also been my privilege to have Jay Rounds, Jim Volkert, and Jim Walther serve as Board Members of NAME. Jay has given Exhibitionist a tremendous boost attracting new authors and providing the profession with a much-needed reflective journal. Jim Volkert has a long history serving NAME in a variety of roles. In each case, Jim brought creativity, humor, and insight that helped NAME achieve much of its success. Lastly, but not least, Jim Walther has been a leader for NAME on many fronts. He provided much needed guidance as NAME struggled to meet its obligations and change into a professional organization with a new vision for its future.

There are many more people that have given their time and energy to promote NAME, to develop activities, serve on committees, answer questions, to work toward the common goal of making exhibitions, the product and the process, better. Thank you for serving as an Advisor, a Regional Rep, a State Coordinator, for helping with Exhibitionist, for developing session proposals, for coming to NAME sponsored sessions, for being faculty at workshops, for representing NAME to regional and state organizations. Thank you for being members of NAME. I look forward to seeing you at AAM in Baltimore!
Rethinking the Exhibit Team

"We know two things for sure. It is much easier to produce exhibits without the team process. The product, however, is much better with the team process."
—Diane Lewis (quoted in Matelic 1997:190).

"While team proponents consistently pointed to mutual appreciation among team members as a significant outcome of the process, there was no discernible improvement in the quality of exhibitions developed by teams. And pseudo-teams often generated a committee-style process that dulled creative vision."
—Kathleen McLean (1999:94)

The rise of the exhibit development team is probably the biggest change in practice in our field over the past couple of decades. Teams are such an obviously sensible idea that it seems impossible to imagine a return to our old ways of doing business. Few exhibit professionals would advocate such a move. Nonetheless, exhibit teams have not been a happy experience for many practitioners, and even those most enthusiastic about the advantages of teams can produce horror stories in which teams broke down into paralyzing conflict, or stifled creativity and produced fragmented, uninspired and dull exhibits.

How can we make teams better? How can we create incentive structures within our museums that make it more attractive for the various disciplines to collaborate than to compete? How can we ensure that our teams focus on the dynamics of creative collaboration, rather than on the divisive "coalition building" or "alliance forging" typical of committee politics? Rather than approaching an exhibit project as a process of "cutting up the pie" among the various disciplines, how can we create new, synergistic relationships and interactions among team members that are derived from the challenge of the exhibit itself, rather than from the expertise each member brings to the table? (Schrage 1995:217ff.)

In the following pages, Exhibitionist seeks to begin a rethinking of the exhibit team that will continue into future issues. The first article presents the results of a survey of 92 exhibit professionals from around the nation, covering both factual issues about the extent of use and composition of exhibit teams, and opinions about how well it's working. Next, an on-line panel discussion among five highly-experienced exhibits people gets into greater depth on some of the most difficult issues regarding teams. And finally, a case study of teamwork at the Smithsonian focuses on the critical problem of disciplinary boundaries.

Got your own ideas on the subject? We'll be welcoming submissions for our next issue, from brief notes for the Forum section to full-length articles. The deadline for submissions for the fall issue will be August 15th—but the sooner the better! See the back cover for information on how to submit.

REFERENCES CITED:

Matelic, Candace T.

McLean, Kathleen

Schrage, Michael
Who's Using The Team Process? How's It Going?

It's been eighteen years since the Kellogg Project sponsored a series of workshops, involving 77 museums, encouraging the use of interdisciplinary teams in the development of new exhibits. While such teams had come into use in a small number of museums prior to that time, the Kellogg Project is usually considered to be the turning point in a move toward team approaches, replacing the formerly-prevalent "linear" approach in which the project moved sequentially from one professional specialty to the next (the typical sequence being curator->designer->fabricator->educator). In the team approach, all (or most) of the relevant disciplines interact throughout the entire process.

After some two decades of experience with the team approach, it's time to assess how things are going. Is use of the team approach really as widespread as is commonly assumed? Have museums been successful in switching to a very different mode of work? Where used, has the team approach resulted in a higher quality of exhibitry? Have problems emerged that limit the effectiveness of exhibit teams? Are further refinements—or major changes—needed?

As a first step in this assessment, in November and December of 1999 we conducted a mail survey asking some basic questions about experience with the team approach. A total of 187 questionnaires were mailed out to specific individuals, and 92 completed responses were received. The exceptionally high percentage of recipients who completed and returned the survey indicates the intense interest within the field in the issues raised by the team approach.

The sample was constructed to cover all parts of the United States, all types of museums, and the full range of professional specialties involved in the exhibit process. For this initial, exploratory step in a continuing program of research, our goal was to solicit input from a very wide range of respondents, rather than to construct a random sample that would be statistically representative of the "universe" of U.S. museums and museum people. Given that about half of the questionnaires sent out were returned, we assume that those people who chose to respond were more likely to be those who have had direct experience with team approaches. Thus, the results probably overstate the extent of use of the team approach in U.S. museums, since recipients at museums that do not use teams would have been less likely to respond. The results reported below should then be understood as suggestive of a wide range of experience with exhibit teams, but not as an accurate statistical representation of experience or opinion among all practitioners in U.S. museums. (A table at the end of this report summarizes the characteristics of the respondents.)

**Who uses the team approach?**

Our questionnaire screened out museums that do not engage in any in-house exhibit

<table>
<thead>
<tr>
<th>Type of Museum</th>
<th>DO use teams</th>
<th>DO NOT use teams</th>
<th>No answer</th>
<th>Total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
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<td>1</td>
<td>1</td>
<td>11</td>
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<tr>
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<td>6</td>
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<td>36</td>
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<td>4</td>
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<tr>
<td>Children's</td>
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<td>3</td>
</tr>
<tr>
<td>Other</td>
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<tr>
<td>Anthropology</td>
<td>4</td>
<td>0</td>
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</tr>
</tbody>
</table>
development. Presumably many of the recipients who did not return the questionnaires work in museums that contract out for all exhibit development. All of the museums represented by our respondents thus do at least some of their exhibit development in-house, and for those exhibits we asked whether most were developed by teams. In 88% of the cases teams were indeed used, distributed among types of museums as shown in the table on the previous page.

It is notable that almost all the responding museums that do not use teams were history museums. We thought this might be due to the prevalence of very small local history museums, but half of the six history museums reporting "no use of teams" had annual operating budgets in excess of $1 million.

**How large do the teams tend to be? Does the type and the budget of a museum influence the size of a team?**

Most museums employed teams with five or more members, although history and anthropology museums had the lowest percentage of large teams. Not surprisingly, larger teams were found in museums with larger annual operating budgets. In museums with budgets of greater than $5 million, all but two teams had five or more members, while in museums with budgets of less than $500,000 all but one team had four or fewer members.

**What disciplines or departments are typically found represented on exhibit development teams? How is team constitution influenced by museum type and museum budget?**

The job categories most commonly represented on exhibit development teams were, in order of frequency: exhibit designer; educator; curator; executive; and interpreter. Art museums were more likely to include a public relations person and a conservator than an interpreter; they included public relations on their teams significantly more often than other types of museums. History museums included a collections manager more frequently than an interpreter, and natural history museums were more likely to include a researcher or an audience researcher than they were an executive. Educators were represented at 90 to 100% of the responding natural history and children's museums, while closer to 77% of art, science, and anthropology museums, and 68% of history museums, included educators on their teams. 40% of natural history museums included an audience researcher on their teams, compared to only 9% of history museums. Audience researchers appeared almost exclusively in museums with an annual operating budget over $1 million. With two exceptions this was also the case with conservators. Executives were less likely to be part of teams in museums with budgets over $5 million.

**Who generally acts as a supervisor on the exhibit development teams? Does supervision vary by museum type or budget?**

Exhibit teams in this sample were most often supervised by exhibit developers, except in art museums, where they were most likely to be led by a curator, and in history museums where they were more likely to be supervised by a curator or an executive. Science museums had the highest percentage of project managers supervising exhibit development teams. Museums with an annual operating budget of up to $5 million usually had exhibit teams that were supervised by executives, curators or exhibit developers. Museums with a budget over $5 million most often used teams that were supervised by project managers. Use of project managers as team supervisors increased with annual budget size, from none at museums with a budget less than $500,000 to 38% at museums with a budget over $10 million.

**By what process are key decisions made on the teams?**

Most respondents (74%) reported that decisions were made by consensus among the team members. In almost all of the remaining cases (22%) a team leader made the key decisions. In this sample, such cases of decisionmaking by team leaders were confined to small museums with budgets of $5 million or less, while decisionmaking by consensus maintained a strong majority at every budget level.

**Are exhibit development teams given a satisfactory degree of decisionmaking authority?**

Of the respondents to the survey, 81% "strongly agreed" or "agreed" that teams do have satisfactory decisionmaking authority. Nearly all administrators, curators, and designers agreed that exhibit development teams are given a satisfactory degree of decisionmaking authority; but only 74% of educators and exhibit developers agreed.

**Does inter-disciplinary conflict create problems in the team process?**

Many writers have warned of the potential for team processes to degenerate into territorial or personality battles, and anecdotes illustrating the realization of that potential circulate in more-than-ample supply. Our survey results, though, show that conflict, while common, is certainly not inevitable in exhibit teams. Close to half (39%) of the respondents reported "Little or no conflict" or "Some conflict with largely productive results" in their own team experiences, while the remainder (60%) reported "Moderate amount of conflict with both positive and negative results," or (in several cases) "Conflict that is disruptive
and largely unproductive." A few, while reporting mostly more positive experiences, noted specific projects in which conflict had been "completely incapacitating." Thus, conflict seems to vary a great deal from team to team, or even within a given team depending on specific circumstances—as was the case with the unfortunate designer who reported "little or no conflict unless the Director becomes involved."

In the cases where specifics were offered, the types of conflict included battles over disciplinary turf (e.g., "the curators won't let go of design..."), personality and ego clashes (e.g., "if they don't get their ideas accepted once they tend to withdraw from team processes"), lack of commitment to a shared vision, ambiguity of roles, and difficulties in reaching final decisions. An extremely common theme was the "painful" slowness of teams trying to work through conflict to consensus, a process which is reported to be often "tedious" and sometimes even "excruciating."

Different disciplines seemed to have varying perceptions of conflict in teams. Administrators, educators and curators were roughly evenly divided between those who reported no "unproductive" conflict and those who had experienced higher levels of conflict with "both positive and negative results" or that was "disruptive and largely unproductive." By contrast, around 80% of both designers and exhibit developers reported negative/disruptive conflicts in their teams. These findings suggest important differences that lie in the perspectives of certain disciplines rather than in the objective facts of team dynamics; however, the nature and size of the sample don't allow us to assume that these patterns would hold for the entire population of museum professionals.

The majority of those respondents who offered any theory at all claimed that team conflict is primarily the result of personality issues, particularly of team members unable to work cooperatively; or of differences in the level of professional competence among those thrown together in a team. Only one or two offered suggestions rooted in the tensions of organizational dynamics, such as differences in the professional training, values or priorities of the various disciplines, implications for the distribution of scarce resources, or inconsistencies between teamwork goals and the incentives actually structured into the museum's reward system. However, many did argue that clear delineation of the responsibilities of the individual team members and of final decisionmaking authority are critical in managing conflict, if not in avoiding much of it altogether.

Several people pointed to a lack of training in team dynamics as a root of conflict. In their view, teamwork is a skill like any other (as opposed to a stable personality trait), and most people could learn it with some proper training. Unfortunately, training or even "ramp-up time" for the team to work out its own dynamics is rarely provided. "We create teams, but we do not build them," as one exhibit developer complained. A common theme was that the success of teams is ultimately dependent on "gifted" team leaders with exceptional skills in leadership, communication and management; this might be understood as a way of compensating for the lack of training in teamwork of the rest of the team, or at least as a way of providing that training "on the job." In any case, many respondents probably would agree with the formulation of an educator who observed that "The team approach has been accepted without training, discussion or clarification of roles, responsibilities and, most importantly, decisionmaking process."

Are team-generated exhibits better?

While the team approach might be considered virtuous solely as an issue of "workplace democracy," the bottom line is whether, on the average, it results in exhibits that are "better" than those produced by traditional compartmentalized processes. Even in the Kellogg Project itself, the project leaders concluded that "while the team approach often resulted in better working relationships among team members, there was no discernible improvement in the quality of exhibitions developed by teams" (McLean 1993:37).

We asked our respondents for their opinions, leaving them to decide themselves what "better" might mean. A strong majority—83%—asserted that the team process does produce better exhibits. This assessment was particularly strong among educators (91%), exhibit developers (87%), curators (86%), and administrators (85%); only designers, at 78% agreement, fell well below the mean.

However, there was by no means complete agreement on this point, and even some who supported the superiority of team-generated exhibits added caveats about how the approach can go wrong. One exhibit developer noted that his museum's new team approaches were indeed producing better exhibits, "but only because the previous exhibits represent such a low baseline that virtually anything would have been an improvement." A specialist in interpretive programs stated that sometimes the team process "has been almost solely responsible for producing exhibits of the lowest
that "new ideas and solutions frequently emerge that would not be found independently." These respondents argued that teams generate more variation in exhibit approaches, and so "more innovative presentation." By contrast, a roughly equal number argued that teams tend to suppress creativity, producing "watered-down" exhibits that look like "design by committee" or are "mediocrified from over-review." From this viewpoint, teams make compromises that result in a "play-it-safe," dreamy "sameness" among exhibits. These contrasting viewpoints did not correlate strongly with professional specialty, though designers were somewhat more likely to see teams as repressing creativity while administrators tended to the opposite opinion.

This ambivalence about team creativity was summed up neatly by the Director of Exhibits at a science museum, who observed that teams create a "broader appeal of exhibitry, but less 'ingenious' singular exhibits." One possible interpretation of the responses might be that teams produce "average" exhibits that are of higher creativity, but are less likely to produce surprising, radically-different exhibits than are individuals who are free to follow their own vision. While this is an intriguing hypothesis, we have no objective data that would either support or refute it.

To sum up, respondents to this survey strongly favored the team approach over linear methods of exhibit development. Nonetheless, they acknowledged that intra-team conflict is often a problem and that many teams have difficulty in establishing workable methods for decisionmaking. Most significantly, they reflected a deep ambivalence in the field concerning the implications of team approaches for creativity and quality in exhibits. While team approaches thus seem likely to continue to dominate in museum exhibit development, two decades of experience with the process has revealed important issues that need to be addressed in order to reach the full potential of the concept.

