In label workshops over the years, I have gone from teaching about words on labels to teaching about words as part of whole exhibitions. Feedback from a recent session at a university museum involved a change of heart by a curator who originally thought my suggestions about writing short labels and writing more concretely was undermining the scholarship of her exhibitions. She later said, "It (the workshop) wasn't just about labels; it was about how visitors use them. We have to face the fact that if the messages are not getting through, it's not working." I certainly agree.

My old book about making labels was more about the basics of writing, editing, and producing labels. It was a step-by-step approach. (In one museum bookstore, they put it on the shelf with other "crafts.") It was directed primarily at small museums, with few staff and scant dollars to spend on exhibitions. This is a different book, still directed at beginning and intermediate label writers, but it contains more details that I hope will be thought-provoking to expert designers, subject specialists, and experienced exhibit planners.

Heartfelt thanks to all the folks who helped with The New Book: to Margaret Menninger, The J. Paul Getty Museum and Getty staff for their help and the Guest Scholarship that gave me the time and place to write; to Kathy McLean, Lisa Roberts, Judy Rand, Britt Raphling, Barbara Becker, Rebecca Mendez, Ian Wardropper, Gary Mechanic, Harris Shettel, Steve Bitgood, Lisa Mackinney, Frank Madsen, Alan Teller, John Bierlein, Richard Riccio, Rachel Hellenga and—last but far from least—Marlene Chambers, for their comments, edits and encouragement. Thanks to Peter Kiar, Nancy Levner and Cliff Abrams for advice on the photographs and to Carlos Morales and Proto Productions, Inc. for fine-tuning the chapter on fabrication. Thanks to my publishers and designers for their interest and support; to the various practitioners and museums who have allowed me to share their examples; and to Shedd Aquarium, Field Museum and Brookfield Zoo for taking risks and allowing me to try out so many different ideas.

Introduction

Notable improvements in interpretive labels have occurred in exhibitions in all types of museums since the 1970s. Scores of articles about labels have been written for museum publications. Discussions, workshops, and talks have been offered at professional meetings. We have learned to write shorter labels, use catchy titles, ask questions, and produce text in type large enough to read comfortably, even with bifocals.

There are many good examples we can follow, such as Judy Rand's work and the Monterey Bay Aquarium; Marlene Chambers and the Denver Art Museum's interpretive project. The Field Museum in Chicago, under the guidance of Mike Spock, made significant changes in its approaches to interpretive exhibitions, as has Denver's Natural History Museum. Some institutions have published and shared their manuals of style or label guidelines, such as Philadelphia Zoo, Brooklyn Children's Museum, The Metropolitan Museum of Art, and Minneapolis Institute of Arts. Helpful information about labels is available through the Visitor Studies Association (VSA), the American Association of Museums' Committee on Audience Research and Evaluation (CARE), and the National Association for Museum Exhibition (NAME).

So why do we need another book about labels? Because there are still lots of ways to improve the museum's role of providing interpretation through better labels. We still need to work harder to write labels for visitors, not for ourselves. Apparently some of the advice in the articles and discussions has not reached, or convinced, enough museum practitioners to ensure that more labels are made for visitors, not the curator's thesis advisor.

The 20 chapters in this book can be read in any order, and some information overlaps between chapters. They're meant to be a quick read, with the big idea stated up front in each. Examples of labels and visitor studies are drawn from dozens of different museums, because the principles in this book are

meant to apply across the board, from all types of museums—whether they consist of combinations of objects, artifacts, art, culture, animals, music, people, or phenomena.

SIMILARITIES AND DIFFERENCES AMONG TYPES OF MUSEUMS

Among all museums there are many similarities and shared issues about labels, including their sizes and length, the number of ideas presented, visual resonance, design, and intrinsic rewards. Some people naturally resist the notion that what is good for another person's museum could not possibly have any relevance to their museum, because their collection, audience, city, or board of directors makes their case unique. It is the "not-in-my-gallery" mentality. In fact, there are some differences, some of which are specific to museum type:

- Art museums are more concerned with aesthetics and have conflicts about presenting interpretations that might impose on visitors' own impressions and experiences. Art museum practitioners worry about visitors spending too much time reading; all other museums worry that visitors do not read enough.
- Zoos must deal with animals that can move out of view, or sleep in a large lump that obscures the virtues and adaptations interpreted on the label.
- Children's museums, to reach their primary target audience, must appeal to preverbal and developmentally immature learners.
- Science museums have the difficult problem of presenting content that is complicated, abstract, and unseeable. Thus, many science museums rely on computers as exhibit elements themselves instead of as supplements.
- Natural history museums contend with large collections of multiple examples of objects and artifacts that to an untrained eye often look almost identical (e.g., 30 woven baskets, 20 knife handles, 50 stuffed birds).
- History museums see themselves as having a larger interpretive responsibility than science museums (where

knowledge is "relatively certain") or art museums (where knowledge is "a matter of opinion").

There are also differences between museums of the same discipline but of different sizes and different locations. In general, large urban museums share more in common with other large urban museums than they do with suburban or rural museums with small budgets and small staffs, regardless of the topic.

Our patience and empathy with each other's distinctive characteristics will be rewarded with more understanding of the whole field of museum interpretation. There are fewer special problems than ones we have in common. In postmodern thinking, the certainty of knowledge in all fields is challenged. Besides, many people who work at one kind of institution may end up working for another kind at some point.

DEFINITIONS OF TERMS

I recommend that readers begin by reviewing the glossary. As a profession of museum practitioners, we are a relatively young group, with few agreed-upon standards, no basic training manuals, and no clearly shared vocabulary. We need to be more careful in defining our terms and using them consistently. For example, in this book, "exhibits" and "exhibitions" are not the same thing: Exhibits are single exhibit elements, whereas exhibitions are groups of elements that together make up a coherent entity or share a theme.

When I use the word "visitors" I mean casual, free-ranging adults (alone, in social groups with other adults, or with children), not school groups or people in tour groups or with audio-headsets. The primary users of labels are adults.

An interpretive approach to labels means:

- label content is conceived in the context of communication goals and a big idea;
- labels are written with knowledge of the physical context and layout of the exhibition;
- the development of labels requires visitor input through

front-end and formative evaluation;
- labels cannot be thoroughly understood unless visitors read them in the context of the whole exhibition experience.

OBJECTIVES FOR THIS BOOK

When museum practitioners produce labels that are guided by clear goals, and contain accessible content and have words and visuals that work together, more visitors will understand, find meaning in, and enjoy museum exhibitions. This means that in art museums, visitors will spend as much or even more time looking at the art as they spend reading labels. It means that in natural history, science, cultural history museums, and zoos, visitors will be able to trust the labels to contain information meant for them. It means that in children's museums, not just adults, but children will read labels.

The goal for readers of this book should not be to achieve or expect perfection in museum labels, but to be able to recognize quality and make intelligent decisions about how to make better labels and more effective exhibitions.

This is not, I hope, the last book on labels. Museum practitioners, visitors, cultural critics, funders, and researchers will continue to discuss labels because content in the form of text is pivotal to many of the important issues about exhibition effectiveness and a fundamental part of museums' educational mission. The current attempt to reach broader audiences (i.e., more people, with more diverse demographic characteristics) can only be achieved through better communication techniques in exhibitions for people who have no special knowledge, interest, or training in the subject. And, not just those audiences—we also need to reach out to people who do not use museums, or who do find references to themselves there, or have not yet seen what can be gained from visiting them. Only then will museums truly be educationally effective and broadly serve their communities. Good labels are key to this effort.

