



Improving Exhibition Interpretation

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Table of Contents

Introduction	1
Using a Variety of Media	5
Give the Visitors "New Eyes"	11
Visitors Must Understand the Context	15
Direction of Information Flow	19
Thoughts on Carts	23
Performing Techniques	27
How Animals Walk	41
Conclusion	49
Appendix — A Typical Development Schedule	51

Introduction

What is Exhibition Interpretation?

When a visitor comes to a museum or zoo, he or she is confronted with a wide array of objects that someone, perhaps a curator, thinks are "important." Perhaps it is a certain painting. Maybe a particular type of animal, or a quilt from America's past.

Why is that artifact so interesting? What is so special about that painting? What am I supposed to "get" out of looking at that? Answering these and other questions is the job of exhibit interpretation. Even more, it is helping the visitors answer these questions for themselves.

How has this traditionally been done? Often, with signs and other printed materials. While these are good for some purposes, a more modern approach includes many ways of communicating with visitors. Actors, hands-on exhibit elements, video tapes, guided tours, and computers are but a few of the ways that museum professionals have tried to reach the public. However the goal is always the same: to have visitors walk away with new understandings or insights because of their museum experience.

About our project

In 1989, the National Zoological Park, in collaboration with the National Museum of American History, began a new project called Improving Exhibition Interpretation (IEI), funded by the Smithsonian Special Exhibition Fund (SEF). Our shared goal was to provide high-quality interpretive programs for the general public to supplement and enhance the existing exhibits and interpretive signs. These interpretive programs were to have two objectives. The first was to create opportunities for visitors to become active participants in the learning process. The second was to help visitors learn to observe museum objects and zoo animals, and to use those skills throughout their visit, and beyond. Basically, we wanted to help the visitors use the exhibits more effectively. In particular, we were interested in reaching those visitors not attracted by existing labels and audio-visual programs. We borrowed heavily from our past experiences, applied styles of activities that are successful in other settings and translated them to work at our own locations.

We have dealt with issues such as: What is of interest to the visitors? How can those items of interest be effectively delivered to the visitors? What type of staffing is needed? What type of staff training is needed? What are the difficulties in actually getting things accomplished? How can you have an impact at your institution?

Each of us works at a different site. Eddie Goldstein is at the National Zoo; Heather Smith is at the National Museum of American History. These are quite

different types of locations. Choosing these sites was a conscious decision because it was felt that by working together and comparing notes from such widely diverse sites, we might come up with some generalizations about communicating with visitors that can be applied in many different places.

Starting in May of 1989, we developed a series of activities at each site which we fine-tuned over the next fifteen months. Although we were quite pleased with the visitors' response to the individual activities, we thought that presenting all of them simultaneously might have a greater impact than merely the sum of the separate activities. In order to test this synergistic effect, at each site we held a special event, called **SuperWeek**, during the summer of 1990, which was a showcase of the project. An informal evaluation of the two SuperWeeks led us to conclude that the types of activities that we were developing were very effective, and well received by the visitors. In the final year of the project, we made efforts to translate many of these activities into on-going programs at each of our sites.

About this Booklet

As we began to experiment with ways to communicate with our visitors, we discovered a number of techniques that led to, what we considered, successful activities. These insights evolved into a design philosophy that proved useful in developing further activities. This booklet is an attempt to share many of these insights with you.

As we experimented with a variety of ways of interacting with our audience, we found that quite often, the medium of presentation that we used had as great an influence on the visitors as the content did. In fact, sometimes our objective was not to deliver specific information at all, but to offer interesting experiences for the visitors. In the section called "**Using a Variety of Media**", we talk about the differences between various media, as well as offer a list of the activities that we developed at our two sites.

This project was not just a potpourri of activities. Our objective in all of the presentations was to provide the visitors with some sort of experience, so that afterwards, they would look at and respond to the museum differently. How we approached this objective is the subject of "**Give the Visitors 'New Eyes'**".

We found that no matter how good we thought an activity was, visitors would not participate if they did not clearly understand what they were supposed to do. "**Visitors Must Understand the Context**" explores this idea and gives some examples of how to provide the visitors with a clear context for an activity.

We also made a conscious effort to develop activities where the flow of ideas was not just a one-way street from museum to visitors. Instead we strived for activities where visitors would also have input. In "**Direction of Information Flow**", we talk about why we feel this is important, as well as some techniques for accomplishing this.

Of the many physical formats that we employed, the one that we used the most often was the "cart" format. Although these cart presentations were quite varied in style, there are some generalizations about using carts that spanned them all. In **"Thoughts on Carts"**, we share our ideas on the ingredients for successful cart activities.

The other model that we used quite often was the idea of an activity being a performance. The theatrical world has refined the art of communicating effectively with an audience into a science. The section called **"Performing Techniques"** discusses many of the techniques used by actors and performers, and translates them so that they are applicable to the zoo or museum setting.

While many performing techniques depend on the skill of the particular interpreter, many others can be designed directly into the structure of the activity. This can make an activity more effective no matter who is performing it. The section called **"How Animals Walk"** is a case study of how we incorporated many of the ideas of the previous section into one of our shows.

We have also included an **Appendix — A Typical Development Schedule** which can serve as a checklist of many of the things we feel are necessary for developing successful interpretive activities.

This booklet is not just a "show and tell" about our project. We have tried to put together a handbook of ideas that you can use to trigger your own thinking on how to better interact with your visitors. This booklet will have achieved its purpose when you translate these ideas and anecdotes into techniques that you can use in your own situation.

Using a Variety of Media

One of the assumptions of the Improving Exhibition Interpretation (IEI) project was that an educational message can be delivered to our audiences in a number of different ways. Furthermore, the medium we choose for a particular activity has as much of an impact on the visitor as does the content that we are trying to convey. Traditionally, the medium used is the written word, displayed on a sign or text panel. Our goal was to experiment with a variety of methods of communicating messages to the public, particularly methods using live interpreters.

When we use the word "medium," we include all sorts of methods of transferring information from one person to another. In this sense, talking is a medium. Dancing is a medium. Video tapes, live theatre, demonstrations, signs, and games are all media. They all are examples of ways one might choose to communicate an idea to the public. However, watching a play about the life of Charles Darwin is a very different experience than reading a book about his life. Actually trying your hand at working a cotton gin is quite different from seeing a videotape about it. Just what are these differences? What are the effects of different media? Under what circumstances is one medium more appropriate than another?

The IEI project was really a study of how different media, or communication techniques, can work in a museum or zoo setting. We make no attempt to answer the above questions. We have simply experimented with a variety of interpretive techniques with those questions in mind, and would like to relate some of our findings.

What are some of the differences between various media?

To begin to see how different media affect a visitor, it is useful to think about what some of the properties of a medium might be. For example, consider two relatively familiar media: books and newspapers.

Books and newspapers are both examples of printed words, but there the similarity ends. The layout of a book is linear. It is usually meant to be read in a certain order and implies a commitment to read the whole thing, or else not even start. (There are exceptions to this, of course.) A newspaper, on the other hand, is non-linear. As a reader, you "shop around" when reading a paper, scanning headlines for things that interest you, picking and choosing as you go. Most people, when they get the Sunday paper, have no intention of reading the whole thing, and certainly not in a methodical first page to last page order. In fact, most papers begin a few of stories on the front page, and continue them elsewhere in the paper. You couldn't read the paper in a linear fashion even if you wanted to. Reading a book and reading a newspaper are very different experiences, and impact the reader differently.

Even what at first might seem like a single medium, for example, "Books", is often too broad a term to describe all of the various forms that are included (and, of

course, their various impacts on readers.) How is a non-fiction history book about Abe Lincoln different from an historical novel about the man? Perhaps one is better at conveying facts while the other is better at portraying the feel of the times. Which is more important for understanding why history took the turns that it did? Probably both.

Recognizing different media

Books, newspapers, in fact, all media have their own conventions which users expect, and which help users to recognize and understand them. For example, most people assume that books are ordered chronologically, perhaps with flashbacks, or in some other logical fashion, reaching some climax or conclusion near the end of the book. As they are reading, they try to fit the information into this mental framework for books. Newspapers, by contrast, are ordered differently — from most important to least important. Big stories make it to the front page with large-type headlines, lesser stories may not even make it to page 10. Even within each story, the journalist tries to put the most important information first, knowing full well that many people will never read the entire story, but will just skim the first couple of paragraphs. (There is no point in putting a surprise twist in the last sentence of a newspaper article.) Again, once the reader recognizes the medium, he attempts to process the information within the rules for that medium. It is important, therefore, to give the readers clues as to what medium you are using so that they can effectively process the information you are trying to deliver.

EXTRA! EXTRA!

Type style important!

Choice of styles makes big difference.

WASHINGTON, DC --- Sometimes a visitor will come up to a sign and see that the visual style of the text is not appealing, and, therefore, will never even bother to read it.

Perhaps there is so much text that they don't even want to start.

The text just doesn't look friendly.

Ah. This is much better.

As you can see, how information is delivered can be as important as what is delivered.

What type of medium does this example remind you of? What about it reminds you of that medium? What conventions of that medium are contained in this example?

Note: The above example has clues or conventions to let you recognize what type of medium it is, hence, how to interpret it. It is important that a museum activity has clues so that visitors can recognize it, hence, understand what their role in the activity is. (*See section - Visitors Must Understand the Context.*)

What is the point of all this?

You've all heard that famous Marshall McLuhan quote, "The medium is the message." At the risk of sounding trite, you've just heard (or read) it again. Very often, the way that we choose to present an idea has more to do with the visitors' experience than does the content of the idea.

Our feeling in the IEI project was that it was important to experiment with a variety of interpretive techniques and to pay attention to how each of these techniques works in a zoo or museum setting. Rather than choose a single medium (demonstrations, for instance) and put together ten different demonstrations about ten different topics, we consciously chose to change our medium of communication with each topic. In particular, we concentrated on media which employed live interpreters in some manner.

What follows is a list of the different activities that we experimented with in the IEI project and the media they represent. In each, we tried to capitalize on the conventions associated with that medium to enhance the visitors' understanding and experience. This is meant to be the start of an idea list of different ways that live interpreters might interact with the public.

List of Improving Exhibition Interpretation Project Activities

Name of Activity - (TYPE OF MEDIUM) - Description. . . .

(At the National Zoo)

How Animals Walk - (STREET THEATRE) - An entertaining, street-theatre type performance in which members of the audience learn to walk like a variety of animals. The image that this was modeled after is that of a magician or juggler working on Fisherman's Wharf in San Francisco or at a Renaissance faire. In this model, the performer must first define his performing space, then gather a crowd. The audience (50 - 150 people) usually sits on the ground in a large semi-circle. During the show, the performer talks directly to the audience, and selects several audience members to participate. In a sense, the performer is a group activity leader. There is plenty of room for comedy, and the audience is asked to applaud throughout the show. At the end, the entire audience stands up and participates. The show has a definite beginning and end, and takes about 20 minutes.

Young Charles Darwin - (THEATRICAL PLAY) - This is a play, a one man show, performed by a professional actor (with makeup and costume) portraying Charles Darwin. Like How Animals Walk, it is performed outdoors with the audience sitting in a large semi-circle on the ground. However, unlike How Animals Walk, where the performer retains his own personality, the actor here takes on the role of an historical figure. Darwin talks directly to the audience in the guise of retelling his voyage on the H.M.S. Beagle. This is in contrast to the 4th wall approach often taken in theatre where the audience merely eavesdrops on the lives of the characters on stage. The actor draws his own crowd at the beginning of the show in the character of Charles Darwin. After a few minutes, he starts his performance. A specially built outdoor set consisting of a large map of the world backdrop, and a large ship successfully transforms the outdoor space into a theatre.