**Characteristics of Respondents**

<table>
<thead>
<tr>
<th>JOB CATEGORY</th>
<th>TYPE OF MUSEUM</th>
<th>MUSEUM BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 Administrator</td>
<td>12 Art</td>
<td>12 Under $500,000</td>
</tr>
<tr>
<td>2 Collections</td>
<td>9 History</td>
<td>15 $500,000-$1 million</td>
</tr>
<tr>
<td>11 Curator</td>
<td>5 Science</td>
<td>32 $1-$5 million</td>
</tr>
<tr>
<td>16 Designer</td>
<td>18 Natural History</td>
<td>15 $5-$10 million</td>
</tr>
<tr>
<td>16 Educator</td>
<td>3 Children's</td>
<td>13 Over $10 million</td>
</tr>
<tr>
<td>24 Exhibit Developer</td>
<td>Anthropology</td>
<td></td>
</tr>
<tr>
<td>4 Researcher</td>
<td>14 Other</td>
<td></td>
</tr>
<tr>
<td>12 Other</td>
<td></td>
<td></td>
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</tbody>
</table>

Totals for each category do not add up to 92 due to multiple responses or non-responses.
Rethinking The Exhibit Team: A Cyberspace Forum

During a three-week period, five experts representing various specialties on exhibit development teams participated in an on-line forum to discuss their experience with the team approach. Forum moderator Jay Rounds kicked off the discussion among Eugene Dillenburg, Carey Tisdal, Diana Cohen Altman, Daniel Spock, and Claire Pillsbury with questions based on the findings from the mail survey discussed in "Who's Using the Team Process? How's It Going?" in this issue.

Teams and Creativity

Jay Rounds: Exhibitionist surveyed 92 exhibit professionals from across the country and found that the respondents were deeply divided over whether teams stimulate or repress creativity. What's your thinking on this? What accounts for such a radical split in opinion?

Dan Spock: I don't believe that teams are any more likely to be creative simply because of the team structure itself. Teams will vary widely as to what they will attempt and most of that is attributable to the unique internal dynamic of each team. A key external component is whether there is adequate institutional support, moral and financial, to encourage creativity in staffers. Management has to communicate that it is a value, has to back up its words with actions, has to indulge failures and have the stomach for long periods of ambiguity while staffers find their way.

Gene Dillenburg: I think it stands to reason. Some teams are good; some teams are bad. The diverse responses reflect our diverse experiences.

Diana Cohen Altman: Gene, I can see your point in terms of respondents correlating good and bad teams with how creativity does or doesn't come through. But should we be talking about "good" and "bad" teams? It seems to me a "bad" team could do a great job with creativity and produce a bad exhibition. Or a "good" team could do a bad job with creativity and produce a ... bad exhibition. Or ...

Carey Tisdal: Exhibit designers talk about "suppressed creativity" and content experts talk about "watering down the content." I think these are just different ways of people expressing discomfort in working in a group with people whose background and expertise is different from their own. Disciplines have different value systems involved in making decisions about what is "good" and "bad" and what is valuable and what is not.

Creativity is a curious concept, particularly in 20th century art. The figure of the creative artist, misunderstood by the public, is a popular story arc. Creativity is sometimes valued above and even without completed communication. This seems to be an ethic in some areas of art, and maybe an appropriate one in fine art. However, in a design situation where function and constraints are part of the context of the work, this view of creativity becomes problematic. Real design constraints (like who the learners are and what the content is) can be viewed as a "threat" to creativity.

Jay: Creativity theorists argue that an idea has to be both original and useful to be considered creative. Mere originality is often mistaken for creativity. But real creativity is always operating within some set of constraints that set the problem to be solved. Front-end evaluation, client expectations, etc., don't have to be seen as barriers to creativity; they're just some of the constraints defining the problem that the exhibit team will solve with its creative designs.
Carey: Design requires imagination, and how something plays out in our imaginations is not always how it plays out in the real world. People may NOT react the way the designer thinks they will or even should. This is frustrating, and more than once I have heard museum staff angry at visitors for not behaving the way we imagined they would!

However, I happen to think creativity is an important part of the process of designing exhibitions. I work to protect the team's and the designer's creativity. Part of this is testing ideas against each other rather than one by one. Visitors are better able to express themselves in comparison and contrast, and members of the design team are less likely to feel "rejected" by the audience. You also shouldn't try to use evaluation to replace good, imaginative thought. Evaluation can provide wonderful, enlightening insights, but creative ideas and good sound logic come first!

Claire Pillsbury: I have occasionally seen the "creative" ethic in exhibit development deteriorate into a syndrome of everyone wanting to "stir the pot". The creative part is seen as the prestigious work so many people want to get into that spotlight. There is a borderline kind of one upsmanship where some team members may feel they need to contribute something whatever the topic at hand, regardless of their actual interest, experience, responsibility or ongoing role. On the one hand, some of this is human nature, wanting to join in. On the other, it can get ugly and disruptive if, for example, someone with lots of seniority inserts himself and then forces the team to endorse or follow some unpromising conceptual avenue. All of this is another reason to bring in workshopping methods, prototyping, and informal evaluation, very early in the process. Limus tests of all sorts can be humbling, but the revision process and an ethic of trying out ideas to see if they fly gives great feedback and substantive food for subsequent creative thoughts. In the end, exhibits need to work for visitors, and that involves loads of productive creative conceptualizing and problem solving if brought in early enough in the process.

Carey: I want to reinforce Claire's remarks about using evaluation to enrich the development process, especially creativity. Very often, testing several approaches with visitors is a way to gain real insight into a conceptual approach, and remove the elements of power and status from the decision making process. For instance, we've tested themes or concepts for three gallery designs now, and have found the most interesting and useful results. In one case, we tested a game concept, a small town theme, and a playground theme. The content for the gallery was identical. I think we were all amazed when there was surprising consensus among the groups. The game theme was perceived as too structured and not giving visitors enough freedom to choose among exhibits. The playground theme was seen as too disorganized—even the 5th graders we talked to thought it would have everyone running around and yelling, and not be a pleasant atmosphere. The small town seemed friendly, with clear divisions of content, and fun. None of us on the design team guessed (okay, I am supposed to say "hypothesized") that people would interpret these themes this way. I think the designer enjoyed hearing people talk about his work, and the discussion moved from "I think people will" to "people said." Creativity is important because it stimulates visitor's interest and understanding, and they can explain their reactions—especially children.

Exhibition Teams, Exhibition Audiences

Dan: A general comment collected in the survey prompted a thought. Many respondents noted that team generated exhibits were more likely to be "visitor-friendly", and I wonder if this, not creativity per se, is the special advantage of team exhibit development. Museum News estimates an increase of nearly 200 million visitors to American museums in the last 10 years—678 to 865 million. Though some of this represents a building boom, could it also be related to the fact that museums have become more engaging? And might this be correlated to the increased preponderance of exhibitions developed by teams? Perhaps the inclusion of a wide variety of skills and perspectives in development also generates a more multi-valent and attractive visitor experience in the finished product.
Diana: Locked still in the promise of the team approach is its ability to take us beyond visitor-friendly exhibitions into exhibitions with genuine multivalent appeal. It appears to me that teams too often rely on a diverse make-up to trickle down into making exhibitions accessible to more or other people. Producing exhibitions that actually reflect diverse viewpoints requires sophistication, diligent listening and tireless flexibility, among other qualities.

I'm guessing that team pressures can also lead teams to replicate prescribed norms of “visitor-friendly” exhibitions. The result is in my opinion the kind of accessibility but cultural sameness one finds in major networks’ movies of the week. Teams have extraordinary potential for helping us do more for audiences.

Jay: I think that Diana is raising an important point here. The idea that teams create exhibits with broader audience appeal is probably the most widely-cited advantage of the approach. That MIGHT mean that they're producing exhibits that are “multi-valent,” and so appeal, on a high level, to a broader spectrum of visitors. But it's also possible that sometimes teams make exhibits more widely accessible by designing to the lowest common denominator—as Diana says, achieving the bland accessibility of the “movie of the week.” Can we identify any factors in the team process that determine which way they go?

Diana: Just to clarify, Jay, I'm not sure how much of the blandness factor is due to design for the lowest common denominator. A team-generated exhibition can be eminently watchable, well crafted, politically impeccable, even suggestive of some of humankind's noblest attributes and still not do much more for the visitor beyond imitating other “successful” shows. Think Hallmark Hall of Fame.

The most “diverse” teams can produce the most classically “white,” “middle-class,” “Christian-centric” exhibitions imaginable (which may be fine in some contexts, but that's for another discussion). How and when does this homogenization happen? Something to look at might be how often “formula creep” coincides with a team losing sight of its mission (i.e., What is this exhibition trying to do?). Or we might analyze missions themselves for clues that they might become traps. Other than that, how does one analyze when and how, say, individual team members lose their individual, self-, ethnic-, class-, etc.-related perspectives in contributing to the exhibition? Or when and how a team decides, perhaps subconsciously, to generate something that is a slick impression of what an exhibition should be?

“Selling out” is of course a hot topic in many creative fields these days. But I would like to learn more about what happens to diversity in the team dynamic, that most delicate thing. Personally, I crave input from the anthropologists and related experts.

Gene: Well I'm afraid I can offer no expert opinion on this topic in particular, but an article in the January 1999 issue of Curator may shed some light, not so much on teams themselves, but on the organizations we must work in. “Effective Management of Museums in the 1990s” is the article by Des Griffin, Morrie Abraham and John Crawford. Their summary findings: “The best and worst features of museums: Teamwork, a concern for quality, and an emphasis on public programming are the best features of museums overall. But, training of staff to work in teams is not emphasized, information transfer is poor, rewards and problem solving tend to be ad hoc, and managers do not frequently visit exhibition areas.”

While teams (and the team approach in general) have their strengths and weaknesses, the ultimate effectiveness of team efforts still depends to a large extent on whether our institutions are prepared to support teams and accept their products.

I see a couple of things happening. One fairly obvious one is a sort of “bunker mentality.” Teams are comprised of individuals specifically chosen for their particular skills. There is rarely a ramp-up or acclimation period, during which these divergent professionals may learn about each other's jobs. Without this education, we find curators saying:

"The most 'diverse' teams can produce the most classically 'white,' 'middle class,' 'Christian-centric' exhibitions imaginable."
"I don't care what the design is, so long as we have these objects;" the developer saying: "I don't care what objects we use, so long as we tell these stories;" the designer saying: "I don't care what stories we tell, so long as we have this design;" and so on.

A skilled facilitator can try to coax each of these entrenched positions out of their bunkers and back to a communal give-and-take; or, at the very least, gather their individual contributions and fashion some sort of holistic experience. It's not ideal, but it needn't be fatal, either.

Much worse is the second sell-out—abject cowardice. Relatively few of us are given carte blanche; we all have to submit our work to superiors for review and approval. Perhaps my idealism is showing, but I like to think my bosses hire me to do the best job I can, the best way I know how. Sure there will be disagreements and compromises, and the man who signs the paycheck always wins. But I don't see that as any reason to do less than my best.

But on every team there are always a few voices—sometimes a majority—who want to play it safe; who say "let's just ask the boss what he wants and give him that," or "let's try to figure out what the Board wants and do that." It is utterly disheartening—creativity isn't simply squashed; it's never even acknowledged as an option. It's been a while since I've read John Holt's "How Children Fail," but this sounds eerily similar to the "minimax" risk-avoidance strategy which he found suffocating American education.

Dan: One thing you've pointed out, Gene, is the client question, since every team presumably has clients to please. One frustration I've seen teams contend with is too many clients, and/or clients who might not even agree and are unable to give clear direction. On the other side, I've seen teams prefer indirection over explicit direction, since confusion at the top can afford an opportunity for the team to blaze its own trail in spite of it all. When indirection allows a team to muddle along, sometimes wonderful things result, but probably just as often the clients catch up with the team late in the game and a calamity results as they try to tear up work that has already been arduously created, usually with little time left to fix things to anyone's satisfaction.

Carey: Getting back to the bland exhibit issue. Actually, I don't blame the team approach as the only thing influencing the blandness of some exhibitions—there are a lot of other factors going on. Does the institution value risk and creativity? Are the individuals on the team highly skilled as individuals? Was there time and money to design, evaluate, and produce a top quality exhibition? Yes the team short-comings can produce blandness, but so can a lot of other things.

Diana: Sure—teams make wider targets than the more diffuse forces in the museum. I also agree that one must consider the notion of individual sophistication. Yes, it's a loaded concept, and highly subjective. But I think that one can't assume that individual and group team effectiveness in creating a dynamic visitor-friendly exhibition will emerge naturally in the course of even a well facilitated team project. That's kind of like suggesting that children are instinctively compassionate and don't need to be taught compassion in a sustained way.

Obviously individuals vary tremendously in abilities to analyze work methods and to articulate them. Similarly, people who have been in talk therapy for years might tend to be more aware of emotions and better equipped to talk about them than those who have not been in therapy. Workers who have enjoyed on-the-job freedoms might be more comfortable and assertive in a team environment than workers who are leaving a top-down environment for the first time. The freedom-to-speak factor becomes even more complicated, as Gene suggests, when the new "democracy" might be a bit of a sham. Clearly some of us have more of a stomach for confrontation and rebellion than others. On top of all this, the team environment can foster a shift in the relative value of particular skills. So how individuals cope with the power shift can influence the team's ability to keep exhibits from going flat.

"I don't accept that a team commitment to serving a broad audience has rendered bland exhibits."
Dan: I'm suspicious of the reasoning that crowd pleaser exhibits are necessarily "watered down" or "dumbed down." I don't accept that a team commitment to serving a broad audience has rendered bland exhibits. On the contrary, I think that dumb exhibits rarely engage, and exhibits that are either exclusively content driven (illustrate my thesis), design driven (my favorite style, content be damned), or team process driven (let's not fight) wind up dull if they are not fundamentally audience driven.

Diana: Dan, I'm not sure if you're saying that teams are more often fundamentally audience driven than are non-team arrangements. And I'm not sure what you mean by "dumb" exhibits in this context.

Your comments speak to the heart of my confusion about teams. Here are some questions that come to mind:

1. What does "audience-driven" really mean? This is where one gets into questions about catering to an audience's low expectations and such. Does "audience-driven" extend into developers prescribing what's best for visitors based on visitor awareness? If there are evaluators and/or others out there who know what "audience-driven" means (but don't necessarily know how to do an exhibition), are they effectively conveying the information to developers? Are developers getting it, to the extent that it makes a difference to teams? Specifically how does a team adopt an audience-driven approach—in my definition, one that brings out the best in visitors, that allows visitors to reach new heights? Can one reasonably measure to what an extent an exhibition process, team or non-, is audience driven? Does an audience-driven process afford any special interface with or obstacles to creative intuition (intuitive creativity?), which some would say is the key to creating visitor-effective exhibitions?