1

Behind It All: A Big Idea

A powerful exhibition idea will clarify, limit, and focus the nature and scope of an exhibition and provide a well-defined goal against which to rate its success.

Some exhibit developers do not exercise self-control when selecting content for an exhibition. They have no limits and do not resist the temptation to try to tell every story. As one developer admitted proudly, "I'm the one who was responsible for the 450 panels on the wall. I wouldn't give up." But what is most interesting to that expert will not interest, engage, or positively impress most visitors. Faced with those 450, a visitor reported, "My heart sank when I saw all those labels."[1]

Interpretive labels will be easier to write and will make more sense overall to visitors if the exhibition has a single focus that unifies all its parts. Good labels are guided by a strong, cohesive exhibit plan—a theme, story, or communication goal—that sets the tone and limits the content. Not just the labels, but all of the interpretive techniques and the elements designed for the exhibition will be driven by this plan (see figure 1). The best plans are stated concisely as a "big idea."

A big idea is a sentence—a statement—of what the exhibition is about. It is a statement in one sentence, with a subject, an action, and a consequence. It should not be vague or compound. It is one big idea, not four. It also implies what the exhibit is not about. A big idea is big because it has fundamental meaningfulness that is important to human nature. It is not trivial. It is the first thing the team, together, should write for an exhibition.

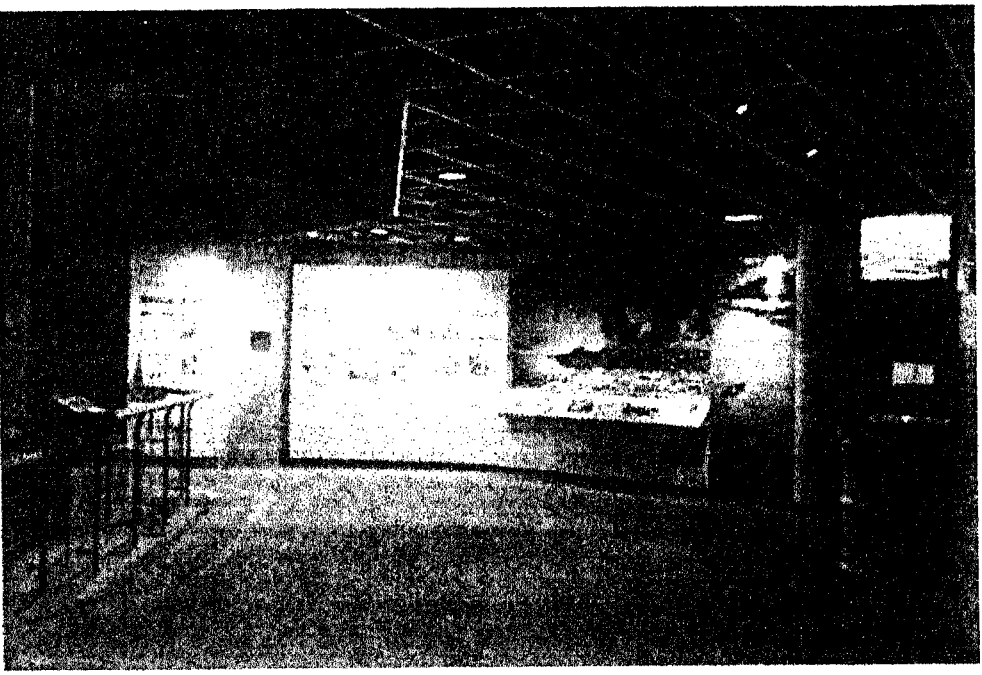

FIGURE 1
All the media in *Otters and Oil Don't Mix* were integrated to support the big idea—that the damage to otters and the ecosystem caused by the Exxon Valdez oil spill was extensive, expensive, and unforgettable. Media include an open diorama, photographs, documents, text, illustrations, a video, a computer hypercard program, and live animals.

The definition of a big idea, written as a big idea statement, reads like this: The big idea provides an unambiguous focus for the exhibit team throughout the exhibit development process by clearly stating in one noncompound sentence the scope and purpose of an exhibition.

Exhibit developers use the big idea to delineate what will—and will not—be included in the exhibit. It is primarily a tool for the team, not an actual label for visitors, so although it must be clear, it is not necessarily simple. The big idea guides the development of exhibit elements and their labels (e.g., for cases, captions, interactives) that support, exemplify, and illustrate aspects of the big idea. This means that each element must also have a clearly defined objective that supports the big idea. For each exhibit component, the question, What's this got to do with it? should have a clear answer.

Exhibitions with a big idea can be big or small (e.g., 7,000 or 500 square feet). Size is not the determining factor. A small exhibit with a big idea can be very powerful. A big exhibit

with a big idea can be very comprehensive and contain many elements that reinforce each other.

Other examples of big ideas:

From a planetarium: "Most of what we know about the Universe comes from messages we read in light." The statement was printed as the introductory panel to the exhibition, shown in figure 2.

From a zoo exhibition about a swamp: "A healthy swamp — an example of a threatened ecosystem—provides many surprising benefits to humans." This means that the exhibits will not be primarily about how animals are adapted to their environment. The statement was rewritten for the beginning of the exhibit as, "What a swamp is good for: clean water, flood control, recreation, habitats for wildlife, natural beauty, cultural traditions. Walk in and find out." The rewrite made the big idea more contextual and specific, for the visitor's sake.

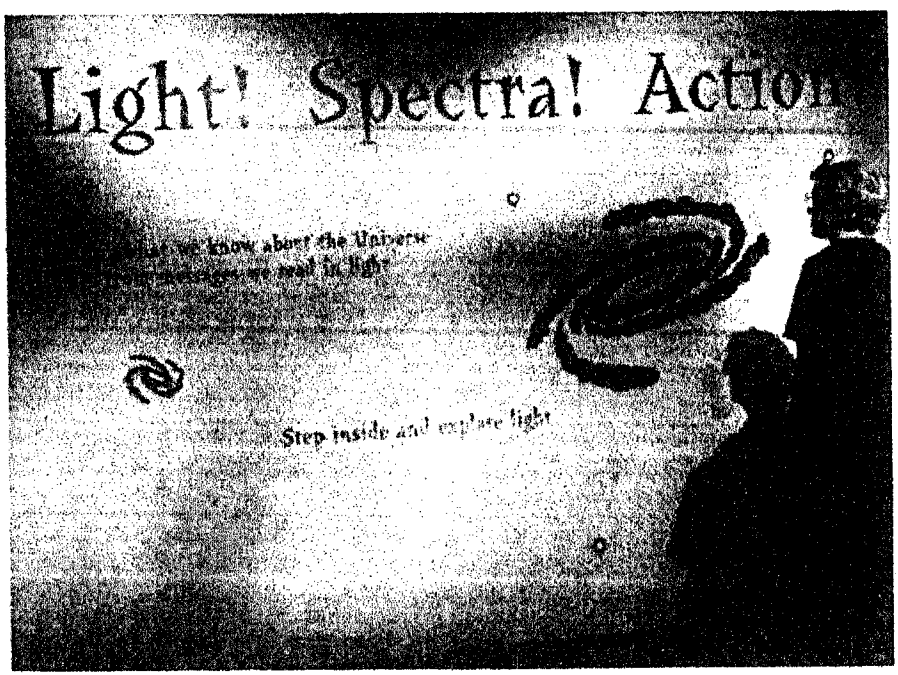

FIGURE 2
A large panel announces the three-word title. It also states the big idea in 15 words (three seconds' worth of reading) and invites visitors to enter the exhibit.