The Bat Game - (GROUP EXPERIENCE) - A small group activity which allows visitors to feel what it is like to navigate with their sense of hearing, as bats do. In this activity a Zoo interpreter asks 8 - 12 visitors to stand inside a small roped-in area. One of the visitors is selected to be the bat. The others arrange themselves as an obstacle course and proceed to make beeping sounds while the bat closes his eyes and tries to navigate through the group using just the sounds that he hears.

It is interesting in that the experience is completely aural, and not visual. Most people do not make a mental map based on the sound clues, and then walk through their map. Rather, it is a feedback experience, with sounds getting louder and softer as they move through the space.

Take a Closer Look - (EMPOWERING TOOL) - A portable observation post equipped with binoculars. Four pair of binoculars, each on its own tripod, fold easily into a luggage cart and can be set up anywhere at the Zoo in about three minutes. (Zoo interpreters must attend to the binoculars, but are free to set them up wherever they would like.)

In this activity, there is no specific information, per se, that is being transmitted. In a certain sense, binoculars are a content free medium. What you see depends completely on what the binoculars are aimed at.

However, the medium, itself, carries its own message. The very presence of the binoculars seem to draw people in. Visitors stop at animal exhibits that are normally just passed by. The binoculars also seem to serve as ice breakers facilitating conversations between visitors and interpreters as well as between visitors and other visitors.

Will The Real Elephant Please Stand Up? - (QUIZ GAME) - On the surface this is a portable cart with objects for zoo visitors to get their hands on and inspect. Actually, this cart becomes the stage for a quiz show about elephants. The Master of Ceremonies displays a group of objects and passes them out to the audience for inspection. The visitors must decide which objects come from elephants and which do not. Information flow becomes a two-way street. Not only does the M.C. give information about the animals to the visitors, but the visitors also put their own information about the animals into the system, as they try to choose the correct objects.

A large banner on posts attached to the cart even forms a sort of proscenium, and a step-stool gives the performer a height advantage over the audience. This adds to the feeling that this is a show. Most importantly, unlike an interpreter passively waiting for someone to ask a question, the performer has an active role as the Master of Ceremonies. (Usually 10 - 20 people are involved.)

Time Out For Lunch - (DEMONSTRATION) - Animals eat in many strange and interesting ways. A Zoo interpreter uses clever devices on this demonstration cart to show a variety of ways that animals are adapted to the foods they eat. This is similar to the Elephant cart in its physical set up. However, instead of a game format, this is a series of science center type demonstrations. The performer does most of the talking, and the audience, most of the watching.

Meet A Keeper - (INFORMAL CONVERSATION) - This activity is really many activities. All around the Zoo, various animal keepers spend time talking to and interacting with the public. Some keepers bring animals with them for the visitors to touch. Others simply make themselves available for questions. At times there are large groups of visitors (15-20) conversing with a keeper. At other times visitors have a one-on-one conversation with the keeper. The common feature in all of this is that the public gets a chance to interact with keepers in a way that is not usually available to them.

Hawk Encounter - (TRADITIONAL EDUCATION PROGRAM) - This presentation is done outdoors in a comfortable area near the bird house. There are about 40 chairs set up to accommodate an audience, and a large table at the front with objects for display. At the start, a staff person from the education department gives a ten minute talk about birds of prey while passing around objects for the audience to examine. The second part of the program features a member of the animal department with a large hawk on her arm. She, too, gives a prepared talk, and answers questions. At the conclusion, there is an informal time where people can get a closer look at the hawk and chat with the animal trainer.

(At the National Museum of American History)

The Cotton Gin - (ON-GOING CART ACTIVITY) - A casual activity during which visitors learn about cotton's history by first separating seeds from cotton by hand, then by feeding cotton into a small hand-cranked gin and watching it quickly separate the seeds from the lint. A docent invites visitors to participate.

The program is loosely scripted. Depending on what visitors ask, the docent can change the order of the information that he or she gives.

The atmosphere is intimate and very informal. There is no set beginning or end.

Early Sound Recordings - (ON-GOING CART ACTIVITY) - A casual activity where visitors listen to early (1905-1921) flat and cylinder recordings on two different 1921 phonographs. A docent plays the records and invites visitors to touch the records and machines.

The cart is scripted, but the docent acts more like an explainer than as a performer; he or she can change the information based on visitors' questions.

The program has no start, middle, or end; the focus is the records and the casual conversation about the objects, inventors, and history of early sound recordings.

Timekeeping - (TECHNOLOGY DEMONSTRATION CART) - A step-by-step demonstration of early clock escapements dating from ca. 1100 to 1675. This program is scripted and, because the program is chronological, the script must be followed. A docent invites visitors to participate and encourages comments and questions during the program.

The program can be done as a show where people sit on the floor in the exhibit, or as a more intimate conversational demonstration with smaller groups. It lasts about 20 minutes.

Hunt For History - (PRINTED BROCHURE) - Families or school groups use these "Hunts" to find 7-9 objects scattered throughout the Museum. By looking closely at an object or drawing conclusions based on its context, they answer questions about the object or its use. There are two versions: one for 5-8 year olds; one for 9-12 year olds. Children sometimes become the leaders as they direct their groups or families through the Museum using the Hunt for History. The activity takes about 1-1/2 hours to do.

Seeing the Museum with Children: A Guide For Parents and Teachers - (SELF GUIDE) - The guide describes each exhibit simply and briefly and suggests related activities for each exhibit, like, "Can you find . . . ?", "Think about this . . .", or "Just for fun . . ." Adults become the interpreters and can knowledgeably guide children through the exhibits. The guide can be used in whole or in part.

Jake - (ACTOR AS INTEGRAL PART OF EXHIBIT) - An actor portrays a 1939 New York City news vendor and talks with visitors about the "new" technology and his perceptions of the future. The format is conversational and revolving. Jake begins conversations with passing visitors and jumps in and out of the formal script. Although the actor talks about other parts of the exhibit and refers visitors to other objects or settings, his base is the newsstand. He strikes up conversations with groups of any size and with people of all ages. The actor is free to rely totally on the script or ad lib based on historical information and visitors' responses.

Charlotte Perkins Gilman - (ACTRESS AS NON-INTEGRAL PART OF EXHIBIT) - An actress portrays Charlotte Perkins Gilman, an early 20th century women's rights advocate, and rallies visitors to listen to her speech. The program lasts about five minutes and is scripted. The actress delivers her speech in a related exhibit, but is not an integral part of the setting. Visitors sit or stand, but do not ask questions. When the actress is not present there is no sign of her and the the exhibit functions as usual.

Inventive Spirits: A Musical Tribute to American Technology - (STAGED MUSICAL PERFORMANCE) - Three musicians (two vocal, one piano) sing period (19th and 20th century) songs related to displayed museum objects like the telephone, automobile, etc. Visitors sit down, clap after songs, listen to performance, but do not otherwise interact. Performers are on stage and separated from the audience. Show lasts 45 minutes; visitors generally stay for entire program.

Give Visitors "New Eyes"

Imagine you are a visitor at an art museum. You wander into an exhibit of works by a modern artist, but you really don't know much about the subject. You very well might find yourself zipping through the entire exhibit in just a few minutes, not seeing anything except a bunch of colors and shapes, with no particular rhyme nor reason.

On the other hand, suppose that the first room of the exhibit contained a display about, "How the Artist Used the Color Red," for example, with paintings and text illustrating some very specific ideas. Sometimes the artist used the color red to set the mood. Sometimes she used red for contrast. Sometimes she used red to focus your attention. Next to each statement was an example from the artist's work. After absorbing the ideas in this first room, you would probably notice things in the rest of the exhibit that were invisible to you before. You would actually see patterns that would otherwise have seemed meaningless. In this sense, you would have "new eyes" with which to perceive the exhibit.

When designing an exhibit, the first room should give the visitors the "eyes" with which to see the rest of the exhibit.

How does this apply to designing activities and demonstrations?

When a visitor participates in one of our activities, we have their attention for, at best, twenty minutes. More likely, five or ten. We can either offer a ten minute educational experience, after which they continue looking at the same meaningless colors and shapes in the museum. Or, we can, in our ten allotted minutes, try to give them new eyes so that their entire visit to the museum is an extension of the educational experience. This is our objective: to have the visitors look at things differently after watching our demonstration, or doing our activity.

Put another way, it is to give the visitors a search image to use as they walk through the zoo or museum. Salespeople do this all of the time. "While you're driving the car, feel how smooth the ride is." "Next time you're in the store, look for the jar with the rose on top."

At the National Museum of American History we do a demonstration about early mechanical clock escapements. The setting for this activity is in the center of the gallery containing a vast collection of old clocks. To the untrained eye, that's all you really see in the room: a bunch of old clocks. It was our intention to help train their eyes. During our presentation, we demonstrated many common elements found in most clock escapements; a crown wheel, for instance. We showed how the crown wheel operates, and what its function is in the escapement. After our presentation, visitors often took a closer look at the historical clocks on display. They could begin to pick out things like the crown wheel where before all they could see were lots of gears.

So what? So they can see crown wheels? The point is that they are beginning to make sense out of something that made no sense before. The visitors have been empowered. These clocks are less foreign than they previously were, less mysterious. We have given them the secret code, and they can begin to decipher the message. They may even spend additional time observing and thinking about clocks. Even more, we were giving them a vocabulary with which to formulate new questions that they might not even have had the tools to formulate before.

Here's another example. John Lehnhardt, collection manager for large mammals at the National Zoo, was talking about how poor the elephant's digestive system is. As evidence, he noted the undigested hay that can be seen in their feces. This conjured up the image of an elephant as a food processing plant, with hay going in one end, moving through a long, winding pipe, being only partially processed as it travels, and plopping out the other end, only partially changed. A totally new way of looking at feces.

This experience translated into an activity for the public as part of the Will the Real Elephant Please Stand Up? quiz game. We fabricated realistic looking models of elephant, giraffe, giant panda, and dog feces. During the game, the visitors pass these models around and try to guess which comes from an elephant. Besides causing a lot of laughs (which helps the educational message stay with the visitors), the visitors have probably not looked so closely, nor had the license to look so closely at different types of feces before. One clear observation is that they do not all look the same. After the guessing and voting is done, we reveal which feces comes from which animal, and explain the concept of hay in feces as evidence of poor digestion. After giving the visitors these new eyes, they look at the other models and try to guess if the animal it came from had good or poor digestion. (The particular choice of four animals spans the spectrum.) The visitors do very well with this. Once again, they have been empowered. Who knows what they think of as they see other animal feces around the Zoo? Certainly some of them must think about the animal's digestion.

Using New Eyes as an activity design tool.

One of the first things we realized in designing new eyes activities was that we could only talk about things that people could actually see. It makes sense to open visitors' eyes to how animals walk, for example. They can see that at the Zoo. It makes sense to talk about the animals' digestive system because, even though you cannot see the digestive track, you can still see one of the products, i.e. the feces. It does not make sense, however, to open their eyes to animals' internal reproductive organs; even with new eyes, there is nothing to see. (That is not to say that you should never talk about things that cannot be seen, just that this new eyes technique may not be directly applicable.)