2. Is it possible to have an exhibition that's content- or design-driven but not audience-driven? One might argue that content and design don't exist outside of the exhibition's context—that is, if content is content of the exhibition, and design is how the exhibition permits people to engage with the content. Maybe we're talking about bad curators and bad designers.

3. What kinds of checks and balances exist in the team arena to keep audience-driven exhibitions in particular from falling prey to cliches, platitudes, and so forth? Again, personally I do see at least as much blandness as before in exhibits at large, but I think the problem is bigger than just blandness. I'm sorry to say, but I've seen visitor friendliness run amok at the cost of a deep, meaningful, and specific experience once too often. (Of course then I'm told I'm not the average visitor, and that ends the conversation.) But do such complaints relate to the team approach, to the challenges faced by museums, to the evils of encroaching consumerism, to heightening standards in criticism, or to whatever else? Maybe I expect more from the team approach, given all the ecstatic forecasts touting the benefits of diversity, different voices, accountability, and such.

Leadership and Team Dynamics

Dan: Teams are analogous to what Winston Churchill said about democracy, to paraphrase "Democracy is the worst form of government with the exception of all other forms of government." Teams aren't the easy or efficient way to create an exhibition. Dictatorship through an auteur system would likely provide a more direct process. But who among us wants to work in that kind of an arrangement? And is it any more likely to produce excellence? We live in a culture that celebrates inclusiveness and I think we would all chafe under a more autocratic form of exhibit development.

Gene: While I agree that an autocracy is personally distasteful, I feel there is a stronger reason to avoid this structure. Exhibitions are such massively complicated beasts that no one person can possibly master all the necessary skills, or advocate for all the essential agendas. Exhibits require expertise in content, design, visitor studies, object care, programming, media, promotion, etc. etc. etc. Few of us master one of these disciplines, let alone all.
Diana: Imagine the advantages of truly vetting one’s skills and rituals in the diverse team environment. But how, in the course of an uncharted team experience, to deploy oneself as a team player and as a specialized professional?

I have seen teams become a field day for people who were not sure of their role in the exhibition process to begin with. Individuals who start sounding like “part curator, part designer, part ...” can be as destructive as players who overly compartmentalize. The walls go up, common ground starts shifting, and even the most open-minded players start longing for the old days.

How can we weed out our “auteurcratic” tendencies from our attempts to offer individual specialized expertise in a team setting?

Dan: This is where team leadership gets pretty critical. You need someone with a highly attuned sense that the process is beginning to fray and who is fearless about stepping in and mediating. I don’t believe that means hammering out a compromise necessarily, because this can lead to mediocrity. In my experience this sort of role friction usually indicates that something interesting is happening and by working through it, something rather new is possible. Role expertise is important, but when team members hide behind their specialty it is usually a bad sign, a sign of inflexibility and defensiveness. A good facilitator will keep the team working on the problem until a solution is reached. Often this can be done by revisiting goals, by prototyping, but endless arguments without practical problem solving tools is deadly. A good team leader should have the radar to know a real stinker when one comes along, but having the skill to judge when you’re flogging a dead horse or on the edge of a breakthrough is a real intangible in the whole mess. In any case, a team can’t be creative unless team leaders have some appetite for risk and are willing to let people try things, even step out of their roles somewhat.

Carey: I agree that good leadership is a critical element of making the team process work, but the other set of skills involves being a good team member. As an evaluator, that is generally my role, and I have given that some thought. I really do think people need to be respectful of other team members’ areas of expertise. Second, I think you have to keep in mind the project goals and have some understanding of the processes of others on the team and how they fit together.

The two most difficult boundaries not to cross are in the areas of “teaching/learning” expertise and exhibit design. I think the reason for this has to do with the nature of the final product—an exhibition, that is where the focus is and it is difficult not to jump right in there and speak in those terms. All of us love to have ideas about the exhibits, especially advisory groups! But there is a lot of ground work to do BEFORE sketches and designs are produced. A good design solves a problem and a creative design solves it in a fresh and unusual manner. So first, you better understand what that problem is that you are trying to solve, and the designer is not always the best person to formulate that problem—

he/she needs to clearly understand the problem—but that up-front stuff sometimes needs to be done BEFORE the designer joins the team.

Gene: Leadership makes or breaks a team.

Dan describes a good leader as a good facilitator, and that is extremely important. But just as important is the leader as visionary. The exhibit process needs one person to have a vision for the final product, to hold it always, to communicate it to the rest of the team and to get them fired up about it. You cannot have “vision-by-committee.” It leads to bland, “movie-of-the-week” exhibits, as Diana called them. It must be the invention, and responsibility, of one person, who nevertheless gets the rest of the team to buy in.

To realize this vision, the leader must understand, accept, support, encourage, and elicit the vital contributions of every other member on the team.

So, a good leader is a visionary, a facilitator, and a nurturer ... which makes him only slightly less rare than a bi-lingual woodpecker.

Dan: Does anyone think people can learn leadership or facilitation through team dynamics training? We’ve found that one serious root of team conflict is poor communication. Someone who is trained to facilitate can get issues out on the table for discussion when the conflict avoidance tendency blocks teams from dealing with it. The problem is that facilitation works best when the facilitator is a relatively neutral party and visionaries are decidedly not neutral! Has anyone experimented with a facilitator role on teams as separate from, say, a developer?

Gene: It’s a conundrum. Good exhibits need visionaries, and no, visionaries are NOT neutral. On the other hand, a neutral, non-visionary facilitator will likely produce a neutral, non-visionary exhibit. Facilitation can be taught, of course. And you’re absolutely right, a team needs to discuss and work through issues of conflict, rather than take the easy way out and ignore or bury them. But a facilitator from outside the exhibit profession would lack the necessary understanding of the roles and vital contributions of the various team members. (Heck, too many of us WITHIN the profession lack this understanding.) I see it as a disaster waiting to happen.
Claire: I agree that it's not necessarily a virtue to have a neutral leader. Good exhibits need charismatic and enthusiastic visionaries. A winning and energetic attitude can be contagious. However being attentive to team dynamics and sorting out conflicts as they occur is also obligatory. Ideally there should be visionary leadership with the responsibility of dealing with team conflict, addressing communication problems or whatever else is at the root of a conflict. If team members can learn to express themselves, respect each other, enjoy riffing off each others ideas and accept the occasional disagree situation early in the process they can work much more effectively after that.

Leaders and team members can get better at these conflict resolutions if they can force themselves to engage in resolving things.

Gene: More than 40 years ago, someone praised Casey Stengel for winning some ungodly number of championships as manager of the New York Yankees, and he modestly demurred, "I couldn'ta done it without my players." This is often repeated as a joke, but we tend to overlook that the reverse is also true—the players couldn't have done it without him. Somebody needs to keep an eye on the whole game, to yank the stars when they start to falter and put in the substitutes; to create the strategy; to yell at players who aren't performing up to their potential; to console the team during the numerous losses that even a champion must endure; to simply make sure the right nine guys get on the field every inning. Sports lore is full of teams that looked unbeatable on paper, but who stumbled on the field. The conglomeration of superstars never gelled into a "team," while groups of lesser athletes, with less to prove as individuals, were able to win.

Or, if you don't like sports, consider the "supergroup" phenomenon of late '60s/early '70s rock 'n' roll. Having star musicians on each instrument often produced an unmusical mess, as each star tried to shine. Far better to have a band of capable musicians backing up a single star, or a group who's members are aware of their individual talents and contribute those to the song, as well as being aware of their individual limitations, and not trying to exceed them.

Finally, let us not forget that museums did not invent the concept of teamwork. Team sports have been around since at least the late 1700s, and quite probably much longer than that. There may be lessons to learn from other examples of teamwork.

Thomas Boswell, sports writer for the Washington Post, has written extensively about team-building in baseball. He identifies several factors that contribute to a successful team. I will follow up each of Boswell's factors with how I would apply them to museum team building:

1) Sensitivity to one's environment. You must build a team that suits your home park. If you play half your games in a stadium that emphasizes speed and is difficult to homer in, then loading your line-up with slew-footed sluggers is probably not the way to go.

In museums, this means understanding the lay of the land. How does the institution operate? What does it value? What does it expect from the team?

2) You don't need stars at every position. It's expensive, it's not necessary, and they begin to work at cross-purposes to one another. It's better to have a few stars at key positions, and fill out the roster with competent support players who understand their role.

For museums stars vs. supporting players is tricky. Everybody wants to be a star. But answering #1 may help define #2. The institution may decide yes, we value all the diverse disciplines represented on the team, but the one thing we really want is cutting-edge research, or beautiful design, or whatever. Knowing that going in can help a team avoid a lot of jockeying for position.

3) Grow your own. Develop players within your farm system, teach them how you want to play the game, and promote from within. Far more effective than hiring established players away from other teams and re-training them to fit your philosophy.

This is a particular burn under my saddle. Every museum wants great exhibits, but few are willing to hire, train and maintain a top-notch exhibits staff. Designers, developers and evaluators are brought in for short-term, high-profile projects, and are rarely given the opportunity to learn and internalize corporate culture. Meanwhile, permanent staff view the contract players with suspicion and even resentment, and sometimes undo their work as soon as they've left. Yes, personnel are any company's greatest expense, but also its most valuable resource.

4) A manager to lead. In addition to calling the shots on the field, his main job is to run interference, protecting his players from the press, the fans, the umpires, the management, etc.

In museums, leadership and vision must not only be present—which they too often are not—but also clear and consistent. Tactical direction must be appropriate for the make-up of the team. Otherwise, management's job is to clear a path, hire good people, and get the hell out of their way.
5) **A team leader to prod from within.** Sometimes this is an official team captain; more often it's a player who assumes a leadership role. It may be the calming influence of the wise old veteran; the prodding of a young firebrand; the release of a class clown.

In any group dynamic, someone rises to the fore. It would be nice if this were the project manager. But whoever it may be, their personality must mesh with that of the team and the institution.

Follow this formula, and you'll be in the World Series in no time...

**Diana:** I still wonder how much of what we think we know about the practice of teams is actually more relevant to the mystique of the team approach. It seems to me that nearly twenty years later, the hype has as much life to it as the practice.

The more I try to articulate my observations about teams, the more the term "team approach" loses its meaning for me. I realize that the concept offers considerable elasticity, but after all these years of hearing about teams, I want to know more about specific practices. Primarily I want to know how teams have managed to incorporate the progress we have made in visitor awareness. Can it be that the answer lies in each individual team? Or have teams in general evolved into a kind of audience-driven engine? What am I missing?

Surely I have been a part of enough teams for enough years to offer some kind of summary. I suppose I can offer this: Yes, it would seem that two heads are in fact better than one.

Truly, this discussion has been a wonderful forum for actually applying a team philosophy to the business of assessing the team approach. Thank you to Jay Rounds and *Exhibitionist* for arranging this opportunity.

What's next? Can somebody do (has somebody done?) TEAMCAM on the Web?

**Claire:** TeamCam? This and Diana's other remarks reminded me of something I saw at an ASTC conference session. Each panelist presented their own institution's "team" approach, what the roles were, what the stages of the process was, etc etc. What amazed me was that the main thing all the different team scenarios had in common was the word "team"! They were astoundingly different and yet each perfectly formed in their unique flow chart geometry and idiosyncratically idealized in intellectual harmony. However the lone dissenter, a brave individual introduced her presentation by saying at first she tried to drop out of the panel because she believed the team dynamic created more problems than benefits. And then she proceeded to illustrate the rest of her presentation with video vérité excerpts from her recent exhibit team meetings. It was painful and very funny to watch, hear, and recognize what really goes on at team meetings, especially in contrast to the previous presentations of idealized scenarios. Much more eloquently than a thousand words, these videos illustrated what most of us encounter in the team process. People and group dynamics are complicated and full of frailties. There are a million ways to derail or bog down. It takes effort, sensitivity, and creativity to help make teams more than "the way we do things" or an abstract formula. It occurs to me that accepting the uncertainty is the first step in committing to work together as a team. Creatively working through uncertainty and collaborating as you go along gives you momentum to keep on the rails and out of the bogs. The motley mix of different perspectives handled carefully and with some luck can transform to genuine synergy or as Webster would say "The action of two or more ... organisms to achieve an effect of which each is individually incapable."

"Accepting uncertainty is the first step in committing to work as a team."
Trust in the Team Approach: A Case Study

by Ann Rossilli

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The team approach to exhibition planning and design is very much alive—as is evidenced in the responses to Exhibitionist's recent survey of museum professionals. Most respondents to the survey believed that teams are most successful (and least stressful) when they maintain a strict division of, and respect for, individual professional roles—i.e., when curators curate, designers design, developers develop, writers write, and no one poaches on the other's territory (see Rounds and McIlvane, this issue). Respect for individual roles is at the very heart of working in a productive group environment, and is a concept many of us in the museum exhibition field have long championed. Sometimes, though, a strict separation of roles can actually retard the exhibition development process—especially when the team's immediate challenge is to maximize creativity rather than production. In such circumstances the best results may be achieved when each team member is free to cross the strict job-category boundaries, in order to work in a truly collaborative fashion.

Working in this way requires not only mutual respect among team members, but also trust. In the following case study, I describe how a fluid conception of roles, grounded in a high level of trust in each other's capabilities and motives, helped our exhibition development team hold together and find creative solutions when faced with our most extreme challenge. As a designer on the core team of "On Time," a new permanent exhibition at the National Museum of American History, I offer the following account illustrating how this team approach, enhanced by trust, enabled our team to meet its most extreme challenge.

The "On Time" Project

"On Time," an exhibition that opened at the National Museum of American History in November 1999, explores the changing ways Americans have measured, used, and thought about time over the past three hundred years. The exhibit was developed in-house, by Smithsonian staff.

Having worked together on a large permanent exhibition in the past, the curator and the designer decided to team up for the "On Time" project. The content for the exhibition, the product of years of research and original thought by the curator, needed to be distilled and organized into a palatable learning experience for our visitors in a rather awkward physical environment. The former "Timekeeping" hall on the first floor of our museum was to be our exhibition space. This space, narrow and confining, presented our first challenge. Designer and curator spent quite a lot of time and energy attempting to insert chronologically-organized story boards three-dimensionally into this hostile space. We finally decided that we must yield to the space limitations and let the schematic organization of the exhibition flow from them. A basic overall bubble plan comprising three major sections emerged.