From a science museum: "This exhibit will let visitors try out imaging tools to better understand their world." The statement would be clearer if it did not begin with "This exhibit . . ." but it is clear that the primary experience will be that visitors get to *do* something.

From a historical society: "Manufacturing a Miracle: Brooklyn and the Story of Penicillin." This is an unusual case where the title of the exhibit served as the big idea also. Evaluation showed that visitors easily grasped that the exhibit's title implied that Brooklyn played an important role in the manufacture of penicillin, which made the miracle drug more widely available.

From an aquarium: "Sharks are not what you think." Although this big idea was rather abbreviated (that is, it does not say what about sharks is not what you think), the exhibit developers reported that "an impressive 80% of our visitors left the show with the main message."

From an art museum: "What the artists portrayed about the West in these paintings is largely fiction, which had an impact on perpetuating myths about the West in other media." Viewers could then take their own position to this viewpoint, agreeing or not.

All of the examples above show the difference between a topic and a big idea. Topics, such as swamps, sharks, imaging tools, or Western art, are incomplete thoughts; whereas, a big idea tells you what about sharks, whose myths, or what imaging is good for. A big idea helps exhibit planners share the same vision for what the exhibition is really about.

The examples that follow are flawed big ideas:

A big idea that is too big: This exhibit is about the settlement of the western United States.

A big idea that might be too detailed for a lay audience, depending on how it is done: The exhibit will present the

complex historical and scientific information surrounding the questionable authenticity of the sculpture.

Several big ideas strung together, without a single idea to hold them together: Visitors will learn about molecular structure, chemical reactions, and the scientific process of analyzing unknown substances.

Too often, in my experience, museum practitioners, especially those working in children's museums and science museums, do not ask themselves what the big idea is. Instead, they develop the exhibition as a bunch of "neat, affordable devices that visitors will love and not be able to destroy." These neat exhibit elements are often developed with cleverness and creativity, but lack a cohesive or logical relationship to each other and do not always support any exhibit objectives. They also lack soul—the fundamental meaningfulness that answers the question, So what?

Neat exhibit ideas without precision, focus, and soul are not enough. There should be more to exhibit elements than having visitors like them and enjoy themselves. Enjoyment is not the only criterion for success. Especially in exhibitions that claim to be educational, visitors should be able to understand what an element is about, grasp its context in the whole exhibition (i.e., within the big idea), and find it personally meaningful and useful.

As visitors exit an exhibition, if they can easily, unhesitatingly and thoroughly answer the question, What was that exhibition about?, there is strong evidence for immediate impact—comprehension and personal significance. If the majority of them seem hesitant ("Uh, ummm . . ."), uncertain ("I think, maybe, well . . ."), brief and incomplete ("It was about sharks"), or apologetic ("I really wasn't paying attention," "I just breezed through"), there is evidence that the big idea was not clear. Visitors certainly can create their own meanings, in ways unintended by the exhibit developers, but this is not a problem as long as what the majority of them

create is not contradictory to the exhibit's purpose, or does not perpetuate misunderstandings that the exhibit was supposed to correct.

Having a big idea does not make visitors' experiences in the exhibition more controlled, constricted, or less open-ended than an exhibition without one, but it does increase the likelihood that visitors will be able to decipher the exhibition's communication goals. A big idea keeps the exhibit team accountable to their educational objectives while allowing visitors to construct their own experiences freely.

The "voice" of an exhibition is linked to the big idea, but is also different from it. The big idea determines what the voice or voices within the exhibit will be like—casual narrator, formal instructor, knowledgeable expert, firsthand experience, or different voices with different points of view.

If the big idea is a controversial one, a balanced viewpoint may or may not be desirable—again, it depends on exactly what the big idea is. The 1995 controversy at the Smithsonian Institution over plans for the *Enola Gay* exhibition was the result of a bad match between the subject (the atomic bombing of Japan in World War II) and the timing (the 50-year celebration of the end of the war, honoring those who fought).[3] Was it supposed to be an academic history-of-war exhibit, or was it a tribute to the United States of America's armed forces? A balance between those two might not have been possible, but a clarification of whose point of view was being communicated and for what purpose would have clearly been a good idea.

A big idea works best when the team writes it down—but does not set it in stone—at the beginning of the exhibition development process and changes it when necessary. The operative words are "written down." If the big idea is not written down, different people on the exhibit team will have their own interpretations for it, and conflicts will develop over what is necessary and appropriate in the exhibition. Even when the big idea is written, it is amazing how differently people will interpret it. Members of the exhibit team should

all memorize or post the big-idea label over their desks so that they can refer to it easily.

A big idea can be tried out with visitors early in the planning stages, and visitor response can help developers shape or modify it, or tighten up the exhibit plan. After the exhibition is completed, evaluation can tell you whether or not the visitor's experience successfully reflects or incorporates the big idea.

Exhibitions that lack a big idea are very common. And they show it because they are overwhelming, confusing, intimidating, and too complex. There are too many labels, and the texts do not relate to the objects. The labels contain too many different ideas that do not clearly relate to each other. They are hard to grasp. They are typically underutilized—the majority of visitors move through them quickly, stopping at only one-third of the elements.

Exhibit developers who work in teams will appreciate the power of a big idea. It can unify the efforts of the team members by helping to eliminate arguments over ego and turf. When all members of the team focus on the same objectives, each person's ideas can be considered more fairly. If an idea works, the team embraces it; if it does not fit, the team can reject it without bias by one member. A clear big idea also protects the team from criticism by sources whose support is needed, such as the director or the board. In an exhibition driven by the team's desire to communicate a big idea, there will be less need for the single job of "educator" because the whole team will share that role.

I have given a lot of space to the idea of having a clear big idea in the first place because so many other things depend on it—content research, label writing, image selection, design layout, and size. Without a big idea, the job of the writer is much more difficult: interpretive labels contain fragmented, unrelated facts with emphasis on providing information for the sake of information, not on providing meaningful, useful experiences for the visitor's sake. With a concise statement as the basis for all interpretation, the use of words in the exhibi-

tion will have clear direction and defined limits.

In the next chapter, you will see that just as a big idea provides useful limits to the nature and scope of an exhibition, an interpretive approach to label writing gives the exhibition a less authoritative, knowledge-based voice. A big idea defines what the story will be, and an interpretive approach encourages visitors to become part of the story themselves.

NOTES FOR CHAPTER 1:

1. These comments were from the 1995 American Association of Museums' 87th annual meeting panel discussion on "Critiquing Museum Exhibitions: The Sequel," available on tape.

2. Judy Rand, "Building on your ideas," in *Museum visitor studies in the 90s*, ed. Sandra Bicknell and Graham Farmelo (London: Science Museum, 1993).

3. Mike Wallace, "The Battle of the Enola Gay," *Museum News* 74, no. 4 (July/August 1995).

What Are Interpretive Labels?

Interpretive labels tell stories; they are narratives, not lists of facts. Any label that serves to explain, guide, question, inform, or provoke—in a way that invites participation by the reader—is interpretive.