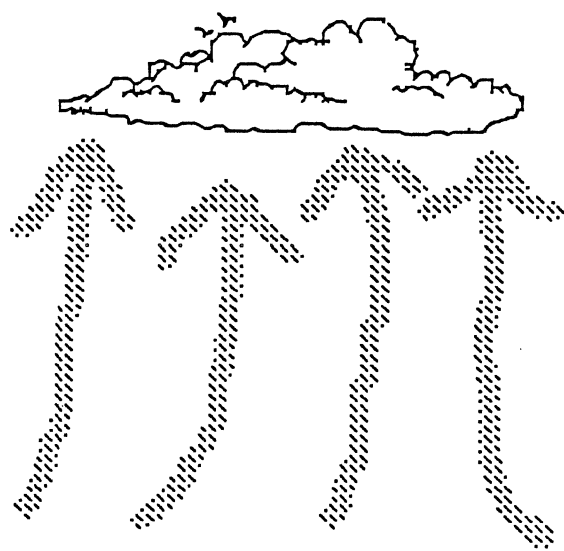
Having restricted yourself to things that can actually be seen, you must decide what aspect of it you want the visitors to "see." What new pattern or idea do you want them to take away? A better way to put it is this: What can an "expert" see in this object that an ordinary person cannot see, and how can we empower that ordinary person to see it as well? The expert brings with him or her a mental model

into which the object fits - a context in which to place the object. The idea, then, is to help the visitors form a mental model similar to the expert's so that they, too, can fit the object into a context and see it as the experts do.

In addition to giving the visitors the context in which to fit what they see, you must also give them the tools with which to see it. One of us (E.G.) had the following experience: "I was once standing on a cliff, overlooking Boulder, Colorado, as some hang-gliders were about to take off. They were pointing into the void talking to each other about up-drafts over here, and down-drafts over there, as they mapped out their flight strategy. All I saw, however, was empty space. I finally asked them what they were seeing that I couldn't see. They began to point out the clues that they used. The motion of trees on the ground indicated one type of air pattern, certain cloud formations represented another." These clues were the tools that the hang-gliders used to aid their perceptions. They could actually see the patterns in the air. It was almost as if they had a trained imagination.



What I saw

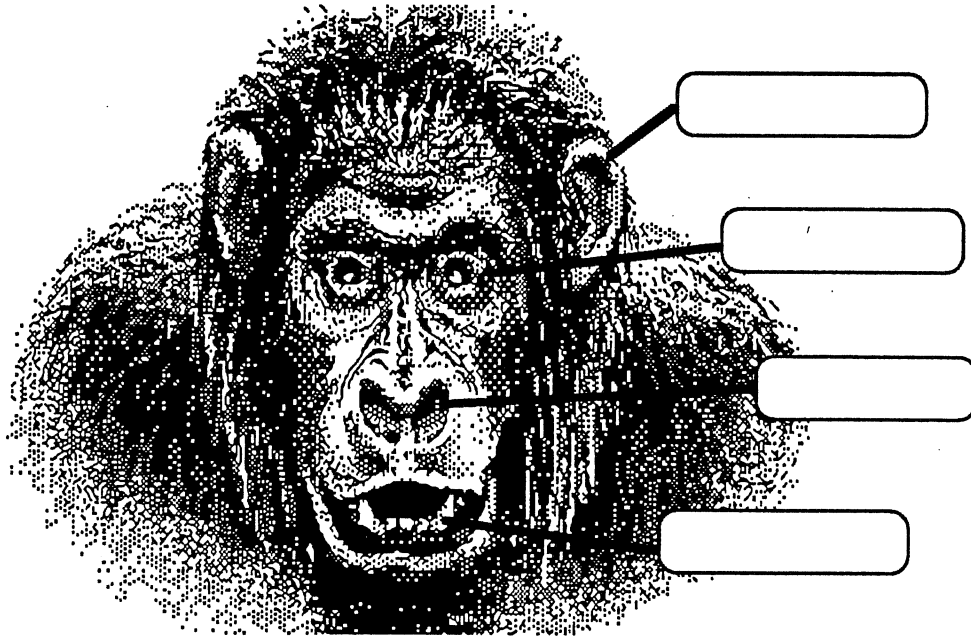


What they saw

As an experiment, next time you see those large white clouds with flat bottoms and fluffy tops (cumulus clouds) realize that they are actually the tops of columns of warm rising air. See if you can visualize the rising air columns.

Choose an object in your museum or zoo that it is your job to interpret for the public. Instead of asking the curator what he or she wants the visitors to know about this object, try to ascertain how the curator sees the object. What things about the object does the curator look for? What imaginary patterns does he or she see? Can you draw a picture of what the curator sees? Can you explain it in words? Can you devise an activity that encourages visitors to see the object the same way that the curator does? Most importantly, can you generalize this way of looking so that it transfers to other objects in the museum or zoo? This is the essence of giving visitors "new eyes."

Visitors Must Understand the Context



What's this all about? A picture of a gorilla with balloons? What am I supposed to make of this? What am I supposed to do?

The problem is that the picture is out of context. If this picture were part of a little kid's workbook about the parts of the body, you would probably assume that you were supposed to fill in the words "eye", "ear", "nose", and "mouth". But in the middle of this booklet, it is not so clear what is expected. In order for a person to make sense out of something, he needs a context for it.

In our project, we chose to experiment with activities that are out of the ordinary for our museum and zoo. When a visitor turns a corner in a museum exhibit hall, she probably doesn't expect to have one of the exhibits talk to her. Yet this is exactly what happened in the Information Age exhibit at the National Museum of American History when the visitors confronted an actor playing the role of Jake, a newspaper vendor. What was the visitor to make of this?

This issue of providing a context for the experiences that we offered to the visitors was important if the experiences were to be successful.

The role of the visitor

Have you ever been in a restaurant where a violin player comes over to perform at your table? For many people, this is an uncomfortable situation. Should you look at the violin player or look at each other? Are you supposed to stop eating? Do you clap when he is finished? Just what are you supposed to do?

Many people are confused as to what their role in the interaction is supposed to be. As a result they want the violin player to leave as soon as possible. The same is true of activities in the zoo or museum. If the visitor does not clearly understand his role, he will be uncomfortable and want the interaction to be finished as soon as possible. In other words, he will walk away.

It is your job to set things up in such a way that people instantly understand what is going on. Are they supposed to be passive members of an audience? Is this a question and answer session? Are they supposed to walk by and look or are they active participants in some sort of interactive situation? It is your job to somehow say, "This is my role.....and this is your role....." Some situations are easy to understand. If a visitor comes upon an activity where a person is up on a platform speaking to other visitors sitting in chairs, then he will probably get it right away. "This is some kind of demonstration." (Even then, however, it may not be clear if this is a private demonstration, or if the visitor is welcome to sit down.)

Other situations are not so immediately obvious. In The Bat Game, at the National Zoo, visitors were confronted with a situation that they could not instantly identify. All they would see is a Zoo interpreter standing near a 6ft. x 12ft. roped in area. The interpreter would invite them to stand between the ropes and play The Bat Game. It was not at all clear to the visitors what was going on, or what was expected of them. In this case, it was extremely important that the interpreter clearly spell out what the visitor was to do.

An important function of any interpretive activity is to give enough cues to the visitors so that they can easily figure out what the activity is all about, and what their role in the activity is expected to be. This can be done in two ways. Either you must tell them directly, or you can trigger a "template" that is already in their minds, e.g. "This is a quiz game." As soon as a visitor hears that, he says, "Oh, I know what a quiz game is; I know what I'm supposed to do."

These cues can be given by the staff person performing the activity or they can be built directly into the structure of the activity itself. The best situation, of course, is when both of these ways occur. Will The Real Elephant Please Stand Up? (at the Zoo) is an example of using a quiz game format to deliver information about elephants. Visitors quickly realize what is going on at this activity. First of all, the physical layout of the activity looks like a game, with the interpreter holding up objects and asking people questions. A visitor walking by would see other visitors raising their hands to vote about something or other, and obviously playing some sort of game. Secondly, the interpreter is very explicit about what is going on. "This is a game where you try to figure out which of these objects comes from an elephant." Thirdly, and most importantly from a performing point of view, the interpreter acts like a quiz show emcee. This not only adds to the fun, but establishes the context for what is going on. It allows the visitors to act like quiz show participants. They understand their role, and they can enjoy themselves within that role. In fact, it even gives them license to do things that they otherwise might not do, for instance, talk to perfect strangers. (In many ways, the ideas that are shared between unacquainted visitors can be as important as the "official" information delivered by the museum or zoo.)

Transforming the space

Another key to helping the visitor understand the context of the activity is to have a gradual transformation of the space, from the normal "museum space" to the "activity or performing space."

At the Museum, we had an actress play the part of Charlotte Perkins Gilman, an early 20th century women's rights advocate. She was to give a speech about women's rights in one of the Museum galleries. When the time for the speech came, the actress rushed into the room without any warning, announced that she was giving a speech on women's rights, leapt up onto the podium, and began her speech.

Visitors didn't know what was happening. Thirty seconds earlier they were casually looking at some museum artifacts, minding their own business, and now some woman was ranting and raving about something. What was going on here? What was she doing? What were they supposed to do? The visitors did not understand their role in this interaction. They were not given enough clues as to the context of the activity. As you might guess, most visitors avoided the situation altogether. As a result, the actress often found herself addressing very few people.

One of the problems with the above scenario was that the performance started too abruptly. From a program designer's point of view, the museum space had become a performing space. However, there was no time allotted for the visitors to readjust to this new situation. Naturally, they were confused and avoided the activity. It is important that if you are going to transform one type of space into another you must do it gradually, either gradually in time or gradually in space.

Contrast the above scenario with the Young Charles Darwin show at the Zoo. Here, too, we had an actor portraying an historical character, giving a speech about his interests. However, we made a gradual (in time), three step transition from "normal" area to "performance" area.

First there was the normal area. An actor, in costume, set up his props and performing space. People walking by could see that something different was about to happen. The physical set up suggested that it was some type of show, so probably they would be audience members (if they chose to stick around).

Next, the actor took on the persona of Charles Darwin. In that role, he began inviting visitors to have a seat. He explained that he was about to give a short talk about his recent trip around the world. As visitors gathered, he chatted with them, always in the role of Darwin.

The final step in the transformation was the beginning of the formal presentation. Darwin jumped up onto his platform and, clearing his throat, started his performance. By this time, visitors were not at all confused as to what was going on, and what their roles were. He was Charles Darwin, this was the nineteenth century, they were his audience.

It is the performer's or interpreter's job to make the context clear to the audience. She must, in words or in actions, let them know what the activity is all about, and what is expected of them. Hopefully, the structure of the activity will make this job easier. However, when it is not immediately clear what is going on, then the responsibility lies even more heavily on the performer or interpreter to explain the context of the activity and to help the visitors understand just what they are supposed to do.

Direction of Information Flow

One of the most fruitful concepts for generating new ideas for activities or exhibits is the concept of direction of information flow. How can you design an exhibit or activity so that information does not always go from the museum to the visitor, but also from the visitor to the museum, or even, from visitor to visitor?

The basic concept comes from Marshall McLuhan who describes information media as being on a scale of hot to cool. A "hot" medium is one in which information flow is directed outwards, from the medium to the user; a "cool" medium is one which somehow draws information from the user into itself.

An analogy might make this clearer. Imagine two blocks of metal sitting on a table; one of them is very hot, and the other is very cold. The hot one is so hot that you can actually feel the heat radiating from it without even touching it. The heat energy is flowing out from the metal block into the environment, i.e., the direction of energy flow is out of the metal. The cold block, on the other hand, draws heat energy into itself from the environment. In this case, the direction of energy flow is into the metal. Now replace the word "metal" with "medium" and the words "heat energy" with "information" and you have the idea of hot and cool media.