The content did not resemble traditional exhibits about time and timekeeping instruments. Clearly we needed to take a fresh approach to the subject. Designer and curator agreed that a third team member was called for. We recruited an interpretive specialist from the department of education to join the core team. This self-selection of team members who had worked together in the past contributed to a very high level of trust. The three of us decided early on that our project goal...
would be to set precedents not only in the presentation of
the exhibition content, but in the process of developing and
planning it as well. Therefore, we decided to take the team
approach to a new level throughout the entire process. That
is to say, we committed ourselves to operating without the
traditional barriers to creative thinking and problem solving.
Although our respective roles, i.e., designer, curator,
interpretive developer, would always guide us individually,
in work sessions we permitted each member to step out
of our traditional professional roles and cross boundaries.
The curator was free to tackle design issues and voice
strong audience advocacy, the developer could freely
propose content organizational strategy and deep cuts in
text, and the designer contributed to text development.

Trust is the foundation of any good relationship, and over
the four years that the team worked together, we strove for
consensus on all issues. Although most of the time we
achieved this intuitive way of working and communicating,
we did sometimes lapse into majority rule, and occasionally
a final decision had to be made in a more totalitarian way.
The ultimate team approach we set out to take is ferociously
labor-intensive and time-consuming. The fact that we had
worked together on past projects was of course a great
advantage. This precluded an even more time-consuming
period of familiarization and “courtship” in the pursuit of
mutual trust. Our strong relationship of trust in each other’s
capabilities and motives had been forged in the past. This
level of trust can be achieved by other teams on a faster track
only if members have a deep understanding of their individual
project roles and have a high degree of professional
confidence and personal maturity. I like to think that our
intensely collaborative efforts produced a clarity of a unified
vision that is evident to those who care about such things.

We set out to present the preliminary content
for review and approval in a format which
would facilitate an immediate comprehension
of the breadth of information and the proposed
juxtaposition of ideas, objects, graphics, etc.
by a wide array of readers: sponsor, museum
management, colleagues, peers, etc. This docu-
ment, which came to be called our “concept
brief,” was based upon exhibit objects, design
for inclusion and the interpretive goals and
objectives we had negotiated together. Each
section of the exhibition supported its individual
list of objectives. The content embraced much
peer input and the final presentation in print
format reflects this valuable contribution. While
the exhibition techniques, and to some extent the
organization of the exhibition, evolved over time, the concept
brief remained the skeletal structure. It served to keep us
outcome-focused throughout the process, often subliminally.
Everything was proceeding beautifully. And then....

The Challenge
Dateline October 1, 1998. Figures have been more or
less calculated. The diagnosis is pronounced: the planned
exhibition is deemed to be over the resources available.
The treatment, even worse: re-work it at half the cost and
in a extremely compressed time frame! The immediate
reaction by the core team was to either commit group
seppuku or quit our jobs and open a combination art-
gallery-martini-bar-ski resort. Pure fantasy of course, as
neither option would work in the real world. What we did
do, however, was spend a week experiencing all of the five
stages of loss for the exhibition we had created together.
This period of deep mourning was followed by an exhilarating
three-week marathon consisting of intense brain-storming
and planning to prepare a proposal for solving the funds
and scheduling problems creatively.

We ended this exercise with a mutual commitment to do
whatever it would take to maintain the content of the
exhibition in its entirety while cutting the physical structure
radically. But how? Major surgery was clearly in order, but
not as it might be performed by a more traditional exhibit
team in which members might operate less flexibly, within
some narrowly prescribed code of professional roles. Such
a team might throw up their collective hands and opt for a

Richard Strauss, Smithsonian Institution
truncated exhibition with exhibit areas brutally amputated. Not so for the "On Time" core team. As the designer, I was faced with not only cutting the estimated costs to the bone, but going right to the bone marrow for fabrication, installation, materials and labor costs. How the entire content was preserved while reducing the structure so radically is a lesson in a true "team approach."

Meeting the Challenge
Upon receiving the devastating news regarding the funds and schedule along with direction from senior management to redesign the exhibition, the reaction of team members might have been an exercise in finger-pointing and ultimately damaging solutions. Since design emerged as the key to controlling the high cost of labor and materials, design needed to take the lead and work with the other team members to focus on creative ways to re-format the content and objects. As noted earlier, the team had decided to commit to setting precedents as a goal at the outset. This commitment was intended to support the museum's mission statement, particularly to "...create learning opportunities, stimulate imaginations, and present challenging ideas about our country's past." With this commitment already in place, the team was able to take on this daunting situation as one more challenge to meet together.

The first thing we did was to agree to explore alternative content communication methods. If we reduced the objects physically on view by roughly two-thirds and displayed the remaining third in greatly simplified cases, limited in numbers, how were we to remain true to our original concept—which had taken us three years to develop? We decided to make use of computer interactives to exhibit a great many of the objects in "virtual cases" on monitor screens. By doing so we not only achieved our objective of including all of the originally intended objects, but in many instances created the opportunity for visitors to see them in much greater detail. For example, while there are numerous pocket watches "on the floor," none but those presented on the computer screen can be seen in such stunning detail. A bonus for the exhibition is that visitors now have the opportunity to sit at a computer work station and click to their hearts' content through an exhaustive menu of detailed object images and accompanying text information.

An Even Better Exhibition
Necessity is truly the mother of invention and in this odd twist of fate, it seems the exhibition just may have morphed into a more innovative presentation than originally planned. There are now approximately one hundred and fifty objects physically displayed in the exhibition. For many of our visitors this is probably just the right amount to take in on a visit that is typically one stop in a tightly-scheduled trip to Washington. For those with more time, the abundant objects accessible on the computer interactive stations are an opportunity to delve deeper into the subject. Featuring a wide variety of media—live demonstration carts, functional labels that invite visitors to pause and think about time in a different way, and videos—the exhibition offers an exploration of many challenging ideas about the subject of time. From a design standpoint, we were able to maintain the intellectual and physical communication pathways with far less expense, in a severely shortened time schedule and with limited resources, while maintaining the environmental design intact. The most valuable lesson for the team was that the three principal team members were able to react nimbly and efficiently while at the same time maintaining our unity of vision. This, I am convinced, could not have been possible if we had not operated throughout the project as equals, and had not been willing to cross disciplinary boundaries and all share in all aspects of the work.

I like to think we broke some ground contextually, spatially and visually in the final exhibition. Early responses to the exhibition by our colleagues tend to bear out this notion. The features that we developed included the following: a flattening of the traditional hierarchy of text and the minimizing of label copy to privilege the objects; a free and open floor plan—Web-like in feeling—to permit visitors a view to the entire exhibition and the opportunity to create their own highly individualized experiences; challenging assumptions about the subject by exhibiting provocative objects such as a race horse skeleton and a 1930s refrigerator; introducing visitors to fresh stories about our relationship with time; and opportunities to access much more content and deeper levels of information at interactive computer work stations.

The exhibition will be formally evaluated in the future. For now we have anecdotal data and positive press coverage to suggest the degree to which we might have succeeded. Our colleagues have been eager to report their reactions and comments, which have been overwhelmingly positive. Of course, the true critics are our visitors, and upon observation, they seem to be engaged intently in the content. This is no small feat given the scheduling challenges the majority of our visitors set for themselves on their visit to the Smithsonian complex, let alone to our museum. The underlying theme of the exhibition is the emerging dominance of clock time over all other time, such as natural cues and biological time, and how we came to accept its authority. As a consequence, most of us feel that we are over-scheduled, in a hurry and racing to beat the clock. Our audience no doubt will appreciate an exhibition scaled to meet the needs of their own time-challenged visit.
Greetings Gentle Readers! Months have passed since my last opportunity to partake with you from the cornucopia of museological delights that pours (well, slowly drips—or maybe 'oozes' might be a more accurate portrayal of this phenomenon) into my mailboxes both virtual and real. And once again, correspondents both regular and irregular contribute news from the frontiers of exhibitry. This column will, in a few breathtaking paragraphs, whisk you across and beyond this continent; we'll ease our way into some esoteric (often downright silly) suggestions from our intrepid colleagues, but we'll start with news of genuinely excellent exhibits recently seen.

For example, this winter Julie Nauman, Dan Oliver and John Russick traveled to California to study new media applications, some of them in recently-opened institutions. Since Julie, Dan and John are working on an exhibit about contemporary Chicago neighborhoods and the communities' complex history, they concentrated on museums where cultural and social history takes center stage.

Their first stop was the Golden State Museum, in Sacramento, newly developed from the former California State Archives collection. Here, exhibits employ a wide array of technologies to engage visitors. For example, life-size photo cutouts show people holding blank placards upon which are projected images of actual protest signs for a variety of issues; the technique creates a dynamic survey of a number of political and social themes in a relatively small space. In other exhibit spaces, text is projected on walls and floors, using light to activate the space with provocative words and phrases. Visitors can sit in a period diner environment and overhear conversations emanating from jukeboxes in each booth.

Next stop for this team was Los Angeles, where they visited the Skirball Cultural Center and enjoyed not only its beautiful and classic object-rich exhibit design but also the use of technology to, in their words, "serve the exhibit themes without upstaging them." Again, text projections were used to activate space, in this case to create a "visual symphony" on the stone entry wall. Speakers for videos are cleverly placed within benches, directing the sound right at the visitors' ears, and allowing for a very low level of sound to be used. A large screen video projection is visible through a large case of costumes; the moving images provide a visually complex backdrop to the objects in the case, and entice the visitors into the next room. Finally, a multi-screen video program "poses questions with text, then juxtaposes a multiplicity of voices to answer them. The voices are edited together in such a way as to create a dialogue between a variety of people."
Another Los Angeles highlight of Julie, Dan, and John's trip was the new Japanese American National Museum. Here, the main exhibition focuses on the entirety of the experience of Japanese Americans, with special emphasis on their confinement during World War II. Among the exhibit techniques that provided a real sense of personal involvement were home movies used in a video presentation; old, weathered picture frames used on family photographs; and docents who engage visitors with their stories and experiences. "An artist was commissioned to create a work for the exhibit. Her installation is in the floor: as visitors walk over it, they see through the Plexiglas floor into compartments containing soil from nine concentration camps. Artifacts such as toys, books and other personal items found on those sites have been mounted into the compartments and appear as evidence of those who were imprisoned there."

Finally, our visitors were impressed by the in-house video production department that "enables archives materials to be used, rather than sit on the shelf. They are actively producing documentaries for the museum and filming oral histories and museum events. They also produce promotional and fundraising clips for the Museum."

Claire Pillsbury recently recommended another new history museum, Pointe-à-Callière, the Montréal Museum of Archaeology and History. Located in the historic quarter of the city, this museum offers multimedia, guided tours, and interactive exhibits to interpret the material evidence from six centuries of human occupation. Classic artifact displays are set against stratigraphic backgrounds, archaeological techniques are explained, models represent the site at different periods in its history, figures from the past come to life and a son et lumière show unfolds above the actual archaeological remains. While you're in the area, Claire also reminds you to look in on the Musée de la Civilisation in Quebec City, known for its innovative themes and approaches. Throughout this year they're showing exhibits on African women, on French-Canadian humor (well, you probably won't appreciate that one unless you're Quebecois yourself) and coming up is a visionary exhibit on humanity, language, nature, science and technology conceived by avant-garde artist Robert Lepage.

Next time you're here in my hometown, please stop by the National Vietnam Veterans' Art Museum in Chicago, IL. Created and nurtured by a small and very dedicated staff, this independent institution presents two full floors of rotating displays drawn from its permanent collection, including painting, sculpture and photography, and also offers temporary exhibits by individual artists. They've also done collaborations with the local Vietnamese community, as well as with nearby cultural institutions in Chicago's burgeoning South Loop neighborhood. Education programs, presented by veterans, are geared toward high school students. One docent shared with me his experience of being thanked by students for giving them insight into experiences about which their own fathers have so much difficulty speaking.

Also in Chicago, a group of dedicated volunteers led by visionary Chuck Renslow has finally seen the culmination of a decade of planning with the opening of the permanent home for The Leather Archives and Museum. The museum is now housed in a former synagogue (bits of written Hebrew are still visible on architectural details) that was purchased with money raised entirely through the efforts of men and women within the leather community and with no support from any outside agency. The gallery section displays face masks, chaps, whips, costumes and related items including a vintage dog collar; 2,500 year-old painted pottery depicting spanking; a comprehensive collection of buttons and patches from motorcycle clubs across the country; and a timeline tracing the origins of sexual practice back to the days of the Egyptian ruler Hatshepsut who was apparently a cross-dressing foot-fetishist. Although the collection features some rather astonishing and explicit objects, the staff knows from experience that displays of art featuring more conventional male or female nudes are the ones that tend to draw objections. The archives and library include books, oral histories, posters, letters and videos; they are used by a very broad range of researchers working on anything from graduate student theses to television documentaries. Future program plans include demonstrations of wax torture and knot-tying in the 164-seat auditorium. The
only institution of its kind in the world, the museum enjoyed a very positive relationship with the family based neighborhood surrounding its previous home, and has already been welcomed into its new community when the Rogers Park Neighborhood Association chose it for the site of a recent meeting. Admission to the museum is free (but by appointment).

A new correspondent to this column is Kristine Hastreiter, who writes from her home base on Cape Cod. She recommends the Cape Cod Museum of Natural History in Brewster, MA, where you’ll find exhibits featuring live specimens and hands-on activities for kids, or take off for birding, seal-watching, field trips and marsh tours. But she’s also promoting Cape Cod’s nearby attractions. Among these are the Cahoon Museum of American Art, featuring naïve and whimsical paintings by Ralph and Martha Cahoon, portraying mermaids and sea captains, playful whales, and the Garden of Eden. The collection also includes work by other New England folk artists, and is presented in a house dating to 1775.

In neighboring Sandwich, MA, Kristine recommends three museums. The brochure from the Sandwich Glass Museum sparkles with ruby, turquoise, amethyst, topaz and emerald-colored illustrations. The museum preserves the history of the industry that began in 1825 and employed hundreds of artisans who made and shipped glassware throughout the world. Glass-making demonstrations offer context for the 5,000 objects on permanent display. Looking for something to put in one of those sparkling glass jars you just bought at the Glass Museum store? Stop by the Green Briar Nature Center and Jam Kitchen, where a living museum shows jams and jellies made using turn-of-the-century methods. And before you hop back into the car to leave Sandwich behind, hop over to the Thornton W. Burgess Museum, dedicated to the life of the author of *The Adventures of Peter Cottontail*.