The purpose of interpretive labels is to contribute to the overall visitor experience in a positive, enlightening, provocative, and meaningful way. Interpretive labels address visitors' unspoken concerns: What's in it for me? Why should I care? How will knowing this improve my life? If labels only identify objects, animals, or artwork, they are not interpretive. As one visitor commented about the lack of interpretive labels in a natural history museum's bird halls, "Maybe one out of five birds had a little baseball card thing on them besides the name. 'Hits right, throws left, batted .328.' I guess I was looking for more."[1]

Interpretive labels are part of interpretive exhibitions, which are displays that tell stories, contrast points of view, present challenging issues, or strive to change people's attitudes. Interpretive exhibitions are found in all types of museums where visitors become engaged in the subject of the exhibit toward a particular end result: realizing the communication objectives selected by the exhibit developers.

An exhibition that is a collection of objects, artifacts, art, or mechanisms, with no intended learning objectives—except for the nebulous "visitors will experience it in their own unique way and find their own meanings"—is not a well-developed interpretive exhibition. This vagueness probably traces back to an unfocused underlying theme for the exhibit.

Vague exhibitions do not acknowledge to have, or hold themselves accountable for, any particular impact on visitors. In most institutions that claim to have an educational mission, interpretive exhibitions are the norm, but in many cases

they could be much more committed to a particular educational theme or purpose than they are.

But what is "interpretation" itself? It is more than presenting information and more than encouraging participation. It is communication between a knowledgeable guide and an interested listener, where the listener's knowledge and meaning-making is as important as the guide's. It comes to museums (in the United States) from the more oral tradition of educational programming in the National Park Service, and it is far more interactive than traditional, formal educational models of teachers as deliverers and mediators of information.

In the classic *Interpreting Our Heritage*, Freeman Tilden explained his six principles for interpretation, developed from his extensive experience in National Park ranger programs and in writing labels and designing exhibitions at park visitor centers.[1] Although his 1950s-language is noninclusive (e.g., visitors and interpreters are referred to as "he" and "him") and the photographs appear dated, his principles still ring strong and true and are presented in straightforward, down-to-earth style. Tilden's six principles:

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
4. The chief aim of interpretation is not instruction, but provocation.
5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.

6. Interpretation addressed to children (say, up to the age of 12) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.

Tilden proposed these principles in 1957, long before museum educators and other practitioners began using words like "the visitor experience," "meaning-making," and "empowerment." His fifth principle is the most relevant to my point of view in this book: To have a big idea behind it all; to keep everything else focused toward one, overall whole message; and to think about visitors as whole people with many shared needs.

Many other books discuss the importance of and describe the history of interpretive exhibits.[1] And there are several recent books that describe current thinking about serving diverse audiences. Kathleen McLean, in *Planning for People in Museum Exhibitions*, makes the point, "If we want exhibitions to be truly engaging, then all exhibit professionals, not only the educators and evaluators, will have to be communicators and audience advocates."[2] McLean argues for ways to make exhibitions better for the public as well as for many ways to make the exhibition development process function better within museums.

Lisa Roberts, in *From Knowledge to Narrative: Educators and the Changing Museum*, reviews the rise of professionalism of museum educators and its impact on the ways museums present knowledge.[3] She contrasts the curatorial-positivist stance (Here is our knowledge and truth for you to learn) with a multiple-meanings context (Here is what some people believe to be true). This shift of authority—and the acknowledgment of uncertainties and disagreements about what we know—within museums, whether science, history, or art, is part of a larger academic questioning about our assumptions in every major discipline. Roberts credits museum educators for the current trend in making exhibition narratives more inclusive: "It is educators whose

sensitivity to visitors has brought them to question the comprehensibility, significance and voice of exhibit messages."

These general notions about interpretation have concrete implications that are important for museum labels. For one, there are some interesting similarities between interpretation, narratives, storytelling, and exhibit texts. Printed words exist as visual and as verbal elements to the reader's eye and mind, and as oral components to the reader's ear (reading silently or hearing someone read aloud). Good interpretation, like good storytelling, carries the listener along with the sound of the words and the images they create, and lets the listener participate by anticipating where the story is going. Good stories don't keep the reader in the dark.

Labels tell very short stories. In figure 3, a caption for an aquarium tank of silvery anchovies captures the immediate essence of their behavior. In figure 4, visitors' first impressions are quickly addressed and altered by the main caption for a diorama. Below are three more examples of interpretive labels that strike a good balance between what the reader might anticipate is coming next and what does:

When the tide ebbs, sandpipers fan out across mudflats and beaches to feed. As the tide rises, they retreat, to preen themselves and wait for the next low tide.

—from an aquarium, at a seabird exhibit

These screens were made at the Savonnerie manufactory, which was owned by the French Crown and provided carpets and screens for the royal chateaux. Such screens were known as paravents ("against the wind") and were usually kept folded in the corners of rooms. When the rooms were being used, the screens would be arranged by servants for protection against drafts.

—from a decorative arts exhibit, as a caption for a pair of textile screens

The logger needed clothes that were functional and provided freedom of movement. Pants were cut off just below the boot tops to keep the rain out and to prevent snagging. Men working in the woods often had to take off at top speed, and if a pant leg caught it could mean the difference between life and death.

—from a history museum, as a photo caption in an exhibition about logging

---

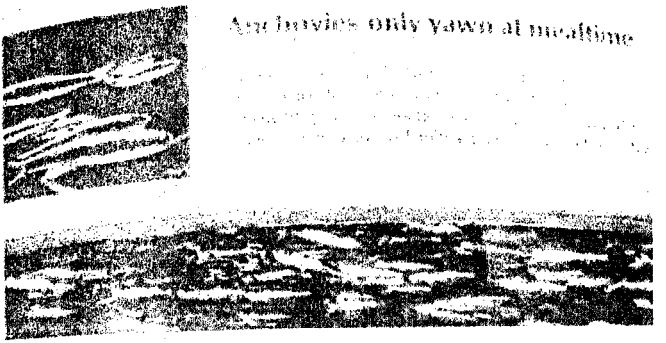

FIGURE 3
The caption for a large, round fish tank interprets the behaviors of silvery, swimming anchovies. It does a good job of directing visitors to look for the specific behavior discussed in the label.