An example of a hot medium might be a college professor lecturing to a class. The information flow is a one way street - out of the mouth of the professor. Contrast this with a cool medium. For example, imagine a large white wall with one word at the top: "Graffiti." Near the wall is a table with lots of spray cans of paint and a sign that says, "Go for it!" Put that medium into an environment of human beings and see what happens. The very presence of this medium will pull information into it.

One immediate difference between hot and cool media is this. With hot media everybody gets sent the same message. (All of the students in the lecture hall hear the same words.) With cool media, everybody puts in a different message. It would be very rare indeed for two people to independently draw the exact same graffiti on the wall.

Another difference between hot and cold media is that with hot media the information delivered is explicit.

Professor: "One way that symmetry can occur is when an artist places the same design element at the four corners of the picture."

With cold media, any information delivered is implicit. It occurs through the act of participating with the medium.

Person with spray cans: "Hmmm. I bet this will look nice if I put the same design in all four corners. Let's see."

This does not mean that cool media are completely free form. By controlling the parameters, the exhibit or activity designer can shape the boundaries of the

visitor's experience. For example, if you only put out spray cans of paint, the visitor will not make any thin delicate lines.

One mistake that people make is thinking that cool media need to be physically interactive; computer touch screens, clever mechanical devices, etc. Not true. It is possible for a completely static exhibit to be extremely mentally interactive. The key is how much mental energy the visitor must input into the system.

One particularly powerful example of this is in the Field to Factory exhibit at the National Museum of American History. The exhibit deals, in part, with the Black person's experience in the South during the early part of this century. Quite often, in public places, Black people were required to use separate drinking fountains, waiting rooms, restaurants and other facilities. It was not uncommon to see three restrooms, labeled "Men", "Women", and "Colored".

To communicate this, there are two doors from one of the exhibit rooms into the next. They are labeled, "Colored" and "White." It is impossible for you to continue into the next room without passing through one of these doors. It is quite an experience to be confronted with this and to have to decide which door to go through. All of your own thoughts and experiences come into play as you make your decision. — "I'm White. Should I go through the 'White' door and reinforce past prejudices? Should I go through the 'Black' door and prove that I'm in solidarity with Black people?" — "I'm Black. Should I go through the 'White' door to prove that I am no longer bound to the old restraints? Should I go through the 'Black' door because I'm proud of who I am? Or, does that mean that I am still thinking like a slave?"

One thing is clear. As 100 people pass through these doors, 100 different decision making processes come into play. It is almost impossible to go through in a neutral way. Each person is forced to put his own information into the system, and make a decision whose meaning is unique to him. This is the essence of a cool medium. Whatever learning takes place comes from the information that the user puts into the system. The function of the medium is to help the person process the information he already has. It is implicit information, not explicit. The exhibit design actually draws information from the visitor.

How can you build visitor participation into an activity?

A medium does not simply fall into one of two distinct categories: hot or cool. It actually lies somewhere along a spectrum. So a better way to phrase the above question is, "How can you take the activity that you are working with, and give the visitors a more active role?"

Instead of always stating facts, occasionally ask questions.

At the National Zoo, we had a quiz game called, Will the Real Elephant Please Stand Up? In it, the M.C. explicitly asked questions of the visitors. "Which of these teeth do you think comes from an elephant?" Our thought was that this type of interaction causes the visitors to think about what they already know about

elephants, in an effort to make the correct choice. Often, they can figure out the answer for themselves. When the emcee ultimately does reveal the answer, the visitors are more interested in listening, since they have already invested some of themselves in the question.

Invite visitors to determine the course of the activity.

At the Museum, we had an Early Sound Recordings cart. It was a cart chocked full of historical items that relate to early sound recordings. Two types of early record players, photos of early recording artists, actual cylinder recordings, etc. Rather than having a structured lecture, we start by playing some early recordings, and chat with visitors who come up to listen. We consider the contents of the cart to be our box of props that we can draw from as appropriate to follow whatever direction the conversation flows. The visitor has a lot of control as to how the presentation proceeds. In another activity (also at the Museum), we provided a printed brochure called, Seeing the Museum with Children: A Guide for Parents and Teachers. With it, we provided the tools with which adults could structure activities for their children most appropriate for the individual child.

Provide an empowering tool to help the visitors view the exhibits.

At the Zoo, we provided binoculars (on tripods) to allow the visitors to Take a Closer Look, at the animals. This medium (binoculars) is the ultimate in cool media. It does not have any content of its own. Yet, when you set them up in the park, they draw visitors over, as if they were a magnet. The more control that the visitors have over them (movable rather than fixed view), i.e. the cooler the medium, then the more the visitors will use them for a longer period of time.

Invite visitors to manipulate objects.

At the Museum, there were several carts at which visitors could try out the objects. For example, a working Edison Ambriola (old-fashioned record player) always held people's interest more than the static ones enclosed in the display cases.

Invite visitors to experiment. (Provide a palette for experimentation.)

At the Museum, there is a computer program called Design a Quilt which is part of the Quilts: A Selection From the National Collection exhibit. Unlike many computers at museums which are basically information delivering machines (hot media), Design a Quilt provides visitors with a large palette of quilt patches with which they can assemble their own quilt patterns on screen. (The ideas for quilt designs flow from the visitor to the machine; cool medium.) People learn (about symmetry, for instance) not by watching lessons on the topic, but by making aesthetic decisions about what would make their quilts look nice.

Thoughts on Carts

What is a cart?

What exactly is a cart? Is it even a single thing? Or are there a number of different interpretive media that employ carts in different ways?

A cart demonstration is a mobile demonstration which gives visitors a chance to stop for a moment and focus their attention on a specific person — the interpreter — and a specific activity. Visitors may handle objects (a cotton gin, a phonograph, an elephant tooth), ask questions, and enjoy informal conversations with a knowledgeable person and each other. A cart is more flexible than many other interpretive media like tours, brochures, labels and performances because it may be moved to different locations and is compact. Most important, visitors are encouraged to closely interact with objects that they may only have seen in cases or exhibitions.

A cart may be a platform for many different purposes. It may be a means of demonstrating a machine or a scientific principle. It may be the center of a large group activity like a show or performance. The cart's objects and activities may be a means of interpreting complex ideas such as social history. It may or may not involve extensive visitor participation. In any case, the cart should meet the museum's needs and style. In some cases a cart demonstration that does not involve hands-on activities for visitors may be more appropriate than a cart that relies on visitor participation.

Over the IEI Project's three-year course, we have developed five carts: two at the National Zoo: *Time Out for Lunch* and *Will the Real Elephant Please Stand Up?* and three at the National Museum of American History: *The Cotton Gin Demonstration Cart*, *The Early Musical Recordings Demonstration Cart*, and the *Timekeeping Demonstration Cart*. Based on our experience with the three carts at the National Museum of American History, we offer these thoughts and suggestions for anyone who is interested in trying carts in their own museum.

At the National Museum of American History, two of our carts, the *Cotton Gin* and *Early Musical Recordings*, were very similar in appearance, program format, and the way visitors interacted with the interpreters and the objects. The *Cotton Gin Demonstration Cart* expanded on visitors' knowledge of the 1793 invention and the social changes which it helped to bring about in the 19th century. Visitors walked up to the interpreter at the cart and were invited to touch and gin cotton. They were guided to related objects which are on exhibition throughout the Museum. Most of the learning happened through the hands-on experience of ginning cotton and informal conversations with the interpreter and other visitors. Even if a visitor spent three to five minutes at the cart, she would still walk away with an idea of what a cotton gin is, how it works, and how it affected United States history.

The Early Musical Recordings Demonstration Cart worked in a similar way. Visitors were attracted by the music from a record being played on one of two ca. 1921 phonographs. They listened to the music, looked at and manipulated the machines and records, and discussed these with the interpreter and with each other. Many visitors recognized the phonographs and shared their memories about similar records and machines.

Not all carts work the same way.

The Cotton Gin and Early Musical Recordings carts were very similar in format and fit our purposes of teaching social history through hands-on activities. These two carts also fit our visitor patterns; the flexible scripts allowed visitors to join the program at any time and stay for any length of time.

Our third cart, the Timekeeping Cart, did not follow this format. Except for the fact that we used a cart as a table to hold our props, this was really more of a demonstration than a hands-on cart. We used large, simple clock escapement models to demonstrate how clock escapements were developed and refined from 1100 to 1700. We placed this cart in the Timekeeping Hall. Visitors would stand or sit and watch a 15 to 20 minute demonstration during which an interpreter manipulated the models to show technical developments within clock escapements. When done well, the visitors found this very engaging.

Although a few of our interpreters had the skills necessary to draw and hold visitors while they presented the cart in a show format, most did not. Many docents found the models were very difficult to manipulate (much time spent changing parts on the models) and interpreters had difficulty keeping visitors' attention during the presentation. The cart had little if any visitor participation. The cart script was very technical and did not address the social history of timekeeping, despite many efforts to rewrite the material to fit the models. Last, unlike the Cotton Gin and Early Musical Recordings carts, where visitors can have an interactive experience in only a few minutes and the information can be delivered in any order and in any amount, the Timekeeping Cart, because of the chronological nature of the information, had to follow a set script to get from model to model.

Our conclusion was that the Timekeeping Cart required that the docents be skilled performers, that audiences were willing to stand for 15 - 20 minutes for the demonstration, and that the Museum staff was satisfied with a script which was mainly void of historical information. Therefore we eliminated that cart, although the models and the information may show up in a different medium.

The two carts at the Zoo had still different formats. Time Out For Lunch was a demonstration cart, similar to the Timekeeping Cart, but the material was more modular. This allowed visitors to come and go more easily without missing crucial information. Will the Real Elephant Please Stand Up? was a quiz game. Once again, each segment of the game was quite short, so it, too, did not suffer from the problem of visitors needing to be there from the beginning of the show.

Things to consider when designing a cart program

Each of our carts resulted from much experimentation. We tried different objects, interpretive approaches, and program formats before we came on some elements that worked in most cases. These helped to guide us and may guide others who might be contemplating developing cart programs.

1. What purpose will the cart program serve? What format will work best to achieve that purpose? Will it be a traditional demonstration with an interpreter (performer) playing to an audience? Will it be a hands-on activity? Will it introduce complex concepts through objects? Determining the cart's purpose may help to eliminate problems about the script, format, and levels of information to be delivered and audience participation.

2. Unless the cart is a traditional demonstration (performer talking to audience), there should be some level of visitor participation. At the National Museum of American History, the most successful carts were those which relied on visitors to determine the program's direction through physical participation (voting, manipulating an object) and exchanging questions.

3. If you choose to do a cart program with a continuous script, you can expect visitors to come and go at any point in your presentation. In that case, the script must be written in such a way that visitors can get the basic message and have some physical interaction during any five minute segment of the presentation. If they stay longer, they should receive further information without hearing the same thing over and over. You can accomplish this either by using a modular approach, where each segment is independent of the others, or by delivering different perspectives on the same information, i.e. the information is delivered in layers.

4. A cart must be visible within the exhibition. A noticeable cart will attract visitors who will, in turn, attract more visitors. The cart should be attractive enough to stand apart from exhibition objects, labels and cases. Also, an interpreter at the cart increases visibility. (At the National Museum of American History, we painted our carts bright red and placed them in major thoroughfares. At the National Zoo, each cart had a distinctive, colorful banner which was visible from long distances.)

5. In our experience, a cart works best when it contains big objects that make noise. Big objects that attract attention will attract more people.