Fortified by all that wholesome nature and jam, now you’re ready for the dark and creepy stuff at the Witch Dungeon Museum in Salem, MA. The brochure promises: “The mood is set from the moment you enter the Witch Dungeon Museum. You are there—in Salem Village 1692, and you are guaranteed a unique educational experience with a chill or two. You’ll experience the acclaimed performance of a Witch trial adapted from the 1692 historical transcripts. Professional actresses in repertory re-enact the electrifying scene. Fact sheets available in French, German, Japanese and Spanish.” Macabre illustrations further whet my appetite, as do the testimonials from travel guides and an outfit with the appropriate name of Hex Productions.

In a similar vein, NAME honcho Greta Brunschwyler contributes news of the Dime Museum, recently opened on Baltimore, MD, and therefore of special interest to all of you heading to AAM. Following in the tradition of “curiosity centers” 150 years ago, co-founders James Taylor and Dick Horne say, “People want to believe things. The ghostlier and spookier something purports to be, the more people want to believe in it.” Exhibits include the skeleton of a 10-foot Peruvian Amazon, a Samoan Sea Worm (a fierce creature that in life could gut a cat in seconds), a five-legged dog, and the petrified right hand of Spider Lille, a 19th century prostitute who killed her clients by hiding poisonous spiders in their clothes. This promises to be a highlight of the annual meeting!
At the other end of the spectrum, and about 1,000 miles away, Old Faithful Correspondent Andy Merrell contributes another item to his long-running series on obscure and obsessive museums. This time, it's the Cumberland Museum in Williamsburg, KY, featuring The Carl Williams Cross Collection: "See one of the world’s largest collection of crosses and crucifixes; almost 6,000 different items, 1 inch to 10 feet tall; many one of a kind." The collection is the life's work of Rev. Robert Williams of Louisville, KY, a retired Baptist minister who began collecting crosses over 30 years ago. Other collections at the Cumberland Museum include The Henkelmann Life Science Collection, Appalachian Craft, Appalachian Life-Style Exhibit, Blair's Christmas Land, and a Lincoln exhibit featuring a real log cabin.

The museum is a shrine to delicious but miscellaneous animal by-products.

Another indefatigable NAME-ist, in fact our intrepid editor Jay Rounds, contributes news of a new $6-million Hare Krishna Center in New Delhi, India featuring a temple with life-size robots that act out scenes from ancient Hindu scripture. In his dedication speech, India's Prime Minister Atal Bihari Vajpayee said the message of Bhagavad Gita, a Hindu text dealing with the purpose of life, should be spread globally. The new center was set up by the International Society for Krishna Consciousness and the Hinduja Foundation. Craftspeople from Disneyland and other Hollywood industries created the likenesses of the gods and their accompanying special effects.

According to the latest bulletin from the Icelandic Phallological Museum in Reykjavik, the museum is only two specimens away from its goal of collecting at least one penis from every mammal native to Iceland. All that's missing are representative examples from one species of whale, and from a human. But the latter seems destined to be fulfilled with the bequest of an 83-year old former Romeo who has promised an organ donation upon his death. As to whales, the museum may be providing too much information when it further informs us that it only displays the tips of some whale penises, as they are too long (up to 10 feet) or too heavy (over 100 pounds). There's no end to what we know working in museums...

Such as: the new 16,550-square foot Spam Museum and Visitor Center, created by manufacturer Hormel Foods, Inc. and located in a former K-Mart in Austin, MN. The museum promises not only a shrine to delicious but miscellaneous animal by-products, but also interactive video kiosks, a 100-seat auditorium and souvenirs featuring Spam logos. The existing Hormel corporate museum saw 60,000 visitors last year and the city of Austin looks to the new facility to generate increased tourism. The museum store will open over the annual 4th of July Spam Jam celebration, with exhibits opening later this year. If you’re in doubt as to the appropriateness of a lunch meat museum, consider that Spam cans were added to the collections of the Smithsonian Institution just last year.

Too much Spam in the diet may, however, land you a place in the new Museum of Funeral History, scheduled to open this June in Springfield, IL, adjacent to the very cemetery where President Lincoln’s tomb is located. The museum will give a permanent home to exhibits now located in the Illinois Funeral Directors Museum, a mobile display that features information on burial practices across cultures and times, including ice caskets used in the 19th century to keep the deceased fresh.

Finally, no column would be complete without a contribution from Newsline Irregular Gene Dillenburg. This time Gene sent a brief clipping about Ed's Museum. Located in Wykoff, MN, the museum recently celebrated its first decade in business. Its collection consists of everything Ed ever owned. Unfortunately, no further details are available.
NAME at AAM 2000

Sponsored Sessions

Monday, May 15

NAME Business Breakfast
Join NAME's annual business meeting. We are in the middle of strategic planning and we'd really like your participation for this important, exciting time.

Designing the Traveling Exhibition
Both the quantity and quality of traveling, museum-caliber shows have been on the rise. This session will focus on creative ways in which institutions are developing collaborative projects, reaching new audiences, and using new technologies with traveling exhibitions.

Exhibition Excellence: The 12th Annual Exhibition Competition
Find out who is leading the field in the Academy Awards of exhibition design. Don't be left out! Find out what wonderful things your colleagues are producing. The competition judges will be on hand to discuss the results of this year's competition.

Meaningful Spaces: Museum Exhibits as Architecture
Explore the subtle yet powerful influence of architecture when merged with objects and other media to create museum exhibits. Topics will include visitor navigation, presentation of objects, inspirational sources, and the available palette for creating wordless cues affecting the visitor's experience.

The Meaning of "Meaning Making"
In recent years, museums have frequently been described as "environments for visitor meaning making," and the concept of meaning-making has been proposed as a "new paradigm" for museum exhibits and educational programming. But what do these phrases mean? Building on the fall 1999 issue of the Exhibitionist on this subject, the panel will explore the ideas of meaning making and their practical implications.

Weather or Not? Outdoor Exhibitions
At a time when museums are clamoring for more exhibition space, outdoor exhibitions can provide a chance to fully use a museum's property. Panelists will focus on the advantages and pitfalls of constructing or hosting an outdoor exhibition. Specific issues include: installation, organization, timing, durability, weather, security, permits, and attendance.

New Attitudes: Media and Materials
This will truly be a marketplace showcasing fresh and varied applications of low-tech interactives, cutting-edge technology in the works, and innovative solutions to interpretive problems. You'll also learn about the National Park Service's latest creations and some little-known products for outdoor design. If you have anything to do with exhibition implementation, you'll need to drop in.

Tuesday, May 16

Exhibition Contracts: A Roadmap for Collaboration and Cooperation
The contract is the roadmap for any exhibition project. This panel will discuss the basic information to be covered in a contract, the order in which that information should appear, and the language that might be used.

NAME Roundtable Lunch
Enjoy lunch and network with your colleagues as we discuss what's hot, best practices, and find out who is doing what.

Responsive and Responsible Design: Tripping over the Green
Museum designers and administrators are chal-
lenged to become agents for positive change through their choices of materials, processes, and technologies. It can be difficult to persuade administrators and/or clients to use "sustainable," or environmentally friendly, products and practices. Panelists will describe what constitutes "sustainable;" what products and practices are currently available for use, obstacles and positive outcomes, and practical solutions.

Wednesday, May 17

Exhibit Lighting: Stakeholders, Priorities, and Perceptions of Quality
Three major points will be addressed: Who are the exhibit lighting decision-makers? What are their priorities? What are their perceptions of lighting quality in existing exhibit spaces?

Exhibit Acoustics: Hear and Now!
From the call of the cicada to the report of a rifle, sound is something most of us experience all the time yet take for granted. With the advent of new audio component design and more powerful and affordable software, integration of audio into exhibits is more feasible than ever. Join us for a comprehensive look at what it takes to put audio in your museum.

Thursday, May 18

Critiquing Museum Exhibitions XI
What do we mean when we say an exhibition is "really good"? Museum professionals should be able to articulate what makes a particular exhibition effective, from its overall demeanor to its on-the-floor "behavior" to its most subtle design feature. This year's session, the 11th in its series, features insights by seasoned museum professionals related to "Gold of the Nomads: Scythian Treasures from Ancient Ukraine" at the Walters Art Gallery. Delegates are encouraged to visit the exhibition in advance.

What's Going On II: A Conversation on Hot Issues in Exhibit Development
Using a town meeting style format, this session is an opportunity for those affected by the exhibit development process to express their views and hear what other people in the field have to say. The hottest issues identified in the pre-conference Exhibit Development Roundtable will be used to frame the discussion. If you value group dialog and some levity along the way, this session is for you.

Multidisciplinary Approaches to Diverse Audiences: A Case Study
The exhibition "I made this jar...: The Life and Work of Enslaved African-American Potter, Dave" was designed as a collaborative venture among museum professionals, educators, artists, and the public. This session will present practical steps taken by each of four different institutions that enabled visitors to learn about and appreciate the legacy of Dave the Potter.

Opening Up the Exhibition Process: Artist/Museum/Art School/Community
This session will use an exhibition currently on view at The Baltimore Museum of Art (BMA) as a case study in collaboration. While the participants faced many challenges and difficulties, the process helped change the inner workings of the museum, created a new spirit of cooperation between the BMA and MICA, and offered all participants new insights into the powerful role of the living artist.
Co-Sponsored Sessions

Tuesday, May 16

International Approaches to Visitor Studies
This panel will cover three different approaches to studying visitors in museums. Speakers will emphasize national or cultural approaches to their specific situations. Speakers will relate visitor studies to concepts about learning in museums and provide the audience with an opportunity to reflect on the differences among cultures and to make connections among them.

The Poetry of the Bizarre: Measuring Visitor Understanding of Coral
Museum exhibits often face the near-impossible task of communicating complex, unfamiliar subject matter. Take coral, for example: a minuscule animal that builds enormous reefs and supports a quarter of the ocean's life... and most people think it's a rock. In developing a new exhibit on coral reefs, the Shedd Aquarium employed front-end evaluation to identify visitor misconceptions, and formative evaluation to test approaches for conveying exhibit messages.

Wednesday, May 17

The "Ins" and "Outs" of Outsourcing
Institutions outsource for a number of reasons. This session will outline the critical areas that museums need to address in order to guarantee a successful outcome for their outsourced activities. Key issues include when to outsource (and when not to); how to gain internal support for outsourcing; how to articulate a plan for identifying, choosing, and contracting with a vendor; and how to implement and manage an outsourced project.

Museum Accessibility: Helping Patrons Who Are Blind See Your Exhibitions
Audio description can broaden the experience of museum exhibitions for people who cannot see or have low vision. This session will describe how audio description works and how to add it to museum settings via special audio tours, augmentation of existing recorded programs, or through the training of docents. Audio description can be and has been employed in a range of museum disciplines, from planetariums and gardens, to art and natural history museums.

National Interpretation Project Progress Report
How does one create a meaningful experience? Interpretation is perhaps the least tangible of all the areas of museum operations, but it is essential to public accountability. To meet this challenge, museums need the right tools. This poster session presents the findings of regional study groups that identified shared processes and best practices, and constructed a variety of models for doing exemplary interpretation.

Healing Communities: Collecting and Interpreting Tragedy
For museum personnel, the complex emotions involved in interpreting a tragic event for the public can prove challenging at best. This session will explore the role museums can play in interpreting a tragic event and serving as a resource for remembrance and community healing. The practical considerations to be addressed include how and when to go about collecting the material objects and oral histories associated with a tragedy, and the means and methods of interpreting such deeply personal events.

Our Voice and Vision: Native Americans and Exhibits
Native Americans are playing increasingly important roles in the museum field, serving as curators and designers as well as informants and interpreters. Panelists will present their perspectives on developing exhibits of Native American history and culture for their own communities as well as the outside world. Questions that will be considered include:
What is expected of a consultant when working on tribal museums? How do tribal museums judge their success within their own communities as well as the greater museum field? How are Native American aesthetics and concepts of order addressed in exhibits?

Thursday, May 18

Better Exhibits through Technology
Imagine walking in a field at Little Big Horn and seeing the battle recreated. Or learning about rifles from the perspective of a soldier. Still images, facts, and figures are all available for the asking from a head-mounted or wearable computer unit. Panelists will discuss specific projects and future applications that could revolutionize museum exhibition design.

Problems of Contemporaneous Exhibitions
Numerous museums have experienced, are experiencing, and will experience the challenges of multiple contemporaneous exhibitions related to historical celebrations and commemorations. Panelists will outline the issues and suggest strategies for optimal results.

Transforming the Museum...
New Research on Visitor Learning and Experience
This presentation will serve both museum professionals and individuals involved in team-based exhibition development. Utilizing results and practices from “Visitor Memories and Learning”—a collaborative, field-based exhibition development study—the presentation will pose critical questions and provide tangible task-oriented exercises.

Museum Professionals and Founders: Reflection, Vision, and Change in the Evolutionary Process
An institution’s transition from the initial “founder stage” to professionalization can prove challenging. Panelists in this roundtable session have managed this process to the satisfaction of all involved. They will present guidelines and a framework to aid delegates with the evolution of their own institutions.

Issues Luncheon on Diversity
Keynote Speaker: Ray Suarez
Some thirty-six years ago, two prominent members of the profession proposed (in a letter to Museum News) that museum journals should begin publishing critical reviews of exhibitions. The result, one of them recalled twenty years later, was "a storm of protest" and a failure "to bear significant fruit" (Washburn 1985:22).

Now, of course, reviews of exhibitions have become fairly common, with fifty-two appearing in the past five years alone in Exhibitionist, Curator and Museum News. The session on "Critiquing Museum Exhibitions"—now in its eleventh year—has become a highlight of the annual meeting of the American Association of Museums. And a number of programmatic articles have sought to delineate why and how we should critique exhibitions.

The purpose of such "critical thinking" is, according to Kathy McLean (1994:6), "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." In short, criticism is a mechanism to help us, as a field, become more knowledgeable and skilled in our work. This implies that criticism of a specific exhibition is addressed not to the people who created the exhibit, but to the profession at large. Unlike evaluation, which can accomplish its immediate goals through private communication to the exhibit developers who want to make remedial improvements, criticism can only do its job through public presentation, publication and wide distribution. Used imaginatively, it can become an essential vehicle for improving practice throughout the museum community.