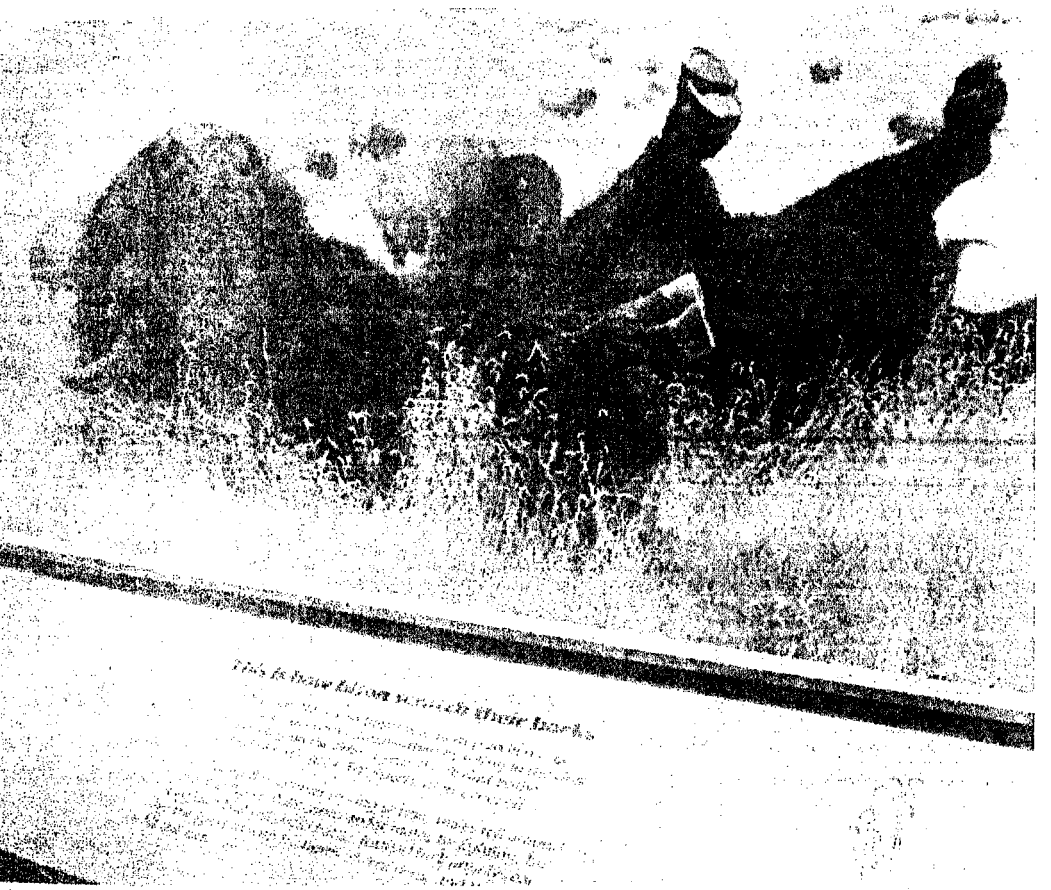

FIGURE 4
A common first impression—that the bison is dead—is quickly and effectively countered with this caption for a diorama.

These kinds of labels help readers look back and forth between the label and the object, following the details of the narrative. Or, readers can imagine action in their minds and memories, aided by the label's concrete references. You may not see the tide rising, or feel the cold breeze in the chateaux, or witness the logger running for his life, but these quick stories give visitors a "minds-on" moment.

LABELS WITH MEANINGFUL STORIES

Visitors typically refer to labels as blurbs, captions, descriptions, titles, legends, cards, and explanations.[4] What changes would it take to get them to call labels "stories" or "conversations"? One way might be to follow the advice of Joseph M. Williams, in his very handy book called *Style: Ten Lessons in Clarity and Grace.*[5] He gives us some excellent guidelines for how to make prose more clear, less passive, and more engaging. His "First Principle of Clear Writing" states, "When we link the simple point that sentences are stories about characters who act to the way we use the grammar of a sentence to describe those characters and their actions, we get a principle of style more powerful than any other." His principle has two parts:

1. In the subjects of your sentences, name your cast of characters.
2. In the verbs of your sentences, name the crucial actions in which you involve those characters.

Similarly, labels that lack subjects and with unclear action cannot tell clear stories that flow easily. Because many of the stories in museums are about people, labels can be edited to include them as the subjects. In the two examples below, notice the difference between naming who did what, and what information is specific to the visitor's experience.

In the first, the subject "they" refers to the pictographs, not the early people, and pictographs are never defined. The pictographs do not have beliefs, people do, and the second example more actively acknowledges that.

Pictograph

Carvings and paintings on rock are scattered throughout California. They seem to have had magical or religious significance related to the hunting of large game. Other rock paintings were made during girls' coming-of-age ceremonies and boys' initiation rites.

Rock Carvings and Paintings—Pictographs

Early people carved and painted on rocks throughout California. The pictograms they created, such as the one on your left, may signify magical or religious aspects of the large game they hunted. Other rock paintings showed girls' coming-of-age ceremonies and boys' initiation rites.

The nature of storytelling in museum exhibitions and the techniques for doing it well are part of a larger context of issues that surround education, communication and being human. Neil Postman, who writes about modern culture, media, and education, suggests that one of the reasons traditional education in society today is not effective is that we lack commonly accepted stories that give us purpose and meaning. In *The End of Education: Redefining the Value of School,* Postman describes some of the stories that in recent times have failed to give us something to believe in: God and the Bible, Nazism, Marxism, modern science and technology.[8] Instead, he suggests we need stories that tell of origins, envision the future, and give a sense of continuity and purpose. This is especially challenging when we think about the diversity of typical urban communities that museums serve.

Postman proposes five new narratives for redefining the value of schools: the Spaceship Earth, the Fallen Angel, the American Experiment, the Law of Diversity, and the Word Weavers/the World Makers. I believe all of them have immediate relevance for museum interpretation because they help provide a fundamental meaningfulness to what museums are about:

- *The Spaceship Earth story says we are the crew members on this global spaceship and we have a moral obligation to work together to take good care of it.*

In zoos, aquariums, botanic gardens, and natural history museums, the new narrative could be about breaking down the myths and misunderstanding people have about the balance of nature and the preservation of nature. In dioramas and immersion exhibitions, such as rain forests or caves, dynamic processes and the need for global management of disrupted ecosystems could be stressed, rather than messages that reinforce visitors' notions that "everything would be fine, just as God made it, if we just learn to leave it alone." It would make global conservation our responsibility, not His. Currently, there are numerous examples of natural history exhibitions (including those in zoos and aquariums) that stress stewardship.

- *The Fallen Angel story's major theme is that human beings make mistakes, but we are also capable of humbly correcting them.*

In science museums it might mean more stories that show the meaning of the scientific method—its usefulness, its process, its foibles. It would mean putting more emphasis on the process of science—hypothesis making, hypothesis testing—rather than emphasizing science's technological products. It would stress our mistakes, maybe even more than our achievements. It would admit change and uncertainty more openly. In science museums, there are more examples of exhibitions that glorify and astound us with science than those that treat it as a subject fraught with fallibility.

- *The American Experiment is about how to argue and how to discover what questions are worth arguing about, and to recognize that every group has made good arguments and bad ones.*

In cultural history museums, the new stories would use multiple voices and contrasting points of view to stress common needs, questions, and imperfect solutions to problems. They would emphasize the need to argue intelligently, and stories would admit good and bad arguments by every group of people. It is an experiment characterized by change; history museums should encourage and show us how to participate in it.

- *The Law of Diversity tells a constructive and unifying story of diversity, not a divisive, isolating one that stresses differences.*

In art museums, a new sense of narrative and interpretation might mean making art more accessible and recognizing creativity among all people, not just artists. Art has grown and changed in response to multiple influences; it is not static. Of all museums, art museums still have the onus of perpetuating elitism, not inclusiveness. But in most other types of museums as well, the predominant approach to diversity has been divisive and "focusing on each individual piece, while ignoring the whole, thereby alienating visitors who do not identify with the group on exhibit."[9]

- *The Word Weavers/the World Makers is about the story of language and how we use it; how words transform the world, and how we are transformed by them.*

This one cuts to the heart of exhibit labels in all museums, but touches children's museums in a special way. We need to think more self-consciously about the social, moral, and symbolic meanings of words. Maybe we could tell children about this power, and let them investigate words as codes and see the way words work to make our world. There are a couple of examples that touch on this: the Museum of Tolerance in Los Angeles, and the exhibit *Face to Face* at the Chicago Children's Museum about prejudice. Both explore how words make us feel.