6. From our perspective, the activities in a cart activity should be placed in a broad context (history, zoology, etc.) and not simply be interesting, but unrelated facts.

We had mainly successes but some failures. One of the cart experiments at the Museum was not successful. We wanted to do a cart in the exhibition about the Industrial Revolution. For each of several historical themes, we selected a single representative object. As visitors stopped at the cart, we asked them to study the objects and answer questions about them. (How was it made? Who used it? How

was it used?) Through these artifact study techniques we wanted to help visitors discover the larger historical context through the objects. Overall, this method did not work. First, visitors were hesitant to stop — probably because they saw no activity and heard no sounds. We were also being too academic; the message was difficult to get at in a few minutes, and visitors were not sure of what they were supposed to do. Also, we had too many objects which were not only small, but were not very interesting at first glance.

The one set of objects on this cart that did work was a small basket containing wool, flax, and seed cotton. We created a game by asking visitors to guess which came from animals and which from plants. We also were able to talk about the fibers while referring to the nearby cotton gin. Many visitors had heard of the cotton gin, or remembered Eli Whitney, so they were anxious to participate and learn. From the positive response we got from visitors about both feeling the cotton and their general, if vague, knowledge about the machine and Eli Whitney, we proceeded to build a small cotton gin and develop the Cotton Gin Demonstration Cart.

Final thoughts . . .

We were pleased with how successful the five carts were at the National Zoo and the National Museum of American History. They are a very flexible, informal medium. Visitors may participate in some activity, talk to a person (rare in some museums), and have fun learning without committing much time. What we learned, as outlined in this section, will, hopefully, help other museum educators to improve their own exhibition interpretation.

Performing Techniques

The main goal of the Improving Exhibition Interpretation (IEI) project was to experiment with effective ways of communicating with visitors. Our job was not to reinvent the wheel, but to apply tried and tested communications techniques in a new setting. When possible, we lifted ideas from science centers, children's museums, or, where ever we saw clear communications taking place.

One of the things that we consistently noticed was that people like to interact with other people. In fact, it is not uncommon to see more visitors watching a zoo keeper cleaning an empty enclosure than watching the animals in the adjacent enclosure. Hence, we devoted much of our energies to exploring communications techniques that use people.

One of the richest traditions of this type is that of the theatre. The history of the theatre is older, by far, than any of the other sources we looked at. Sophocles, Euripides, and Aristophanes dealt with the issues of speaking clearly to audiences back in the fifth century B.C., and for 2500 years, actors, playwrights, and directors have been refining this art into a science. It is no surprise, then, that many new insights came from applying these theatrical techniques to the zoo and museum.

What follows are some theatrical techniques as they would apply in a museum, zoo, or other educational institution. We use the term "theatrical techniques" in the broader sense of multi-modal communications between people, not just things that go on inside a theatre. For example, if you consciously use your body and facial expressions to communicate while you are talking, then you are using theatrical techniques, even if you are only talking to one person.

These ideas are not meant to turn people into actors. Rather, they are meant to give our staff and volunteers new tools with which to effectively relate to the public. Indeed, not only can the people delivering the programs benefit from these ideas, the people who design the programs can benefit from an understanding of some theatrical techniques as well.

What theatrical techniques have to offer

Theatre is the art of interacting on a one-to-many level. In many ways, this is exactly the job of the museum interpreter. However, there is much more to effective communications than simply transmitting facts. Effective communications is really a multi-level affair. Learning to communicate these other levels (feelings, sense of context, etc.) is where theatrical technique really shines.

For example, we wanted to do some sort of presentation about Charles Darwin. The facts are that he traveled around the world as a young man making biological observations which he later formulated into a theory about the origin of different species of plants and animals. We wanted to communicate much more than this. We wanted to convey the excitement of a young man brimming with ideas,

fascinated with the many wonders of the world around him, whose natural curiosity allowed him to delight while observing even the tiniest of animals. We wanted to relate the idea that the Theory of Evolution is not a body of scientific law that some old-timer name Darwin had decreed; rather, that the process of doing science is really about being curious and mixed up about the world around you, and then trying to make sense out of all that you observe.

The way we chose to do this was with a play. An actor playing the role of a young Charles Darwin could convey these other levels, not only with the words that he spoke, but also with the inflections in his voice, the gestures of his body, and the enthusiasm in his mannerisms. Even more than this, giving the audience a face to attach to the name, "Darwin", adds life to what otherwise is simply a word.

Using theatrical technique means communicating with your body language, the sound of your voice, the expression on your face. (You are communicating via these avenues anyway. You might as well make them work for you.) You can communicate not only left-brain facts, but right-brain feelings. Even more, you can generate these feelings and attitudes in your audience. Not only can you show that Darwin was excited, you can get them excited.

Different ways to apply theatrical techniques

There is a spectrum of ways to interact with visitors. All of these ways can benefit by applying theatrical techniques in an appropriate manner.

The most formal activity is a **play**. This might be done in an auditorium, on the museum floor, or outside in the park. A play is characterized by the fact that the actor or actors assume the roles of some person(s) other than themselves, Charles Darwin, for instance. Clearly, theatrical technique applies here.

Slightly less formal is a **demonstration**. The performer does not assume another persona; he retains his own identity. However, the audience still watches a show which has a beginning, middle, and end. The performing space is usually clearly defined. Very often, the performer uses some props or other artifacts and actively explains something. Again, performing technique can help the performer make the points that he is trying to convey.

Further along the spectrum are **informal talks**. These might be scheduled, or impromptu. In many ways, these are really conversations between visitors and staff members, where questions and answers flow freely in both directions. Performing technique addresses the topics of how to gather a small group of visitors, and how to converse with a group of strangers with the same ease that you might converse with your friends at home.

Finally, there is the **one-to-one** situation. Even here there is the issue of answering the same question 50 million times, yet appearing interested and fresh each time you answer it.

In short, there is much to gain by applying theatrical techniques, even if your ultimate goal is not to do a play in your institution. "Theatrical techniques" is just another way of saying effective, consciously applied, person-to-person communications techniques.

Put yourself in the audience's shoes.

One of the most important things that you can do is have a clear idea of the people with whom you are trying to communicate.

At the National Zoo, we worked with some of the animal keepers on taking a more active role in communicating with the public. This may take the form of demonstrations, prepared talks, or just informal chats. During several of the planning sessions, however, we began to notice a lot of resistance on the keepers' part to doing these presentations.

One of the keepers suggested that perhaps our idea of the public might be very different than the keepers' idea of the public. (Our perception of the public was basically that of friendly people, mildly curious about the animals, who would enjoy some entertaining programs about the animals. Given that mindset, our goals were clear: how could we put together an enjoyable and interesting program about the animals that would attract the attention of a fair number of visitors?)

When the question about "Who is the Public?" came up at the next keepers' meeting, there were some very different responses. Some keepers had basically the same perception of the public as we had. On the other hand, a significant number of keepers thought that the visitors were dumb, not interested in what they (the keepers) were doing, rude, disruptive, and/or inconsiderate. "They are the people who throw stuff into the animal enclosures that I have to clean up." "They are always asking the same stupid question." No wonder some of the keepers have little interest in extending themselves to the visitors. Bringing these issues onto the table, however, went a long way towards redefining everyone's perceptions about whom they would be performing for.

A similar discussion with some of the docents at the National Museum of American History led to some very concrete suggestions. For example, "They are visiting Washington and want to see the whole Smithsonian in one day," led to the idea that the presentations should be short and to the point. This is not to say that you can not go into depth with some visitors. Rather, even those people who can only stay for a short time should get something out of the presentation. "They usually come in family groups," led to the idea that you should have something for everybody. Do not just talk to the kids. Likewise, do not just talk to the adults.

In short, try to understand where your audience is "coming from," then tailor your presentation to meet their needs.

Using Body Language

As mentioned earlier, communications is a multi-layered activity. Your audience gleans as much information by the way you present yourself as it does from the words that you speak. Visitors can easily tell when your body language says, "Don't bother me," even when your voice asks, "Are there any questions?"

Step 1 - Be aware of the messages your body sends.

How does one begin to control their body language? First, be aware that body language is an important avenue of communication. Whether you plan it or not, visitors constantly read messages from your body language. Being unaware of the messages you send means, at best, that you are not taking advantage of a powerful communications tool at your disposal, and, at worst, that you are sending messages that you do not want to. There are specific techniques, however, drawn from the skills of actors, that can help you broadcast the body message that you would like your audience to receive.

A group of interns asked for some advice about giving presentations in front of the golden lion tamarin exhibit. They wanted to talk about the radio collars that are put on the tamarins so researchers can track them in the field. The interns arrived with all of the radio gear, prepared to demonstrate its operation to the visitors. But hardly anyone stopped to watch and listen.

It was clear what the problem was. The interns were facing the animals, not the public. This is very common at the Zoo. A visitor will ask a question of an animal keeper and the two of them will turn to face the animal. It is only natural to look at the object you are talking about. This is great for the single visitor and keeper involved in the conversation. Unfortunately, it excludes everybody else.

Often, during this type of situation other visitors slow down as they walk by, trying to pick up a little bit of the conversation. After a moment or two, they simply move along. The keeper's body language says, "This is a private conversation. You're not welcome to join."

Turning to face the visitors can change a keeper's body language from excluding to inviting. This is no longer a private conversation. It is a presentation, albeit informal, for everybody to listen to. It also allows the visitors to look at the animals and face the keeper at the same time. In fact, by using body language and facial expression to talk to wider and wider circles of people, a keeper can encourage a comfortable size group of visitors to participate.

In the case of the interns at the tamarin exhibit, we took it a step further. The interns moved to the inside of the guardrail and turned to face their audience. This allowed a greater number of visitors to stand along the guardrail, and offered the presenters the freedom of movement to address this larger group of people. In terms of body language, a visitor approaching this scene was instantly aware that a presentation was occurring, and that they were welcome to stop and join.

This applies not only for structured presentations, but even if the keeper is just answering questions in an informal way.

Step 2 - Some specific techniques for controlling your body language

In his 1969 book, *Magic and Showmanship*, Henning Nelms describes a number of techniques commonly used by actors which have particular suitability for any person performing in front of the public, (in his case, for magicians). I will paraphrase some of his ideas, rewording them to be more appropriate to museums and zoos. Specifically, I will describe the concept of the "Silent Script".

One of the main problems on learning to control your body language and facial expressions is that there are just too many things going on at the subconscious level. All of the fine nuances that go into making a natural looking gesture are just too difficult to fake. For example, right now, try to make a natural looking smile. . . . It feels fake, doesn't it? A smile like that would not do a good job of communicating the idea that you were enjoying yourself.

This time, think of something funny, and let yourself smile as a natural response to that funny thought. . . . That produces a much better smile. If you let your mind think of an appropriate thought, then that thought will trigger a natural response in your face and body.

"How can anyone control subconscious actions? A false inflection, the wrong tension in a muscle, or a mistimed pause can give the game away. . . . Fortunately, there is an extremely easy technique which makes control of subconscious actions almost automatic.

"After an actor has worked out his characterization, he has no trouble staying in character as long as he has lines to speak. The lines force him to think the character's thoughts. While he does this, he is not apt to fall out of his role. But the moment he stops talking, he begins thinking his own thoughts. This throws him out of character; he cannot be two people at the same time.

"Once we recognize the difficulty, the solution becomes obvious: every performer needs lines to think whenever he is silent. . . . Do not attempt to memorize [these lines], just get the basic idea in mind. . . . [This 'silent script' should consist of] what you would say if the [situation] were real."