How well has criticism met that potential so far? In this special section, we explore several aspects of the role and performance of criticism. Diana Cohen Altman, who has succeeded Kathy McLean as organizer of the annual AAM criticism session, presents her template for responsible critiques. Lynn Dierking explores the complex relationships between criticism and evaluation. Marjorie Schwarzer offers up a new approach to criticism, combining a variety of contrasting "decoders" in a single review. And Jay Rounds and Tom Hacker analyze the fifty-two reviews published in leading museum journals during the past five years, seeking to determine whether any consensus is emerging on the "why" and "how" of exhibit criticism.

REFERENCES CITED:
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Exhibition Criticism: A Pretty Okay Idea

by Diana Cohen Altman

Diana Cohen Altman is a Senior Exhibits Editor at the Smithsonian Institution and past Editor-in-Chief of Exhibitionist. This year she assumes the chair of the “Critiquing Museums” session at the American Association of Museums conference. She can be contacted at: altmanD@oece.st.edu

Some rules of the road for critiquing exhibitions.

“Good things don’t end in -eum. They end in -mania, or -teria.”
-Homer Simpson

A h, Homer. A man who finds words for what others think but won’t say. If only we exhibition makers were as forthright with our opinions. Maybe our cartoon friend’s opinions only serve to remind us what can happen when opinions are glib, unsubstantiated, and quotable: the words get repeated and turn into mantras. Too often, even within the exhibition-making community, exhibitions are celebrated with “It’s really cool,” and indicted with “Bad news.”

The shorthand is fine in the short run, but what happens if—when—time and other professional constraints keep us from truly analyzing the successes and failures of the exhibitions around us? And as important, what happens when we don’t share our opinions with others?

For several years I have been a proponent of “holistic” exhibition criticism by exhibit professionals for exhibit professionals. I believe that seasoned exhibition professionals have a great deal to offer museums in the way of creative intuition and of interpretive analysis of the full-blown exhibition experience. I look forward to a steady stream of such exhibition critiques as a complement to the tremendous insights that visitor studies/evaluation work has already yielded.

Here, with a nod to Homer Simpson, is a kind of critiquing manifesto I have prepared to remind myself why critical opinions about exhibitions matter. Good things can too end in -eum!

One Critic’s Guide to Exhibition Critiquing

1. Exhibitions are complex entities that exist only in the context of visitors visiting them. They interact with most if not all of the visitor’s senses as well as with the visitor’s frame of reference. They do not stand on their own merit. If an exhibition goes down in a forest and no one is around, it wasn’t an exhibition.

2. Although they “succeed” in some ways that might never be explained, exhibitions can also be deconstructed in ways that help to explain their successes and failures with visitors and audiences.

3. Seasoned exhibition makers have an obligation to analyze and articulate the analysis of all aspects of an exhibition. They/we also have an obligation to disseminate those opinions.

4. Exhibition critiques are opinions—educated opinions that are important in large part because of their idiosyncrasies. That is, the reader or listener of a critique has a lot to learn from the fixations and irritations of their esteemed colleagues.

5. Critiquers must base their analysis on the exhibition before them—not on the team’s vision, on the critiquer’s alternative vision, or on some other exhibition altogether.

6. We must strive to keep exhibition critiques from devolving into formulaic analyses.

7. Anyone in a position to invite, perform, or distribute critiques has an obligation to do so.
8. Thou shalt not covet thy neighbor's exhibition. Don't let your thoughts drift too far into what "I-as-dictator" would do with this exhibition. The exhibition reflects a particular set of individuals whose stamp influences how visitors "see" the exhibition.

9. Honor thy neighbor's exhibition. There is a line between candor and disrespect.

10. Don't worship false idols. Apply your beliefs about what you consider sacred to the exhibition medium, but not at the expense of recognizing new paradigms that work for a particular exhibition. If there were a checklist of what makes a good exhibition, we'd all be following it.
Critically Thinking about Exhibition Criticism and Exhibition Evaluation

As exhibition development has matured as a science and an art, the activities of exhibition criticism and exhibition evaluation are maturing as well. However, as these two separate but related activities have developed it has not been without some angst, particularly as museum professionals sort out the similarities and differences between these activities, contemplate what potential relationships might be fostered between them and offer strategies to improve the quality of each. Why is this so? What are some of the issues that surround this debate? Are there ways to clearly define the roles of each activity and to use both exhibition criticism and exhibition evaluation constructively to improve practice?

A Problem with Definition

Kathleen McLean (1998:8), a major proponent of exhibition criticism, has defined its purpose: “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.” Interestingly, that would not be a bad definition for exhibition evaluation either—which is a great deal of the problem. The processes are similar in that both are efforts to assess quality, but they are not the same.

There is actually a great deal of difference between exhibition criticism and exhibition evaluation; differences which have not always been clearly articulated, and consequently have resulted in much confusion. Although some would suggest that the purpose of each activity is similar (to judge or assess the quality and effectiveness of an exhibition) each process only contributes to this judgment process in certain areas. For example, exhibition criticism is an appropriate activity for judging the quality and effectiveness of an exhibition from an aesthetic, design and (depending upon the discipline) sometimes a content perspective, and it can help the field to develop some shared vocabulary and strategies for discussing and improving exhibitions. As suggested by Kathleen McLean (1998: 9), “critical reviews help to develop a clearer sense of the parts of an exhibition and illuminate how these parts relate to the whole exhibition experience.” Already, exhibition criticism has played an important role, and hopefully will continue to play a role, in establishing ways for the field to meaningfully talk about the exhibition medium, create forums for discussion (the American Association of Museum exhibition criticism sessions are an example), and ultimately improve the practice of exhibition development. This is an appropriate role for criticism to play.

Subjectivity versus Objectivity

However, exhibition criticism is not an activity that can or should be used to judge the quality and effectiveness of an exhibition from the visitor perspective. Although some guidelines for critiques do encourage the reviewer, or in some cases a group of reviewers, to include at least some effort to “judge” the visitor experience in the exhibition, these insights offer a quick and superficial “view” of visitor reactions. More often than not they reflect the experience of the reviewer as visitor, rather than the experience of actual visitors. By design, most critiques last at the most a day or two, and so the perspectives of very few visitors if any are included. If visitor perspectives are included they tend to be in an unsystematic fashion. I know that when I have been asked to critique an exhibition, I have observed some visitors, and even in a few cases interviewed some. However, these informal observations and interviews informed my personal, subjective view of the

There is a great deal of difference between exhibition criticism and exhibition evaluation.
exhibition. Although my personal view is certainly based on a great deal of experience, nonetheless, for that particular exhibition, it was not a systematic or thorough visitor study. Although it is commendable that many criticism sessions include evaluators or audience advocates as members, it is also important to not overstate the role these representatives play in the criticism process.

Exhibition criticism, by its very nature, is not an activity in which the validity and reliability of systematic methodologies are important. The very essence of exhibition criticism is based on a subjective review; the reviewer's (or reviewers') own experience of and in the exhibition. In fact, the feeling is that personal intimacy with the exhibition is essential if the reviewer is to provide the depth of analysis necessary to produce a high quality and ultimately useful critique. By design the reviewer is an "insider," not an ordinary visitor, and their experience and expertise is being used to make critical judgments about the quality of the exhibition. It is not surprising then that Samuel Taylor, while participating in an American Association of Museum (AAM) exhibition criticism session a few years ago, emphasized that when you listen to critics give their opinions, you learn almost as much about them as you do about the exhibition! This is not a criticism of the criticism process; it is merely a characteristic of the exhibition criticism process.

The only way to assess the quality and effectiveness of an exhibition validly and reliably from a visitor perspective is to conduct a thorough, well-designed summative evaluation, which systematically and objectively gathers visitor feedback and reaction to the exhibition. Although it is naive to suggest that this activity is entirely objective (for example, methods and tools selected vary greatly among evaluators and these subjective choices do influence evaluation findings) the purpose of the effort is to gather empirical evidence as objectively as possible. This empirical evidence, in the form of visitor demographics, psychographics and visitor feedback, is then used to assess the quality of the experience and can be compared to the exhibition objectives laid out by the exhibition developers. As Beverly Serrell (1998: 7) suggests, in a high quality evaluation, the evaluator acts as a "visitor feedback conduit." As an activity, exhibition evaluation is not better than exhibition criticism, merely different, in important ways that should not be confused.

An Unfamiliar Tradition

Another issue that has created some angst in the field is unfamiliarity with the tradition of criticism itself. Criticism as a tool was borrowed from the humanist tradition, where there is a long history of using this approach to critique the quality of work in various humanist fields. However, the museum field is multidisciplinary, including humanists, but also museum professionals from other disciplines, including science and social science. For the most part, these disciplines are unfamiliar with the personal, subjective approach that criticism takes in assessing quality.

This situation has been exacerbated by the fact that many critiques focus on negative feedback, rather than on constructive positive and negative feedback. Interestingly this is not a problem for people familiar with the tradition. Historically, criticism has tended to be negative and hard-hitting, an unfamiliar and unpleasant experience if one is not accustomed to that approach. Certainly many of the criticism sessions at meetings can be quite angst-producing. Although there is no doubt that as a profession we can all benefit from some honest assessment, the point of some of these sessions seems to be to be as negative as possible, causing one to wonder if this is ultimately a productive approach. Perhaps since we have borrowed the approach, we can modify it to our own purposes. By attempting to make the process one that provides constructive feedback and a forum for discussion about what constitutes high quality exhibitions, we may be able to raise the level of discussion around this topic, an outcome that would benefit the entire field.

Once again there is a precedent for doing this. Early in its history, exhibition evaluation also suffered from a focus on the negative. As an approach evaluation was also borrowed from other fields, primarily the formal education and health care arenas, where the effort was often to find out what was wrong with the effort, rather than to inform and describe the contextual factors influencing the outcome of effort.

Although by no means is exhibition evaluation entirely free from a focus on negativism, some progress in this regard has been made. In part, the evaluation process itself improved and evolved within the museum community, becoming more responsive and useful to the field. There is now more effort to involve the exhibition development team from the start as an active participant in the evaluation process and to focus the activity on providing useful feedback that can inform the process along the way. In fact, the process has become a more integral part of the
development process as a whole, rather than merely being the judge pointing out the failings of the exhibition at the end of the project. As Jeff Hayward suggested, some of this relates to the evolution of the activity as a useful function:

"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 thing 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." (1998: 10)

As the discipline of exhibition criticism evolves and matures, hopefully those involved with this effort will recognize the positive and constructive role that it can play in supporting an honest look at what constitutes high quality exhibitions. There is much potential for it to be used in increasingly creative ways that the field itself can shape.

Although they are quite different, exhibition criticism and exhibition evaluation have the potential for being exceedingly complementary and I think much would be gained by thinking about ways to optimize their differences as a mechanism for fostering improved practice in the field of exhibition design, development and implementation. In what ways might these two activities work more synergistically with one another?

**Meaningful Standards for Criticism and Evaluation**

Exhibition criticism and exhibition evaluation both currently suffer from a lack of standards and a uniform set of criteria with which to judge excellence. Not that you would ever want exactly the same methods or criteria to be employed in a visitor study or an exhibition critique, but it would be helpful for some of the questions and some of the criteria to be the same or at least similar. In the absence of such efforts at standardization, a number of evaluations and criticisms are conducted each year which are for the most part impossible to compare in any meaningful way later. In other words, it is very difficult to "assess" how these efforts are contributing to the field's body of knowledge about what constitutes high quality exhibitions, from either a design, aesthetic, content or visitor-centered perspective. What one finds instead is a comparison of apples and oranges (making generalization difficult at best! For example, I know that Jay Rounds, editor of this journal, has been trying to consolidate reviews (a job in itself!) and discern meaningful patterns and relationships among them but has been facing a difficult time (See Rounds and Hacker, this issue). Because of the varied nature of the contributions, trying to analyze them for any meaningful insights or generalizable lessons can be difficult. Although Kathleen McLean has laid out some guidelines for exhibition criticism in an earlier *Exhibitionist* issue (1998), these were suggested as one approach that could be taken and as far as I know these have not been adopted in any uniform way by those involved in exhibition criticism. This is problematic.

Evaluators can not even agree on whether there should be standards, let alone what they might be!

Likewise, in the exhibition evaluation field there are a number of visitor studies conducted each year but little effort to design studies in ways that valid comparisons can be made. In fact, it can be difficult to even compare the most simple of data, demographics, from study to study! Although a few of us have been arguing that it would be helpful to at least adopt some similar methodologies and questions for evaluating the quality of exhibitions, as well as (at the minimum) similar demographic categories, such efforts are few and far between. When it comes to shared criteria for what constitutes a high quality visitor-centered exhibition, there have been some efforts to develop criteria, but there is still much to do in this area. In fact at this point, evaluators can not even agree on whether there should be standards, let alone what they might be! Harris Shettel (1998) did some early work in this regard that is probably worth revisiting and building upon. John Falk and I, in a new book, suggest eight suites of factors organized around the personal, sociocultural and physical contexts. These suites of factors might serve as a jumping off point for a discussion about establishing visitor-centered exhibition standards (Falk and Dierking, in press). Currently John is also organizing a session at the August 2000 Visitor Studies Association meeting in Boston to debate the issue of standardization among evaluations, but a debate it will be. Clearly my bias is that some level of standardization would be helpful.

One interesting approach to consider would be to open this dialogue up between those involved in exhibition criticism and those engaged in exhibition evaluation (appreciating
that there is some overlap in these arenas). What are the clear differences between these enterprises and what does each process uniquely contribute to our body of knowledge about high quality exhibitions? How do these processes complement one another and, if they do, could more be done to maximize such complementing? Are there any meaningful patterns that can be discerned when comparing the results of exhibitions reviewed through criticism and those evaluated?

Once there is some agreed upon sense of how these processes inform and complement one another then additional questions related to standardization could be asked. What are the pros and cons of thinking about some level of standardization within the exhibition criticism and exhibition evaluation processes? Do parts of these two processes lend themselves to some level of standardization without losing the unique perspectives that varied approaches to each bring? Can standards for these two activities be developed in such a way that the standards complement one another, increasing the likelihood that findings from the two activities contribute to a shared body of knowledge about high quality exhibitions? These are all questions in my mind worth considering and opening up to a forum.

A Timing Issue

One other idea that might be interesting to pursue if there is a desire to dovetail these activities in some way is to explore whether the timing of criticism could be varied. As was suggested previously, the usefulness of exhibition evaluation changed dramatically when it became a more integral part of the process of developing an exhibition, not merely an activity tacked on at the end. Although critiques customarily happen after exhibitions have been completed, is there any reason that they have to? Is there a way to use the exhibition criticism process during the development of an exhibition, in the same way that other forms of evaluation (front-end and formative, in particular) have been used to inform exhibition development? Can exhibition criticism and exhibition evaluation findings inform other related projects and, if so, in what ways? Can exhibition criticism and exhibition evaluation be “synchronized” during the development process to maximize their usefulness and, if so, in what ways?