The answer to the question, What should label writers

CASE STUDY

A DIFFERENT KIND OF NARRATIVE

Comparisons: An Exercise in Looking was a popular exhibition mounted by the Hirshhorn Museum and Sculpture Garden in 1991. It consisted of 15 pairs of objects. Each pair was composed of two works by the same artist in the same medium (oil painting, bronze sculpture, etc.) with similar subjects. It was a narrative exhibition that did not, at first, appear to be one.

The labels with the pairs of objects did not contain the usual paragraphs of text about the objects. Instead, the labels posed several questions that asked visitors to make comparisons, to discover likenesses and differences, and to make judgments. For example, with two Jackson Pollock paintings, the label asked, "Despite the difference in materials, how are these two works alike? Does one area stand out, or do you find yourself looking at the overall pattern in each work? Has Pollock used materials to produce a sense of movement in either of these works?"

While the labels did not tell visitors what the Hirshhorn curators thought about the pairs, or what their answers to the questions were, the exhibition obviously had a focused big idea: it was about the kind of thinking about art that goes into making quality judgments. The fact that the labels were questions, not textual information, created a different kind of narrative dialog between the museum and visitors in the gallery. People spent unusually long amounts of time looking and carrying on extended conversations with each other in front of each pair of art works. Their conversations included arguing about the labels and their answers, validating themselves for what they knew already or found out through the current experiences, and engaging in reveries with the object pairs.

The labels for *Comparisons* met the definition of being interpretive because they clearly helped create a positive, enlightening, provocative, and meaningful experience for visitors. The exhibit experience was about discovering meaning through personal interpretation, not about information given by an expert.

write about? is a complicated one. The general answer is, write about something that will be meaningful and useful to visitors, and write interpretively. Other than that, it depends on the individual museum and its visitors, and the individual exhibition and its big idea.

The question should be reframed as, How do you decide what to write about? The discussions in this chapter, the previous chapter about the big idea, and the next chapter about audiences guide you toward an answer for what the "what" is. The remaining chapters will help you decide the "how."

NOTES FOR CHAPTER 2:

1. From focus group comment in unpublished study by Serrell & Associates, "From Stuffed Birds on Sticks to Vivid Feathers, Gleaming Talons and Sparkling Beaks: A Summative Evaluation of the Bird Halls at Field Museum of Natural History," Chicago, November 1992.

2. Freeman Tilden, *Interpreting Our Heritage*, 3d ed. (Chapel Hill, N.C.: University of North Carolina Press, 1977).

3. Two standard references within the environmental interpretation field are *Environmental Interpretation: A practical guide*, by Sam H. Ham, and *Interpretive Master Planning* by John Veverka.

4. Kathleen McLean, *Planning for People in Museum Exhibitions* (Washington, D.C.: Association of Science-Technology Centers, 1993).

5. Lisa Carrole Roberts, *From Knowledge to Narrative: Educators and the Changing Museum* (Smithsonian Institution, in press). Roberts revised her University of Chicago Ph.D. dissertation (1992) into a book.

6. Lisa Hubbell Mackinney, "What Visitors Want to Know: The Use of Front-end and Formative Evaluation in Determining Label Content in an Art Museum," Master's thesis, John F. Kennedy University, 1993.

7. Joseph M. Williams, *Style: Ten Lessons in Clarity and Grace*, 3d ed. (Chicago: University of Chicago Press, 1990).

8. Neil Postman, *The End of Education: Redefining the Value of School* (New York: Alfred A. Knopf, Borzoi Books, 1995).

9. Eugene Dillenburg, "Turning Multiculturalism on Its Head," *Exhibitionist* 14, no. 2 (Fall 1995).

Types of Labels in Exhibitions

Every label in an exhibition has a specific purpose that needs to make sense within the organization of the whole. But given the way visitors encounter them out of order, they also need to function independently.

There is no universal terminology in museums to identify types of labels. Some institutions use function (e.g., orientation, introductory, caption); others use placement (e.g., wall text, case label, free-standing); some have in-house colloquial expressions (chat panels, tombstone labels) and others haven't thought about labels enough to develop standards for an in-house style or vocabulary. Regardless of the names they are given, labels should be developed as an integrated system from the single title to the broadest categories to the one-of-a-kinds. They should all work together.

The most important types of interpretive labels in any exhibition are the title, introduction, group or section labels, and captions. These labels help to organize the information and present the exhibition's rationale for looking the way it does. Although these labels are developed as linear and hierarchical information, they may not be used in the "right" order by visitors. Nevertheless, the labels still should have internal integrity, organization, and design.

Refer again to figure 1 and notice the use of six different types of labels integrated into the design of one small exhibit area. Each kind of label is distinguished and unified by consistent typeface, progressive sizes, and color combinations. The large main title is reversed out in the top bar. Subtitles are screened onto the wall, and smaller subsections are marked with titles reversed out in short bars. Captions are silk-screened on the walls and on the reading rail beneath the diorama next to the photographs and illustrations. The computer program provides an extended electronic label.

Noninterpretive labels include identification labels (ID

labels), donor plaques, wayfinding and prohibitive signs, and credit panels. They will be discussed briefly at the end of this chapter. Labels for interactive exhibits, which have special requirements, will be addressed in chapter 15. Here I will offer a general classification of basic interpretive labels, and expand on the special role of captions.

TYPES OF INTERPRETIVE LABELS

Title labels identify the name of the exhibition. The best titles will arouse interest and curiosity and give enough information to enable visitors to decide whether they are interested enough in the subject matter to enter (see figure 5). Large titles placed high overhead (i.e., more than eight feet from the ground) may be missed by visitors and will need to be repeated somewhere in their line of sight. There should only be one title, and it should be used consistently throughout the museum—the same name on the floor plan, in the guidebook, on the exhibit itself, and in the press release. An example of inconsistency: *Messages from the Wilderness* might get shortened inadvertently to "Wilderness Messages" or be referred to by in-house staff as "Hall 16." Generic gallery numbers or gallery donor names, such as "Webber Hall," do not serve visitors well.

Introductory or orientation labels set up the organization and tone of the exhibition. A large, simple floor plan and a summary statement will help to prepare visitors for the size, sections, and themes of the space, even if it is a small exhibition, and especially if it is large. Quick, clear orientation is a very important feature for visitors, but many people will not stop to read a long introduction because they are being drawn into the exhibit by many competing sights, objects, and sounds. If the entryway is crowded, visitors will not want to stop traffic flow into the exhibition. Dense introductory text with many thoughts all crammed into one paragraph is not inviting or easy to read. For all these reasons, keep orientation information short and the print large so that visitors can get it in a glance without stopping.