(From *Magic and Showmanship*, by Henning Nelms, ©1969 Dover Publications, NYC.)

One last try at producing a convincing smile. Imagine that you just heard a good joke, then silently think the phrase, "Hey, that was pretty funny," and let yourself smile. . . . For this to work you must think the silent phrase, "Hey, that was pretty funny," with feeling. You should be able to hear the words just as clearly as if you were speaking them. If you do, your body will follow naturally with the appropriate gesture, a smile.

Here's a different way to describe the same process:

When you see or hear something that is funny you often respond with a laugh. Between those two events, however, is when your mind processes the idea, decides whether or not it is funny, and triggers a laugh. In diagram form, it looks like this.

HEAR JOKE -----> (THINK, "That's funny.") -----> LAUGH

How does this diagram help you produce a natural laugh? Suppose somebody tells you a joke that you've heard a million times before, but, to be polite, you'd like to laugh at it. Somehow, you are going to have to "fake it." There are two possible places in the above diagram that you can fake it: at either of the two arrows.

If you fake it at the second arrow, it works something like this: You hear the joke; you think, "I've heard this before," but you try to fake a laugh. The result is a fake laugh.

fake it
HEAR JOKE -----> (THINK, "That's not funny.") -----> LAUGH

If, however, you fake it at the first arrow, the process works like this: You hear the joke; you fake it by thinking, "Gee, that is pretty funny;" then your body responds naturally with a genuine laugh.

fake it
HEAR JOKE -----> (THINK, "That is funny.") -----> REAL LAUGH

You have to fake it somewhere. The secret is to fake it at the first arrow, and let your mind take care of the second arrow, i.e. your mind will take care of the little details in producing the correct facial or body response.

Which brings us back to the idea of the silent script. It is not necessary to actually think of funny things to produce a natural smile. You only need to silently say phrases like, "Gee, that was pretty funny."

An issue that continually comes up in conversations with zoo keepers is how to handle answering the same question over and over again. The answer? By mentally saying, "That's an interesting question," as the visitor is asking his question, you are able to convey a genuine interest in what the visitor has to say. Even more, this same mental trick works on you. You actually become more interested in what the visitor is asking.

HEAR		ANSWER
VISITOR'S QUESTION	-----> (THINK, "That's a good question.") ----->	VISITOR'S QUESTION

Once again, for this technique to be most effective, you should actually speak the words of the silent script silently in your mind. "That's very interesting," or, "That's pretty funny." You say them silently, but with feeling.

Use your whole body to communicate.

In combination with using the silent script technique, it is also important to perform with your whole body. Many people forget to do this. They stand stiffly, and communicate only with their face and voice. At least that's what they think they are doing. In fact, they actually are communicating with their whole bodies, and the message that their bodies convey is that of being stiff and uncomfortable.

Try this. Sit down in a chair and, using just your face, portray the emotion of excitement. Next, still sitting, use your whole upper body to portray that same emotion. Finally, stand up and use your whole body to convey excitement. With each stage, you are using more avenues to communicate the idea. This alone is an improvement. Even more, by using your whole body to convey the idea that you want to, you are not inadvertently using part of your body to portray a message contrary to the rest of you body.

Henning Nelms suggests practicing by portraying a variety of emotions in a very exaggerated way. Do this in private, in front of the mirror. Practice making exaggerated faces. Fear, delight, excitement, curiosity, disgust. Do the same using your whole body. It is not important that you memorize the specific faces or gestures that you make; you are simply building a subconscious repertoire of these expressions.

When performance time comes, do not try to replicate these expressions. Instead use the silent script idea. As you speak your silent lines, ("I'm really getting angry,") your body will automatically draw from your repertoire and will make the correct gestures, in an unexaggerated way. It works automatically.

What attitudes are you trying to convey?

Just what is it that your body language communicates? Usually it is not factual information. Unless you are playing a game of charades, you are not trying to

communicate something specific. Rather, your body language communicates your attitude.

First of all, you must have a clear mental picture of what attitudes you are trying to convey. For example, to convey that you are excited about your job, get a clear image of being excited. Not a third person picture of someone else being excited, an image of you being excited. Say to yourself, "This is exciting. This is terrific. I really enjoy this." And believe it. (If you don't believe it, your audience certainly won't believe it.) The interesting thing is that, the more you artificially "believe" it, the more it becomes true. And that's what will be communicated to the visitors.

The most important attitude that you, as a museum or zoo representative, can communicate to your audience is that you are interested in them. What they have to say. What their questions are. That you are interested in them as individuals. After all, that is what your job is all about. Without visitors, there is no need to do presentations for the public. Be sure you let them feel that they are important.

You should also try to communicate a sense of fun. After all, people come to zoos and museums to have a good time. If you are having a good time (and showing it), then they will have a good time listening to you. It is up to you to help them have an enjoyable time. If so, they will stay, and, perhaps, get something from your presentation. In the Young Charles Darwin show at the Zoo, the idea that learning, observing, questioning, and discovering are fun activities was the main point of the show. What Darwin talked about was his trip around the world. How he said it, how he used his voice and body language -- that is how he communicated the sense of fun and excitement of learning. After visitors go home, they will probably not remember the details of Darwin's voyage. What they will remember is Darwin, and how he enjoyed his work so much. That was the really important message of the show.

Getting started.

The hardest part of any presentation is getting started. There are several approaches to this, depending upon the type of presentation you are doing.

First of all, realize that everybody dislikes trying to start a conversation or presentation with perfect strangers. You should have confidence in knowing that, in general, the visitors who come to the museum or zoo want to hear what you have to say.

For the **one-on-one or small group** situation: When approaching visitors, it must be clear to them that you actually work for the zoo or museum. If you are wearing an official badge or uniform, that may be all that is necessary. Otherwise, you will need to tell them that you work there. Always tell them your name. This, in addition to being polite, will make them feel more comfortable. You might ask them if there is any question that they would like to know. If not, you might suggest some interesting fact about one of the objects or animals that they are

looking at. If a conversation follows, great. If not, tell them that you are available if there is anything they would like to know, and excuse yourself.

Another strategy is to have some prepared ice breakers. They could be small objects that you can carry around in your pocket. A tuft of raw cotton (to explain what cotton gins are used for), a sample of animal food, nude pictures of Martha and George Washington. These are very helpful in starting conversations.

For **slightly larger presentations** (10-15 people): You should announce that you will be starting a presentation in a few minutes. You might want to actively gather a crowd. "We will be feeding the octopus in about three minutes at the octopus tank." "I am about to start a demonstration of historical clock escapements." This can be announced with a full voice to the visitors in the area in general. Intersperse this with personal invitations to visitors in the vicinity. "It's really very interesting. Why don't you join us?"

Once you get a small core of people, then start your presentation. Within the next few minutes more people will join the group as they notice that something is happening. (The corollary to this is that a significant portion of your audience will have missed the very beginning of your presentation, so don't include information at the very beginning that is crucial to the rest of the presentation.)

It is also important for this size of presentation that you continually invite additional visitors to join you. You can occasionally stop your flow of conversation, and say to visitors who are walking by, "I'm doing a presentation about such and such. You're welcome to join us." Even without interrupting your speech, you can invite them with your eyes. You should try to talk to wider and wider circles of people, causing the size of your audience to grow.

Large scale presentations: Use basically the same strategy, with one or two additions. You might use more formal methods to let visitors know that something is about to begin. Perhaps a sign saying, "Next show at 2:00." Playing music often helps.

Begin to get the visitors working for you instead of you working for them. For example, ask visitors to sit near the front of the performing area. Ask them to step forward. "You can see better if you sit over here." In all of these subtle ways you are establishing control over the situation. The assumption is always that the show they are about to see is going to be terrific, and that they really don't want to miss it. (This is a much better attitude than, "I sure hope you folks like my meager show.")

Another important strategy early on in the process of building your audience is to transform them from being a collection of individuals into being a single group. A useful trick is to solicit their help in drawing a bigger crowd. "When I count to three, I'd like everybody to clap and whistle as loudly as you can so the other visitors will think something great is going on over here. Are you with me?" Not only are you establishing control, and getting them to think of themselves as part of a group, you are also beginning to rehearse them in applauding. This is important for helping you get better applause later on in the presentation.

Bringing more people into your presentation

As stated above, you must continually invite visitors to your presentation. All too often you can see the following situation: A docent is giving a tour of the museum. She is talking to the small group of visitors who are following her around. In the meantime, other visitors try to eavesdrop on her remarks, and may even listen for a minute or two, but then move on, feeling that they are not really welcome. (It's probably some sort of private tour.) All that the docent needed to do was to say, "Why don't you join us?" to turn an eavesdropper into a participant. Alternatively, if the docent would simply look at the newcomers, and address her remarks in their direction for a sentence or two, that would signal that it was O.K. to join the group. In general, by talking to the "back row" of visitors, you are, in fact, including all of the visitors who are within the group.

Bringing people into your presentation means more than simply attracting them to your presentation. It means actively engaging them in what you are doing. Ask the visitors questions. "Who thinks they know what this is?" Even those people who do not actually raise their hands to answer are still being engaged in a rhetorical way. They are thinking of their answer. Take votes. "How many people think this tooth is from an herbivore?" Not all of the interaction needs to be between the visitors and you. Encourage conversations amongst the visitors. "Does anybody know the answer to that man's question?"

The Three Step Plan

This is one of the most important guidelines that you can use for any type of presentation.

1. Tell them what you are about to tell them.
2. Tell it to them.
3. Tell them what you just told them.

That's the three step plan. Using it is one of the most effective techniques that you can use for helping visitors understand your message.

Here's an example:

"Believe it or not, the invention of the cotton gin is one of the main reasons that slavery lasted so long in the south.

"Without the cotton gin, growing cotton was not economical. It took too much time and energy to remove the seeds from the rest of the plant. There simply wasn't much demand for large amounts of cotton. However, with the invention of the cotton gin, large amounts of cotton could be processed. Demand for the crop skyrocketed, and, all of the sudden, it was economically feasible to keep large numbers of slaves to pick the cotton.

"So, you see, if it weren't for the cotton gin, slavery might have died out much sooner in the south."

The first sentence gives the visitors a context with which to better understand the story you are about to tell them. The last sentence summarizes what you have just said.

That's the three step plan.

The audience is part of the script.

One of the most most valuable lessons about performing came from working for about six months in a dinner theatre show. Most people think that when a performer goes out on stage, if the audience likes his material, they applaud, or, if they think a joke is funny, they laugh. However, after doing the same show night after night, it becomes clear that the audiences pretty much all clap at the same spots in the show. Some jokes always get a big laugh, while others consistently get a chuckle. In fact, one could probably write a script of the show that included, not only the lines that the performers speak on stage, but the audience reactions as well.

This offers a different perspective on performing. Instead of simply trying to please the crowd, hoping against hope that they would like the show, I realized that the performer's job is really to help the audience with their part of the script. The principal difference between the performer and the audience is that the performer knows what the script of the show is, and the audience doesn't. It is up to the performer to let the audience know when to clap and when to laugh.

Of course, you can't simply say to the audience, "Start laughing now." Nevertheless, what you are really doing is cuing the audience.

With this new perspective many new things are possible. For example, if you want a large applause near the end of your show, you can start rehearsing the audience early in the show on how to applaud. Start by asking for modest applause, and reinforce them for it. As the show goes on, cue them for larger and larger applause, and reinforce it each time. Towards the end of the show, you will be able to illicit a large applause from a relatively subtle audience cue. (Sounds like operant conditioning, doesn't it?)