By necessity all of these questions require a degree of coordination and communication among participants engaged in the two activities, but it seems that opening up this dialogue might be fruitful. Perhaps there is a role that AAM’s National Association for Museum Exhibition (NAME) and the Committee on Audience Research and Evaluation (CARE) organizations can play in fostering this dialogue. By critically considering the unique differences between the two activities and pondering possible relationships that could be fostered between them, the quality and usefulness of both could be improved, hopefully resulting in higher quality exhibitions and practice.

Although critiques customarily happen after exhibitions have been completed, is there any reason they have to?

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Decoding San Jose's Tech Museum of Innovation

"All museums are interesting, even when they are not."
—Elliott Erwitt

Introduction

This essay serves up San Jose's Tech Museum of Innovation as a case study for exhibition analysis. Is this so-called museum of innovation innovative? Is it a museum? If one recalls the historical concept of the museum, then with its thrilling array of machines and gadgets, the Tech is a temple to the muses. But, like contemporary science centers, the Tech is more concerned with presenting the present than it is with displaying historical artifacts. Why, then, does it bill itself as a museum and not a science center? Does the Tech—with its salute to high tech know-how—exploit the rhetorical appeal of the word "museum?" In doing so, does it regurgitate World's Fair-like promotional science and industry museums? Or, do its swanky technological exhibits make for an exciting new kind of in-the-moment museum?

Innovation is a step-by-step process, connecting existing building blocks in different ways to arrive at new solutions. The Tech's mission is to inspire the innovator in everyone. Hundreds of exhibits attempt to inspire visitors to innovate with technology—from designing a faster vehicle to performing more precise surgery to measuring an earthquake. Yet, can scientific innovation occur in a controlled environment? How do you create a museum where the public can actively participate in innovation?

There is no doubt that the Tech is a WOW. But is it an AHA? And, does it really matter if it isn't? The answer to the riddles I have posed so far hinges on who is decoding the Tech's messages, and for whom they are decoding these messages.

All manner of interested parties have discerned the Tech differently. The public votes with its feet, attending en masse. Evaluators find that the Tech's patterns of visitor behavior generally mirror behavior in other science centers, although some exhibits have exceptional holding power. Journalists heap praise. Critics have a field day exposing the not-so-hidden agendas in such a flashy enterprise, and expounding their own personal vendettas against Silicon Valley. And, from the experience of my own visits and biases, I find the Tech to be an intriguing place, a fruit ripe for exhibition criticism.

In what follows, I will analyze the perspectives of evaluators, journalists, critics, and my own visit to the Tech. My goal is to frame the role of exhibition criticism as our profession becomes increasingly quantitative, and blockbuster-driven.
The 132,000 square foot Tech Museum of Innovation is a blockbuster. Its 250 exhibits, created mostly in-house, IMAX theater, and mango-orange and buoyant-blue structure have attracted over one million visitors since the October 1998 opening. Twelve years in the making, conceived as a strategic cultural landmark to assert San Jose's identity as center of Silicon Valley, the Tech's leaders took no chances. They hired internationally-known architect Ricardo Legoretta, who already had a track record in San Jose (he designed the Children's Discovery Museum about a mile from the Tech); built a coalition of community, political and professional supporters; engaged top-notch museum professionals; tested the concept and prototyped exhibits in a smaller downtown site; and spent $113 million.

Exhibits fill four themed galleries: Innovation and Life Tech on the top floor and Exploration and Communications on the lower level. Through multiple entry ways, visitors come upon computer stations, activity and demonstration areas, and exhibits with a resplendent variety of materials, sizes, shapes, and sounds. In the Innovation Gallery, devoted to core Silicon Valley tools of the trade, visitors view a mock clean room to see how microchips are made. They computer-design a roller coaster and take it on a simulated ride. They experiment with circuits, scanners, lasers, sensors and robots. The Life Tech Gallery, across the floor, shows how new technologies interact with biology. There are operating tables, a simulated gene testing lab, an MRI machine, and sports training technology, including a virtual bobsled ride.

Downstairs, the Exploration and Communications Galleries show how new technologies change our sense of the earth, outer space and human discourse. In the Exploration Gallery, visitors test drive a Mars Rover or a deep sea diving robot; ride a jet pack outer space simulator with air-powered thrusters; and view images from the Hubble Space Telescope. Among the communication technology exhibits are a digital studio in which visitors shoot a video portrait and manipulate and network it with sound, images and text. Other exhibits feature e-mail, fiber optic, cell phone, television and web technologies.

Despite the plethora of computer screens, the Tech does not feel like a pachinko parlor. Low ceilings and lighting and ample passageways make for a comfortable experience,
albeit a noisy one. I find wayfinding to be surprisingly easy for such a potentially chaotic space; the lobby comfortable; restrooms accessible and well-marked; floor staff watchful and helpful.

**Decoder: Mass Media**

**Purpose: To attract the public**

The week the Tech opened, the *San Jose Mercury News* ran a 64-page glossy color insert inaugurating its city's new cultural icon. The exhibits staff was publicly saluted; four exhibit developer and designer teams were highlighted. Capturing the essence of why people would want to visit the Tech, developer Dan Wodarcyk explained: "[Visitors are] using real technologies which one may never have access to." Sharon Klotz summed up the philosophy behind the Exploration Gallery: "We are all explorers, each in our own way." Describing the electronic cafe with the excitement of someone inaugurating a new product, developer Rachel Hellenga confessed, "We don't know how people are going to use this. It's never been done before." These three sentiments aptly capture what a visit to the Tech is about: getting your hands on very cool technology, taking in a dose of feel-good exploration, and not really knowing what to do with or make of it all.

Most of the media has been duly dazzled by the first sentiment and ignores the latter two. For *Popular Mechanics*, for instance, the Tech's exhibits inspired "feelings of wonder" and "love": "Everything ... was made to stimulate your senses, and every exhibit is explained in easy-to-understand language" (Grumer 1999: 36). *Technology Review*, MIT's magazine, was equally effusive. The Tech is "intriguing, engrossing and even awe-inspiring." To balance this approval to an audience that is likely to be in-the-know, the *Review* also positioned the Tech within industry, noting "the symbolic import of placing exhibits sponsored by rival chipmakers Intel and Advanced Micro Devices on different floors" (Ditlea 1999).

The Tech's exhibits are framed in other ways in the media. *Sunset Magazine* recommends the Tech as the first stop for any technological neophyte venturing into Silicon Valley. Here, the Tech becomes tourist magnet. *U.S. News and World Report* was hugely impressed with the Tech's donor list and fundraising success. Here, the Tech's exhibits are admired for their ability to attract money. All told, the media has portrayed the Tech as a triumph for San Jose in broad loving strokes.
**Decoder: Professional Evaluator**

**Purpose:** To determine for museum staff how the exhibit's message has been understood by its audience

While media coverage of the Tech entices targeted audiences with promises of delight, professional evaluators measure whether the Tech has actually attained these heights, or more modestly, how audiences are experiencing the museum. Again, the Tech has been thorough, investing in a very comprehensive evaluation study conducted during the summer of 1999 by Randi Korn and Associates. Korn's team developed, administered and analyzed 500 tracking and timing studies, 200 open-ended interviews and over 1,000 questionnaires. According to Korn, the Tech was an extraordinary client: "There is high interest from the staff, including the director, in 'getting it right.' I have never seen an exhibitions and marketing department work so well together." Among Korn's mandates was assessing visitors' experiences in each gallery's immersion environments as well as components that discussed ethical issues related to technology. Overall, Korn found that visitors go through the Tech at about the same pace as they navigate other science centers. What is different about the Tech is what Korn calls "high dwell time:" people become deeply involved in a few activities, instead of skimming many components. The Tech's exhibits have strong holding power.

**Decoder: Critic**

**Purpose:** To interpret for the public

We may think that for museums, which increasingly judge success by attendance draw, educational impact and customer satisfaction, exhibition criticism is less purposive—especially since as audience-focused institutions, we now have sophisticated evaluation methods communicating to our visitors and incorporating their desires into the exhibition process. Criticism, unlike quantitative evaluation or mass media coverage, is a more biased and personal form of evaluation. Perhaps as a result of our litigious society, we are more comfortable hiring evaluators to discern quantifiable evidence in a professional arena, as opposed to letting critics offer qualitative judgment. Yet, criticism allows one to assess the exhibition not so much as a product that entertains the masses, but as an artform which provokes feelings and memories and delivers distinctive and potentially transformative experiences.

The perspective of the professional critic is well-illustrated by Kenneth Baker's analysis of the Tech in the *San Francisco Chronicle*. His choices of adjectives reveal as much about his patrician art critic personality as they describe the Tech: "rock[s] like a video arcade," "showbiz," "sugary," "weird," "condescending," "droning." Baker describes the jet-pack chair as "gush[ing] air like a sneezing hippo," and he tartly observes: "How much will visitors enjoy the Tech depends on several factors: their age, whether they think learning differs from entertainment and promotion, their tolerance for noise and distraction, what fraction of their investment portfolio is in high-tech stocks, and their willingness to be treated like children" (Baker 1998).

At the Tech, Baker is amusingly out of his element. Yet, he is not ranting for the joy of a few cheap shots; he is raising serious issues about the Tech's intentions within the rapidly-evolving (and to some troubling) position of the museum in the marketplace. For example, he notes: "[N]o mention is made in the simulated 'clean room' area of pending lawsuits by retired Silicon Valley clean-room workers who believe their cancers were caused by workplace toxins...The really big question never arises. Should any museum blur distinctions between entertainment and marketing?" To Baker, the Tech simplifies—or Disney-ifies—a complex enterprise.

For *Wall Street Journal* readers who revel in the more complex side of enterprise, David Littlejohn also takes potshots at the Tech's hype. The exhibits make up an "aggressively interactive funhouse" which isn't nearly as entertaining as the rides at Great America just down the road.

*Salon.com* cyber critic Simon Firth is more in tune with the ins and outs of Silicon Valley and thus even more piercing. He appreciates the Tech's commitment to interactivity, its "coolness," and how the marriage between science and creativity can produce innovative technological solutions to problems. But like Baker, Firth is disturbed by the Tech's commercial tone, comparing the museum to a Sunnyvale superstore. Firth also drives home the more insidious side of the Tech (and a lesson that underlines the envy that many museums in the Bay Area may feel toward their newest cultural neighbor): "overall, the Tech seriously downplays the role of money and power in the innovation equation. It doesn't teach you, for example, that you can invent the cost-
efficient human-powered vehicle in the world—but still be beaten by a team with an inferior product that is better funded and that has more powerful friends than you do.” The Tech does not unveil the darker side of innovation for obvious reasons, local corporate funding chief among them (MacGregor 1999).

Firth goes on to use the Tech as an excuse to rant against Silicon Valley. The technology revolution in the Bay Area has created a real estate and traffic nightmare. Why can’t technology solve that problem? What Firth fails to understand is how, or whether, a museum exhibition at the Tech is the appropriate venue to communicate this message to a wide audience.

**Decoder:** Marjorie Schwarzer

**Purpose:** To advocate for a broader conversation

I am sympathetic to Firth since I believe that museums do have a responsibility to probe as well as glorify. My husband and I visited the Tech for the first time on a crowded day: the Saturday of Thanksgiving weekend. With no stomach for large crowds, and an appointment to keep, we expected to peek in for about half an hour, tops. With ten years experience in children’s and science museums, I assumed I would be able to “read” the Tech quickly. In spite of ourselves, we became thoroughly entranced. Three hours flew by; we were late for dinner with my relatives. We told them all that they must visit the Tech.

The Tech’s staff deserves tremendous praise for their initial work. They are well aware of how to engage people through exhibits and clearly employed the right media for the task at hand. There are multiple ways to enter and understand the exhibits. Visitors can construct their own experience at their own pace, yet still be surprised at an unexpected activity or outcome. Following Howard Gardner’s theory of multiple intelligences, individual exhibits provide sound, words, spatial relationships, gross and fine motor activities, and social interaction. Familiar objects (a cell phone) as well as usually off-limits ones (an infrared camera) give multiple contexts. Stations, such as a head scanner and photo lab that allow you to project your own image into an exhibit, provide the ultimate meaning-making activities; you can literally see yourself in an exhibit. There is plenty to do so that each visit will be different. Activities—such as the roller coaster simulator—encourage people, especially adult-child groups, to work together. No wonder the “dwell time” is so long.

Yet I find it disturbing that a museum that celebrates innovation is, in some fundamental ways, so lacking in it. Although some science museum aficionados will disagree with me, I find that much of the museum is simply a new variation on an old theme. Innovation, exploration, life sciences and communications have long been staples in science museums. It’s as if the Tech’s staff conjured up classic science museum stand-bys and digitally downloaded them in San Jose. The sliced body parts of Chicago’s Museum of Science and Industry become a visual database of a sliced human. The science museum icon—the walk-through heart—becomes heart surgery on a screen. The wheelchair activity used in many children’s museums to help children understand disabilities morphs into a simulated wheelchair race through a virtual landscape. The earthquake simulator experience in the Explorations Gallery is a spiffed up version of the California Academy of Science’s exhibit 60 miles to the north, exemplifying what Randi Korn dubs “the mallification of the science center.”

What does it mean to innovate? The Tech takes a romantic view of inventing: faced with a situation, you form a hypothesis, study the phenomenon, develop a methodology and mess around until you find solutions. In Silicon Valley, however, innovation is as much about failure, politics and personality, as it is about scientific process. An exploration of other inventive successes of Silicon Valley could paint a more complete picture: guest workers from the Middle East and Asia who substitute for the lack of trained Americans; till-up non-descript office buildings that allow businesses to rapidly dissolve and merge their headquarters; mind-enhancing drugs that induce out-of-the-box thinking; a 24/7 corporate culture; and financial schemes where companies lose money while yielding huge stock values.