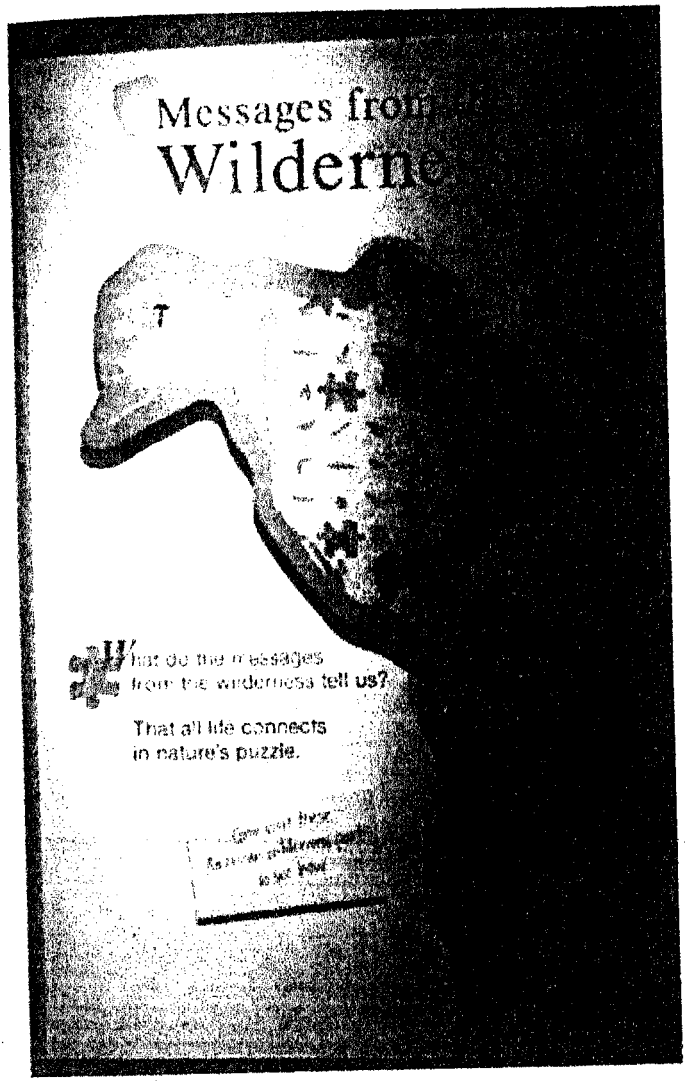

FIGURE 5
Brevity matters. This example of an introductory label is short enough that visitors can read it without stopping.

Visitor research studies have shown that visitors who understand the organization of the exhibition and use it in the intended sequence (if there is one) spend more time and get more out of it.[1]

The prominence and importance of introductory labels make it difficult to get the exhibit team to agree on them. As one label writer put it, "I can write three dozen captions and

nobody will take any interest in them. But as soon as I write the introductory label, everybody from the director to the janitor wants to fiddle with the wording."[3]

Section or group labels inform visitors of the rationale behind a subgrouping of objects, paintings, or animals. Why are these things shown together? is a common question in the backs of visitors' minds, and it needs to be answered to help visitors feel comfortable, competent, and in control of their own experiences. Even if there is little cohesiveness in the groupings, inform visitors of that, so they will not wonder if they are missing something. Do not make area or group labels so long that people will want to skip them (see figure 6).

In the exhibition *Darkened Waters: Profile of an Oil Spill* many of the section labels were almost the same as the communication goals for those sections, for example:

Section labels	**Communication goals**
Recipe For A Disaster	*There were multiple reasons for it.*
We Couldn't Clean It Up	*We couldn't clean it all up.*
Oil and Animals Don't Mix	*It was a huge disaster.*

This unity of concept and design provided a very clear and very strong continuity of messages.

Another type of group label might present alternate points of view to the main thesis of the exhibition or a series of different voices, opinions, or speculations about one particular topic.

Group labels are also called "focus labels" and "chat panels" because they often contain more content than a title or subtitle and are more general than captions.

Captions are specific labels for specific objects (e.g., artifacts, photos, and phenomena), and they are commonly used in all types of museum exhibitions. Captions are the "frontline" form of interpretive labels because many visitors wander around in exhibits, without attending to the linear or hierarchical organization of information (title, introduction, section label). If visitors stop only when something catches their attention, the information in caption labels must make

sense independently—as well as work harmoniously with all the other labels.

Sometimes the only labels visitors will read are captions because they are usually short and next to an object. They should refer to the visible specifics—beyond just the obvious—of the objects they discuss. If they are abstract or can be read alone without any reference to the object, they are not doing their job. Labels that support the caption information, such as subgroup or area labels, should be close by, so that visitors can start with the specific caption or ID, then jump to the broader context, and vice versa.

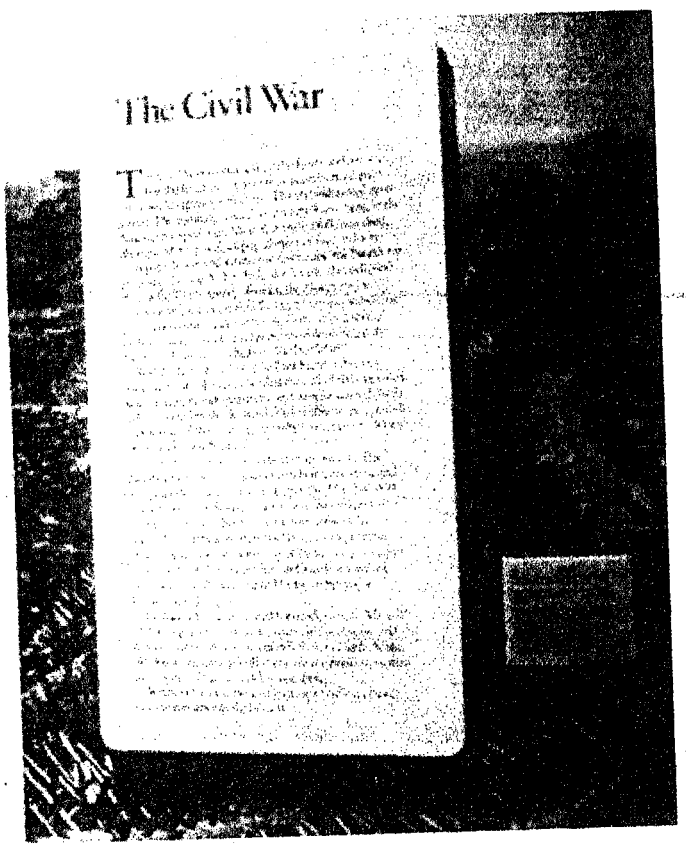

FIGURE 6
A daunting six-paragraph, 36-line, 250-plus word label takes more time to read than most visitors are willing or able to spend. If it were shorter or if there were a separate, short paragraph (three or four lines long) at the top, it would look more approachable.

GUIDELINES FOR EFFECTIVE CAPTIONS

For a good model for caption labels, review some of the old *National Geographic* magazine photograph captions which they call "legends." As can be seen in these three examples, *National Geographic* legends start with bold lead-in phrases and use active verbs. Content starts by being directly related to the visuals, in present tense, and the vocabulary has a broad reading-level appeal:

With one last look, an entertainer in an Ariguemes brothel checks her costume before going on stage. When her striptease ends, she will change to work clothes and join customers for drinks.

—*the photo shows woman standing in front of mirror*

Lonely at land's end, wild ponies guard a solitary stretch of Assateague Island, a sandy barrier off Maryland's Atlantic coast.

—*the photo shows windswept beach and group of ponies*

Aligned like sleek aircraft, a killer whale family group rests in British Columbia's Johnstone Strait. Here they have turned off the active sonar by which they navigate, staying in close contact instead. These toothed whales belong to pods that have remained permanent for 20 years, each pod with its own dialect of calls.

—*the photo shows row of shiny, black dorsal fins above water*

Legends can be read in any order, and they are not rigidly formatted to a certain number of words. In fact, the number of words for *National Geographic* photo legends is determined by what space the designer lays out for the captions—the writers write to fit. Another good model for active, concrete, clear, and concise captions that work well with visuals can be found in Time-Life books.