The same techniques apply in a zoo or museum setting. Even if you are not trying to get applause (as we do in How Animals Walk at the Zoo or Inventive Spirits at the Museum), you still might want to get certain responses from the visitors. Perhaps you would like the visitors to feel comfortable asking questions. If so, you should rehearse asking questions throughout your presentation. Perhaps you would like them to observe the exhibits more closely when your presentation is over. Then rehearse them in observing.

In each example, you have certain expectations of the visitors. It is your job to guide them through what you would like them to do, i.e. guide them through their part of the script.

The visitors must be comfortable.

Make sure that everybody can see and hear clearly. If they can't, you will have a much more difficult time with your presentation. Sometimes, it is beneficial to literally ask, "Can everybody see o.k.?" Not only will you get an answer, but you will demonstrate to the visitors that you are concerned about them.

The visitors should also be physically comfortable. Invite them to sit down. Or try to arrange your performance so that it is under a shady tree instead of in the hot sun.

Along with physical comfort comes psychological comfort. Do the visitors feel comfortable asking question? If not, why not? How can you make them feel more at ease?

Answering questions

Be sure that you repeat any questions that you feel not everyone in the audience heard. Once again, this demonstrates your respect for the audience members.

Ask yourself what the visitor is really asking with her question. Often visitors do not ask what they really want to know because they do not know how to phrase the question. It is like the situation after a long drawn-out speech. The speaker asks if there are any questions. Many people fail to ask questions, not because they understood the entire speech, but because they do not know where to begin. Part of your job is to help the visitors formulate their questions. After giving a short answer to the direct question asked, try to add a little more information on the subject.

If you do not know the answer to the question, that's o.k. Simply state that you don't know. You might suggest where the visitor can find out the answer. Perhaps you, together with the visitors, can discover the answer by observation. Perhaps another visitor knows the answer. The key is that you and the visitors are on the same team. It's not you against them.

Nervousness

Everybody gets nervous some of the time. No matter how long they've been performing, or how big a star they are, sometimes they will get nervous. The trick is to not let it bother you.

Often, even if a performer is extremely nervous, the nervousness will not show to the audience. It is possible to be very nervous, yet still function perfectly. If you are nervous, your attitude should be, "Oh. I'm nervous for this show. That's a drag. But nobody will notice except me. It won't affect my performance." Usually, after a few minutes into the performance, the nervousness goes away. So don't be nervous about being nervous.

The visitors want to hear what you have to say. They are on your side, not against you. You don't have to worry about making a fool of yourself. The visitors are people, just like you. And they are rooting for you to be good.

The bottom line is that if you're nervous, there's not much you can do about it. Just don't let it bother you and, chances are, it will go away.

Ending your presentation

Ending your presentation effectively is very important.

Do a quick summary of what you talked about. (Step 3 of the Three Step Plan.) Thank them for listening. Suggest what other things they might want to do or see at the museum or zoo. Invite them to talk to you after the presentation is finished. And communicate to the visitors (verbally or otherwise) to enjoy the remainder of their visit.

How Animals Walk

Although some of the ideas that we have talked about in previous sections depend upon the performer or activity leader to make them happen, many of those ideas can be built directly into the structure of an activity. What follows is a description of the How Animals Walk show (at the National Zoo) from the perspective of how we tried to incorporate many of those interpretive techniques directly into the design of the show.

Synopsis of the show

In a nutshell, this is a street theatre-type show in which members of the audience are brought "up on stage" and taught how to walk like a variety of animals that can be seen at the Zoo. Our purpose in doing this show is to give the visitors "new eyes" with which to look at the animals, and entertain them at the same time.

No real animals, other than humans, are used. The animals whose walks are demonstrated are:

Pigeon
Sparrow
Human
Lion
Camel
Gorilla
Kangaroo
Gibbon

These animals were selected because they exhibit a wide variety of walking styles, that could be done easily by visitors. Snakes, for example, were eliminated because people would get dirty slithering along the ground on their bellies.

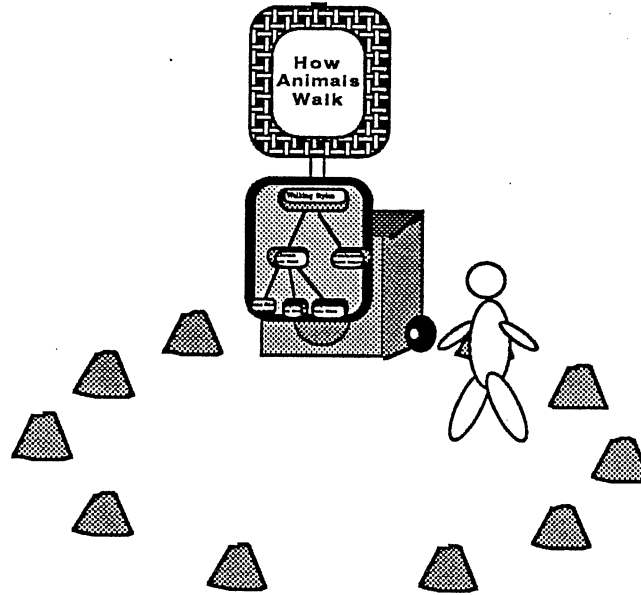
The show finishes with a parade of all the "animals" doing their respective walks around the stage area.

Transforming the space

Before the show begins, you must define your performing space. We start with a mobile cart that carries all of the props for the show, as well as a battery operated PA system, and a flagpole and banner with the show's name. This is placed in a nice shady area, on soft ground, just off of the main walkway of the Zoo. It is important that the audience be comfortable during the show. In fact, a certain number of visitors will watch simply because it is a shady and comfortable place to sit down for 20 minutes.

To clearly define the space, we use about 10 - 15 orange soccer cones to form a semi-circle about 10 meters in diameter, with the mobile cart at the rear of the

semi-circle. These cones serve two purposes. 1) They make the performer's job easier during the show because she does not have to worry about the audience (especially kids) closing in on her. You do not want to have to spend your attention continually holding the audience back. 2) The process of setting up the cones, microphone, banner, etc. tells the visitors that are passing by that something is about to happen. During this time, the performer can informally chat with a number of visitors, tell them what is going on, and invite them to stay and see her show.



Next, she starts the music. We use a tape of Caribbean music because it fits the outdoor flavor of the Zoo, and is fun to listen to.

Finally, the performer hangs a sign that reads, "Next Show in 10 Minutes." By this time, the area that was previously just an empty spot under the trees has been transformed into a small, informal theatre. Transforming the space helps the visitors understand not only what to expect, but what is expected of them. The importance of this is discussed more fully in the *Visitors Must Understand the Context* section of this report.

Please note. Even though the above mentioned things seem like they happen before the show begins, in fact, they are all part of the show. From the moment that the performer shows up at the location, she is making an impression on the public. From the performer's point of view, the show has already begun.

Gathering a crowd

The key to drawing visitors to the presentation is to make it look like something good is about to happen. Hopefully the music combined with the physical setup of the space will attract people.

As visitors approach, the performer invites them to sit down in the front row, in our case, near the circle of cones. This begins to build the core of audience

members needed to get the ball rolling. Equally important, asking them to sit down causes the visitors to make a psychological commitment to the show. As other visitors pass by, the performer should explain what is about to happen, with an attitude which says, "Why not join the party? It's going to be a lot of fun."

At this point the performer tries to accomplish three things: 1) she wants the small groups of people who have gathered to coalesce and begin to think of themselves as a single audience, 2) she wants to get the audience into the habit of applauding, 3) she wants to attract more visitors.

The technique that we use at this point is to ask the audience if they will help in attracting a larger crowd. "When I count to three, I want everybody to clap, whistle, and make a lot of noise so we can draw a bigger crowd. Will you help me?" The "Will you help me?" part is very important because it strengthens their commitment to the show. The whole mood is one of having fun, with the entire audience, as a group, pulling a fast one on the non-suspecting visitors who are passing by. (Normally you cannot ask for applause for yourself, but since this is a joke, it is o.k.) By actively engaging the audience early in the show, we are setting up a situation where information and responses flow freely in both directions.

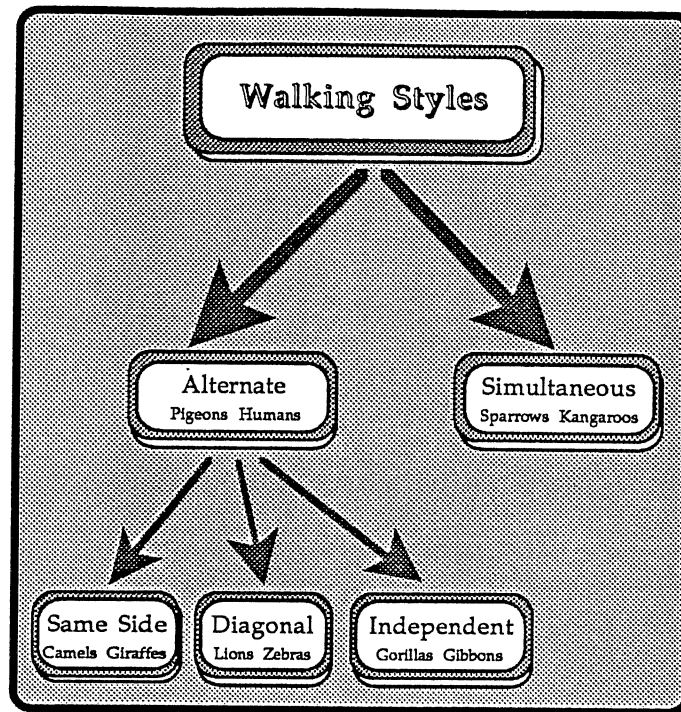
The "Next Show in Minutes" sign is also useful at this point. On the surface it seems that its function is to mark the time until the next show. But there is no need to be accurate with the time. In reality it can be used as a prop to build audience expectation and applause. Done with the right spirit, the performer can get rounds of applause as she dramatically changes the numbers from 10 minutes to 5, then 3, and finally showtime.

In the audience's mind, the show is about to begin. (As you can see, in reality, the show has been going on for some time now.) By this time, it is not uncommon to have as many as 50 to 75 people in the audience. As the show progresses, this number can easily grow to 150.

Understanding the context

It is crucial that the audience has a clear understanding of what is about to occur. Obviously this is a show, that is clear from the setting. Obviously they are expected to applaud, they've been doing that for several minutes now. Other than this, many people may not be sure what is going on.

At this point we replace the "Next Show in . . ." sign with a large chart describing the various ways that animals walk and then turn off the music. This signals that the show is about to start.



The actual chart has *illustrations* of the different animals rather than their names.

The performer begins by telling her name, explaining who she is, and that this is a show about how animals walk, where people from the audience will learn to walk like different animals at the Zoo. In this way, she quickly sets up a context for the show. She also explains why we do this show, namely, so that visitors can have more fun noticing things about the animals that they might not have noticed before. (This is based on the philosophy discussed in the *Give Visitors "New Eyes"* section.)

(The chart is very important so that visitors can follow the logic of the show. When we first started doing the show we did not use the chart. Although it was clear to us how the different walking styles related to one another, to the audience it seemed like a potpourri of animals and walking styles, chosen at random. Additionally, throughout the presentation, the chart gives them a rough idea of where in the show we are.)