The Tech, on the other hand, communicates a simplistic and boosteristic notion of scientific progress. Click a mouse and miracles will instantly occur before your eyes. Silicon chips, embedded everywhere, are sending us on the road to progress, allowing us to push beyond our potential. To be fair, there are thoughtful nods to ethical issues, from organ
donation to privacy on the Internet. These areas, however, are the hardest to find. For example, there is a video cube that airs talking heads expressing different opinions about the value of technology. Since it is placed next to the noisy and crowded circuit and sensor workstations, it is almost as if the developers are daring you to try to pay attention. Ethical dilemmas of bioengineering are similarly buried in alluring video images of genetically-altered plants and animals. Interestingly, Korn's study found that although the ethical components currently have low attraction power, when the evaluators invited visitors to comment on them, there was high interest in the content, especially in bio-medical ethics. This finding suggests that science centers would do well to expose ethical issues. The challenge the Tech is grappling with is how to allow visitors the mental and physical space for reflection amidst a highly active environment.

With a focus on the tried-and-true and attention to the visitor's experience, with good press and a helpful evaluator, with engaged donors who understand the need to stay on top of technological changes, the future success of the Tech seems certain. Yet, there is an inherent danger in this certain success and even in the persistent "wow" one feels in the Tech's galleries.

As The Wall Street Journal puts it: "Revealingly, the museum contains no exhibits that explain how computers work. So far, the designers haven't figured out a way to explain binary mathematics in a simple, understandable way" (Littlejohn 1998). Indeed, I left the Tech feeling even more powerless about the proliferation of information and technology in my life than when I had entered. By showing off the latest high tech pyrotechnics, rather than demystifying them, the Tech has sugar-coated the heroics of high technology in a region that badly needs a reality-check. It does matter that there is no "aha" here.

The greatest innovation an exhibition can provide is moving the visitor to a new level of consciousness. Even if the Tech cannot deal with the many politics and cut-throat economics of the technology industry, it can provide a site where visitors innovate the ways in which they relate to technology. This direction for leading science centers, such as the Tech, is entirely in keeping with the market-driven museums of the 21st century. Zoos and natural history museums have evolved into organizations that not only showcase exotic animals and objects, but teach respect and conservation of the environment. Children's museum exhibits increasingly try not to just amuse children but to actively advocate for their social needs. History museums are attempting to furnish multiple perspectives on past events. Art museums understand the need for blockbusters, but they also explore new artistic terrain and media and challenging issues.

Neil Postman (1992) says that each technological milestone (the pen, the television, the Internet) balances a social equation: we lose something (aural memory, live
performance, social contact) equally as valuable as what we might gain. It would be a shame, however, if what the Tech proves is that we are so numbed by whiz-bang gizmos and our need to mythologize their importance that we have lost our ability to ask questions about their meaning. When museum exhibitions bury these questions, we need exhibition criticism to challenge museums to stretch further in their vision. In a world seduced by power, money and now the Internet, this is the ultimate responsibility of the museum, and of exhibition criticism. The Tech has the talent and will to take this to heart.

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Special thanks to my colleagues Randi Korn and Rachel Hellenga for their generous feedback.

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HAVE WE GOTTEN ANY BETTER AT EXHIBIT CRITICISM?

by Jay Rounds and Tom Hacker

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Analysis of 52 exhibit reviews published over the past several years reveals few signs of an improved technology of criticism.

Criticism is the eye that perceives, the mind that apprehends, the sensibility that takes in the actual work of art.

—Gilberto Perez (1998:B6)

Over the past decade there has been increasing emphasis placed on the need for informed criticism of exhibits to help us improve practice in the field. The popular criticism sessions at AAM meetings, developed by Kathy McLean, have now been running for ten years. Many articles—including those in a special issue of Exhibitionist (1994)—have stressed the importance of scrutinizing our practice in critical reviews.

Has it worked? Have the calls for increased attention to exhibit criticism actually resulted in publication of more and better criticism? In this study we seek to assess the current state of exhibit criticism in leading museum journals.

To set manageable boundaries on the study, we chose to focus on the three most widely-circulated U.S. journals that publish criticism of exhibits from museums of all disciplines: Curator, Exhibitionist, and Museum News. Inclusion of other journals, including those from other countries, of course might change the findings—but that is a question for another day. In any case, these appear to be the journals most widely read by U.S. museum professionals in all types of museums, so reviews published in these journals may be those most likely to influence subsequent exhibit practice in the U.S. We further limited our most intensive analysis to reviews published in the three journals during the period 1994-1999. During that time a total of 52 reviews appeared.

Are the journals publishing more criticism now?

Whatever more subtle changes might have resulted from calls for improved use of exhibit criticism, we assumed that the most obvious response would be an increase in the number of reviews published by the journals. Surprisingly (to us, at least), Exhibitionist only began publishing critical reviews in 1992, with Curator following in 1993. Museum News has been carrying reviews of a sort for far longer. However, rather than showing an increase in the number of reviews in recent years, Museum News has dropped its rate dramatically, from a high of 31 reviews in the five years from 1989-1993 to only 13 in the period 1995-1999.

Even within the past five years there has been at best a steady state. Table 1 shows that the number of reviews has actually declined from a high in 1994.

Table 1: Number of Reviews Published Per Year

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About a third of the individual issues contained no exhibit reviews at all. Why, in the face of so much attention to the need for criticism, would the journals be publishing fewer reviews? We have no direct evidence on this question, but it should be noted that all of the journals publish a variety of types of material, so reviews must compete for space with other priorities. This may indicate the need for additional outlets for criticism, if it is not practical for the existing journals to increase the space allotted to reviews in their current formats. We have also found, in our personal experience with Exhibitionist, that it is surprisingly difficult to recruit qualified professionals to write critiques. In part this reflects the generally low level of motivation for writing in the museum world (Stapp and Hirsch 1995), but we also encountered a reluctance to critique the work of colleagues in what is, after all, a very small professional world. This is particularly marked among those in commercial exhibit or museum consulting firms, who are understandably loath to risk offending potential clients.

42% of the reviews made no evaluation of the design, quality or effectiveness of the exhibit.

Are we really willing to criticize exhibits?

This leads to the question of whether we really are willing to be forthright in criticizing exhibits. The field can learn from positive examples quite as well as from negative ones, and reviewers should be as quick to praise as to condemn. Nonetheless, a serious commitment to criticism will inevitably result in airing negative opinions about some of the exhibits reviewed. Many people are concerned about the possibility that this might have serious impacts on museums. Even though the reviews are published in journals targeted to museum practitioners, the word is sure to leak back to sponsors, trustees, foundations and public officials. Plays that are broadly panned close quickly, and theaters that produce a series of bombs may go dark forever. Does criticism, in the name of improving practice, put at risk the very institutions that house that practice? Could such a risk more than offset the presumed benefits of criticism?

We wondered whether these concerns would substantially affect the willingness of writers to make negative comments in exhibit reviews. To address the question, we recorded every negative observation or comment in each of the 52 reviews analyzed, and also rated the overall tone of the review: positive, neutral or negative.

By our ratings, 42% (22) of the reviews were “neutral”—that is, they made no evaluation at all of the design, quality or effectiveness of the exhibit. Rather, they were limited to describing the exhibit, explaining the importance of the topic, glossing the subject matter, narrating adventures in the development of the exhibit or providing other information. Only 6% took a clearly negative position on the exhibit overall, though another 13% argued that some significant specific improvements were needed, while speaking positively about the other elements of the exhibit. If we leave aside the 22 “neutrals” that express no judgments at all, among the remaining 30 reviews 67% (20) were uniformly positive, 23% (7) offered mixed evaluations, and 10% (3) were strongly negative.

These figures indicate at least some willingness to criticize when doing criticism. It’s more difficult to assess whether the reviewers were as willing to criticize as they should have been. Certainly the fact that close to half of the reviews were purely descriptive, with no evaluation at all, seems problematic. But where reviewers were willing to judge, is it reasonable that two-thirds of the time their judgments were uniformly positive? Perhaps two-thirds of the exhibits we produce really are that good. It’s also plausible that good exhibits are more likely to be chosen for reviewing, since they’re the ones that generate excitement and wide interest. The famed literary critic Northrup Frye argued that “the study of mediocre works of art remains a random and peripheral form of critical experience, whereas the profound masterpiece draws us to a point at which we seem to see an enormous number of converging patterns of significance” (1957:17). In other words, you learn more from critiquing good exhibits than you do from critiquing mediocre ones.

Nonetheless, there is some evidence that journal policy may affect reviewer’s willingness to present negative judgments. Among the reviews in Exhibitionist, 9 of 11 offered at least one negative comment. For Curator, 13 of 23 reviews included negatives. By contrast, only one of 18 reviews in Museum News contained any negative judgment. In part, this striking finding reflects the tendency of Museum News reviews to avoid judgmental statements at all: 17 of the 18 reviews in that journal fell into our “neutral” category, constituting 76% (17 of 22) of all the “neutrals” in the entire study.

What do reviewers focus on when they do make negative judgments?

We recorded 60 specific negative comments, ranging from passing complaints to detailed analysis, all of which came from 20 of the 52 total reviews. A third of the negatives were characterized by the reviewer as being of minor concern. The majority of the negative comments can be grouped into a few categories:
Problems with the message:
12 of the 60 negative comments focused on message choice, with 9 asserting that the "right" message was missing and 3 asserting that messages expressed in the exhibit were not properly representative of the subject or would give visitors the wrong impression. Eight more complained that the message was not expressed with sufficient clarity, or was inconsistent or confusing.

Problems with design: 16 comments focused on design flaws, with about half finding fault with visitor orientation or wayfinding, including introductory elements that were poorly located, confusing or misleading. Three of these noted the lack of clear directions on interactive elements. Other design issues included poor lighting, problematic placement of labels, distracting videos, clutter and blandness.

Problems with physical quality: 5 comments complained that the exhibit "looked cheap," that specific elements were broken, or that the exhibit generally was "beaten up."

Other comments simply characterized the exhibit as "boring," complained of oppressive crowding, or focused on supplemental materials such as exhibit catalogues or videos.

For whatever reason, critics writing in these journals have seldom analyzed exhibits in terms of their application of current theory. Rather, the reviews concentrate on such concrete issues as design and layout (23 cases), labels and graphics (22 cases), choice and quality of content (19 cases) and visitor orientation (12 cases). Such issues are certainly of the highest importance; but so too is theory, which addresses "The Big So What?" of our approaches to making exhibits. At a time when theory is in such ferment in...
the field, criticism should provide a vital mechanism for linking theory with practice. Certainly theoretically-informed exhibit criticism appears in other outlets; perhaps the new century will see it invade the mainstream museum journals as well.

**Is the pattern of criticism changing?**

In one of the most interesting articles yet published concerning exhibit criticism, Marlene Chambers (1999) did predict that the next decade would see significant changes in criticism, moving toward a more explicit focus on questions arising out of constructivism and related theoretical concerns. Chambers outlined three distinctive schools of criticism:

**Yankee Trader criticism,** the most traditional form, focuses on the role of the exhibit in putting across a message. It "examines an exhibition in relation to its success in selling a bill of goods" (1999:31). The "authoritarian" and "didactic" emphasis of the Yankee Trader school leads to criticism of "the nuts and bolts of an exhibition to see whether they do a good job of supporting the message."

**Houdini criticism,** appearing over the past decade, is grounded in post-modernist sensibilities. It "focuses attention on ways to escape from the locked box of the intellectual and cultural paradigms that frame our messages" (1999:33). Houdini critiques attempt "to get inside the heads of exhibition makers and to expose the cultural assumptions that underlie their messages and lead to their interpretive choices" (1999:35,37).

**LEGO criticism** is what Chambers sees as the new wave. Reflecting the constructivist framework, critics in the LEGO mode ask such questions as: "Are there exhibition elements that encourage exploration, critical thinking, and dialogue?" "Did the exhibition developers find ways of showing that objects have no fixed meaning, that they may have different meanings for different people, and that the meaning of objects changes over time and cultures?" (1999:65).

Are these categories discernible in our collection of criticism from the past five years? We each sorted reviews into Chambers' categories independently, then compared our ratings and talked through the cases on which we had disagreed. After these discussions we were able to arrive at mutually satisfactory decisions on each, but the experience revealed substantial challenges in applying the system to actual exhibits. As Chambers acknowledged (1999:65), the three critical stances are not mutually exclusive, and a given review may contain elements of all of them. Still, we were able to assign these categories fairly comfortably based on the overall thrust of the review, even while identifying some minor sub-texts that reflected an alternative stance.

Our analysis found that the criticism published in these three journals overwhelmingly followed the Yankee Trader model. Out of 52 reviews, 46 (88%) were exclusively Yankee Trader, or at least contained only minor elements of the other models. This reflects the lack of attention to theory cited above: it's difficult to do Houdini or LEGO criticism without making specific references to underlying theoretical assumptions.

Even the few reviews that we rated as Houdini criticism (Coppola 1994; Berndt 1997; Stillman 1998) or Houdini with LEGO elements (Sandweiss 1999; Edwards 1997) were at best mild exemplars of the form, with about as much Yankee Trader elements as Houdini. While they did show some substantial differences from many of the reviews in these journals, they had little in common with Chambers' type case of Houdini criticism, Mieke Bal's savaging of the American Museum of Natural History (1992), or such other Post-Modernist critiques as Haraway (1989), Wallach (1998), Duncan (1995) and Handler and Gable (1997)— or even with the friendlier Houdini critiques in the volumes from the Smithsonian conferences on "Exhibiting Cultures" and "Museums and Communities" (Karp and Lavine 1991; Karp, Kreamer and Lavine 1992).

Perhaps the non-theoretical character of criticism in our samples reflects the fact that the three journals are oriented primarily at practitioners, not academics, and so have been consciously focused on "practical" concerns such as labels, visitor orientation and design. The theorizing that Houdini and LEGO criticism entails would then be left to more academic outlets, such as those journals that focus on the concerns of a specific discipline or museum category. For example, the *Journal of American History* and *Museum Anthropology* regularly feature exhibit reviews and may be more apt to critique exhibits explicitly in terms of the theoretical concerns or key perspectives of their
particular discipline. (We did not analyze the reviews in those journals for the present study.)

But theory is not "purely academic." Theory is of practical consequence to exhibit work today. Ideas such as constructivism and meaning making do have important implications for practice—implications that may be as yet poorly understood, due to the lack of widely known exemplars of their successful application in powerfully effective exhibits. Exhibit criticism that explicitly draws out these connections, showing how theoretical assumptions have driven content and design choices (whether consciously or unconsciously), may prove the most important mechanism for improving practice.

Certainly traditional Yankee Trader criticism still has value, and can still do much to help us learn from the experiences of others. But newer forms of criticism, that are explicit in their attention to theory, are also of great importance and should appear with equal frequency in the mainstream journals of the museum field.

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