The performer immediately states that she needs someone from the audience who would like to learn how to walk like a pigeon. She chooses the audience member that she would like to have participate. Usually this is one of the people with his hand raised, but not necessarily. She brings the volunteer up onto the "stage" (the center of the circle) and places a giant name tag saying "Pigeon" around his neck. She continues, "I'm going to teach you how to walk like a pigeon. I'll go first, you go next, and (turning to audience) you watch to see how good a job he does." The effect of this is that everybody has a clear idea of what is going to go on and what they are supposed to do. It allows them to make a mental model of the interaction, and understand how they fit into the picture. As we stated in the *Visitors Must Understand the Context* section, if the visitors do not understand what their role is, they will not feel comfortable, and will have much more difficulty assimilating the information you are trying to deliver.

Notice that everything is orchestrated. "You stand here." "You guys clap." "You sit here." The audience is part of the script of the show, and the performer merely guides them through their "lines".

(Incidentally, the giant name tags that the volunteers wear serve, not only to help the audience follow the action, but, if placed in the correct order before the show, can be used by the performer as cue cards to remind her of what animal comes next.)

A note about choosing volunteers

The performer always chooses the "volunteers". It is important for her to choose people whom she thinks will be good for the show — good sports, fun loving, outgoing people, people who will not be embarrassed. Choosing participants from a wide selection of age groups, sexes and ethnic backgrounds is a must.

There are some rules of thumb. A young father with a pack of kids with him will probably be good. After all, he probably gets down on all fours when he is playing with his kids. People who wear loud or ridiculous clothing are not shy about being noticed. Choosing someone who is with a large group of friends is always good. Not only does he have instant fans, but it holds the entire group until the end of the show.

The key is that the performer chooses the person whom she thinks will be best for the show (even if his hand is not raised), not necessarily the person who is volunteering the loudest.

More about applause

It may seem that there has been a lot of discussion about getting applause. Why so much interest in this for an "educational" show? The answer is that the applause is not for the gratification of the performer (although it's nice), it is a method of allowing the audience members to interact and/or express themselves. There are only so many ways that you can get large numbers of people to interact. (Raising of hands is another one, but that is more appropriate in a school than at a show.)

Besides, people enjoy clapping. Would you rather go to a show (as an audience member) where the audience was sitting on their hands or doing a lot of clapping?

Applause can be used, not only for showing approval, but also for answering questions, taking votes, encouraging fellow audience members, making sounds for sounds' sake, or, as mentioned earlier, for playing a joke. Audience members feel as if they are more involved in the show if they have been applauding along the way. Creative use of applause is a way for the performer to employ the *Direction of Information Flow* concept with a large group of people.

It is the performer's job to guide the audience as to when clapping is called for. As each volunteer comes up onto the stage, the performer asks for a round of applause for him. When the first volunteer is about to start their walking, she asks the audience, "If he does a good job, will you give him a big round of applause?" This not only lets the audience know what you would like them to do, but it sets up a contract between the performer and audience. Notice that in every case, the performer never asks for applause for herself, always for somebody else.

In fact, as the show progresses the performer needs to do less and less to cue the audience. Often simply clapping her own hands will trigger the audience. They will generally continue the pattern of applauding that has been established early in the show. (See *'The audience is part of the script' in the Performing Techniques section.*)

Why particular animals were chosen — the body of the show

Pigeon and Sparrow. These were chosen because they can be seen all over the Zoo, and outside the Zoo as well. (There is no point in giving visitors "new eyes" if they don't have a chance to use them.) They demonstrate each of the two main categories of walking: alternate and simultaneous. They are very easy for visitors to perform, hence, would be non-threatening near the beginning of the show. And, by throwing some popcorn on the ground, we can occasionally entice some real pigeons and sparrows to come by, allowing the visitors to observe the actual animals.

Each animal walk demonstration follows the same pattern: 1) choose a volunteer; 2) show him how to do the walk; 3) ask him to demonstrate it for the audience. As each volunteer finishes his walk, he is asked to sit at the edge of the stage area with his name tag still around his neck. As the show progresses, this group grows larger and larger.

Human. A human puts the other animals in perspective and shows how we fit into the picture. The reason that a human was put at this point in the show is this: very often people think this show is for kids. It is not. It is for all visitors, young and old alike. In order that the show not have that kiddie show feel to it, it is crucial that about half of the volunteers from the audience be adults. It is easy to get an adult to do the human walk, and this breaks the ice early in the show for getting other adults into the act. A second reason for placing a human here is that in a moment we will be trying to explain the diagonal walk that lions do. Humans do a modification of the same diagonal walk, and it is easier to explain the lion walk if the audience has already seen the diagonal action in the human walk.

Lion, Camel, Gorilla. By this point in the show people are usually comfortable enough to do the four-legged walks. These animals exhibit each of the three major types of four-legged alternate walks: diagonal, same-side, and independent. It is important that the performer get down on all fours when demonstrating these walks, since that is what the volunteer is being asked to do, and the performer should never ask the volunteer to do something that she, herself, won't do.

"We only have two more left to go." This is a road map for the visitors. You have now covered examples of animals from all of the boxes on the chart. But the show isn't over yet. It is important to give the visitors an estimate of how much more there is to the show (a context). After all, most of the visitors to the Zoo have an agenda (they haven't seen the elephants yet), or are under some other sort of time constraint. You don't want them leaving just before the end simply because they don't know that the show is almost over.

Kangaroo. This animal was chosen for several reasons. It exhibits both a walking style and a running style which are not the same and which are both easy to do. (Many animals have several locomotion styles; consider horses which can walk, trot, canter, gallop, etc.) Kangaroos also have a very interesting style of walking that is quite different than the others seen in the show. It is a second example of simultaneous walking in a show that is dominated by alternate walks.

Gibbon. This was chosen because it is a very funny looking walk, and is a good way to end the show. If you choose an adult to do this, they look ridiculous (not in a bad way), and if you choose a little kid, they look cute. Either way, you can't miss.

Closing the show

There are three things still left to do in the show: 1) give out the handouts that we have prepared which reinforce the content of the show, 2) have all of the volunteers do a "parade" of animal walks, 3) have everybody in the audience walk like a gibbon. This is the time when the show could fall apart on the performer if she is not careful. Any one of these three things might be construed by the audience as the end of the show. If they don't know what is coming, then as soon as you pass out the handouts, many of them will get up to leave, making it very difficult to finish the show cleanly. The solution, then, is to tell the audience what is going to happen.

"In just a moment, we are going to have a parade with all of our animals. (Performer gestures to the group of volunteers to stand up.) While they are getting ready, we have some handouts for you so that you can have more fun looking at things during the rest of your visit to the Zoo. (Gives handouts to several people in the audience to pass out.) After that, everybody will get a chance to walk like an animal." (These last few sentences let the visitors know what their role is, the handouts help them to have new eyes, and allowing everyone to participate keeps the interaction flowing in both directions.)

The parade

The purpose of this section of the show is to review everything that the visitors have seen in the show. From an educational point of view, this reinforces what they have learned. It is step three of the Three Step Plan explained in the *Performing Techniques* section. From a showmanship point of view, it is a good finale.

The performer puts the music back on to get the visitors into the spirit of a parade and to signal that the show is almost over. Each of the volunteers does his or her animal walk, in quick succession, around the stage area, while the audience applauds for them. It doesn't matter what order they happen to be standing in. Speed, at this point in the show, is more important than who goes first and who goes next. As they are parading, the performer calls out all of their names and their walking styles. "The lion - diagonal walk; the gorilla - independent walk," etc.

Everybody walks like a gibbon.

When all of the animals have finished, and their name tags have been removed, the performer asks everybody in the audience to stand up and learn how to walk like a gibbon. She then instructs the entire audience to, ". . . hold their hands up like this . . . squat down like this . . . and walk around the Zoo all day like this." Since the audience is already familiar with the gibbon walk, it is very easy to do. It is a good way to end the show, and fulfills your promise to all of the kids who wanted to be in the show but were not picked that everybody will get a chance to walk like an animal.

After the show is over

The performer always makes herself available to the visitors immediately after the show. Often people will have questions, or wish to compliment her. Kids may come up to say that they didn't have a chance to be in the show. (At that point, the performer can put a name tag around the kid's neck and let him walk like one of the animals.) In short, even though the show appears to be over from the audience's point of view, the performer is still on stage and acting as a friendly representative of the Zoo.

As you can see, in many ways the success of a presentation depends upon the skill of the performer. Unfortunately, not all of the performers at your zoo or museum will be equally strong. However, it is still possible to structure the presentation in such a way as to increase the likelihood that the show will exhibit the educational and theatrical techniques necessary for success, no matter who the performer happens to be.

Conclusion

We have formulated a number of ideas during the course of our work on the Improving Exhibition Interpretation project, and have tried to set many of them down in this report.

We believe that different interpretive techniques, or media, have correspondingly different effects on the visitors, and that a complete program of museum or zoo interpretation should employ a variety of media.

We feel that a worthwhile goal of an interpretive activity is to provide visitors with the tools (new eyes) to see and understand the museum or zoo in a fresh way.

In order for an activity to be successful, visitors must have a clear idea of what the activity is all about and what is expected of them.

An educational experience does not imply that all of the information goes from the museum to the visitors. In fact, some of the best educational experiences occur when the visitors are actively engaged, adding what they already know to the environment we have set up.

We found that a very practical solution to many of our presentational problems was the use of the cart format. It could be used in a variety of ways, from a storage case, to an activity table, to a mini-stage.

Finally, we often considered our interpretive activities as performances, and borrowed many of the techniques available to performers to strengthen our own presentations.

We hope that the ideas that we have presented in this report will be a springboard for you in thinking about ways to develop effective interpretive programs in your own museum or zoo.

Appendix

A Typical Development Schedule

Since museum budgets, resources, staff and production facilities differ greatly, each museum educator will find his own schedule for activity development. For example, the carts at The National Museum of American History took anywhere from fourteen to thirty-six months to develop — from the first experiments with objects to a program which has a comprehensive training manual, a maintenance schedule, and a trained interpretive staff. These are the steps that we feel are important to develop a successful interpretive activity. (Some of these steps may be concurrent.)

1. Decide what purpose the activity will serve. What theme or concepts will the program and objects communicate? Will it be a demonstration, a basis for visitor questioning and discussion, or something else? Will it serve a large or small audience? Will it involve visitor participation?

2. Select the activity theme and objects. The objects you select should be appropriate to the activity's purpose and message. Do the objects clearly illustrate the desired themes, or do you need a script and activities to support them? What type of format should you choose? A show, a demonstration, a hands-on activity?

3. Do research. The research may take as much as two months of full-time work (library, interviews, locating objects, etc.) All of your research may not show up in the final script, but it may be useful during training.

4. Test. This is an on-going process. Even if you only have a little information and a few objects, you can still test and get very valuable visitor feedback. In our activity development processes, we learned to emphasize the visitor testing because many of our ideas required refining after testing. Testing should be interwoven throughout the development process.

4. Refine the program. This can take weeks or months, based on your test results.

5. Develop the script. We averaged about one month of writing and curatorial review.

6. Write training materials. This took one to two months - probably less time with each new activity, particularly if each manual contains non-specific information on interpretive techniques, visitor orientation, etc.

7. Train and schedule interpreters. This depends on the available resources. At the Museum, this process took two to three months of scheduling training sessions, actual training, and review.

8. Do maintenance. This should be continual and at different levels. But, this crucial step is often disregarded or given too little time and money.

Other questions to answer before you even develop the first activities are:

- * Will the activity serve a distinct purpose in your museum?
- * Who will staff the activity?
- * Where will the materials be stored?
- * Will permanent staff be available to maintain the objects and work with interpreters, and to update the training and reference materials?
- * Will the budget allow replacements and new acquisitions?