Below are some specific guidelines that will help make museum captions work effectively. Many of them are discussed at greater length in other chapters as well:

- Start with visual, concrete information—what visitors can see. Work from the specific to the general, not the other way around.
- Make the vocabulary appropriate for a broad range of ages. (Chapter 8 on reading levels will explain how.)
- Do not cram several ideas into one paragraph. Divide up the sentences into logical chunks.
- Use bullets to make lists easier to read.
- Do not try to make generalizations in captions based on a single object or example. Keep information specific to what visitors are experiencing firsthand.
- Vary the length (number of words), depending on the intrinsic value of the object being captioned. Objects likely to be of more interest (e.g., biggest, most famous) to the majority of visitors or that support the big idea best deserve longer captions. Do not make labels all the same length.
- Make captions short enough so that most visitors, if they choose to read, will be able to read the whole label. Five words per second is an average museum reading speed. Write most of the labels so that they can be read quickly—10 seconds or less, or about 50 words or less.
- Make caption type large enough for readers' range of visual acuity. Your audience includes senior citizens and children, regardless of the type of institution. A minimum of 20-point type is strongly recommended. (Chapter 17 on typography gives examples.)
- Position captions so they are visible and legible to people in wheelchairs.
- Position captions so they are well lighted and shadows don't fall on them.
- If an object has been removed (e.g., for loan or conservation purposes) and the caption is still there, it is a thoughtful gesture to put up a photograph of the piece that is missing.

The following is an example of a caption that contains several of the above-mentioned characteristics, from an art exhibition about symbolism:

Rain Mask with Reptiles, Figures, and Bats

This powerful object was actually a mask used in a rain-petitioning dance at the Santa Anita settlement in the state of Guerrero, Mexico. It includes several symbols for water and rain:

- blue eyes, the color of water
- twisting, flowing serpents
- a vampire bat's head at the top of the mask, included because bats live in caves, believed to be the home of the rain gods

Another meaning of the mask relates to the notion of transformation and power. Lizards (as half-snake, half-legged animals) were said to be able to whisper secrets to the wearer. By wearing the mask, an individual was transformed into a godlike being with both animal attributes and the power to commune with and control nature.

The "Rain Mask" caption contains numerous references to concrete, visual aspects of the object, encourages visitors to look for details, and think about how it might feel to wear the mask. See figure 7 for another caption label with some similar characteristics.

Captions for interactive exhibits follow the same guidelines as above, but the placement and ordering of information is even more important. Captions that give directions need to be placed where people's hands and eyes naturally go. (See more about this in the section on labels for interactive exhibits.)

NONINTERPRETIVE TYPES OF LABELS

Identification labels contain minimal, short details, such as name, maker, date, material, scientific name, accession number. They are not interpretive, although they are often combined with interpretation or captions.

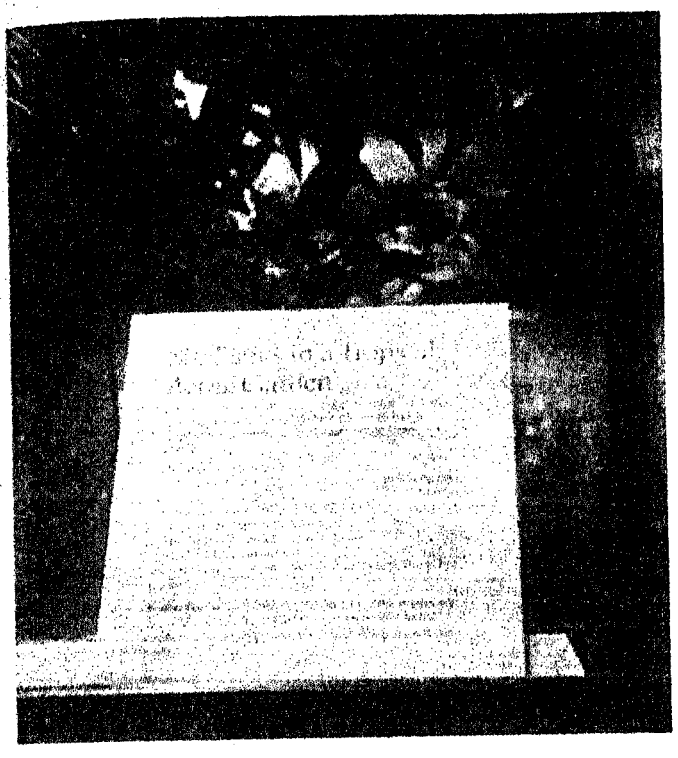

FIGURE 7
Multiple paragraphs, bold words, and bullets are some of the ways to break up a long caption. Because all of the information relates directly to what people can see, reading leads to making discoveries.

Several formats for ID labels are commonly used. The examples below show different arrangements of information and typography, and some work better than others:

The Abduction of the Sabine Women
Painted in Naples, about 1640
Johann Heinrich Schonfeld
Oil on canvas

PIER FRANCESCO
Italian, 1612–1666
Vision of Saint Bruno 1660–1666
Oil on canvas 89.PA.4

PORCELLANIDAE
Petrolisthes maculatus
Anemone Porcelain Crab

DROMEDARY CAMEL
Camelus dromedarius
NORTH AFRICA AND ARABIA
Donated by Hall Foundation

In most cases, what is most important to visitors is what it is—its title, its common name, an identifier that they can relate to. The first sample shows the most sensitivity to the visitors' interests, vocabulary, and priorities. In the second, an unfamiliar artist's name and three sets of numbers present a jumble of details for visitors to sort through. In the third sample, few visitors would even know that the first line was the animal's taxonomic family name and that the second its scientific Latin binomial; the typography and order are in the wrong priority for most visitors. The fourth is functional but somewhat boring.

Identification labels, as long as they are legible, are usually easy for visitors to decode, once a person has seen one or two. While consistency of ID information formats is important within each exhibition, format may vary between exhibitions. Different types of objects, artifacts, or animals might suggest or require a different ordering of information.

Donor information is typically provided last and in the smallest type. These tag lines are not interpretive and they should not be larger than or mixed in with captions, IDs, or other interpretive labels. Labels that acknowledge funders are best dealt with in their own space, near the end of the exhibition, in a discrete, respectful way. Materials, typefaces, and sizes should be sophisticated but not out of character with the rest of the signage. Expensive bronze donor or funder plaques next to dog-eared, paper interpretive labels indicates that visitors are not being considered first. Donor and funder names mixed into titles are ostentatious and confusing, such as "The Webber Hall of Mammals."

Credit panels recognize the contributions and efforts of all the people who worked on the exhibition. A credit panel does not have to be in bronze nor does it have to be big, but somewhere, credit should be given. Visitors should see the many people and different skills it takes to make a good show. Credit panels are also good for staff morale, as well as for reference and accountability.

Wayfinding and orientation signs help visitors find their way around the museum and orient themselves in each new space (such as when they walk in the front door or get off the elevator at an upper floor). These signs are technically not interpretive labels, but the role that orientation and wayfinding signs play in satisfying visitors' need to know where they are—and the importance that need has in making people ready and receptive for learning—should not be overlooked. Visitors cannot be ready to receive interpretation if they are lost. A secure and comfortable knowledge of present location—and the subsequent relative locations of exits, bathrooms, or food—are basic to allowing visitors to feel readiness for "higher level" needs that deal with social, creative, or intellectual aspects of being human.

Prohibitive signs tell us not to touch the art or feed the animals. With a little creativity, prohibitive signs can be made friendly, funny, and positive, not threatening (see figure 8).

DIFFERENT TYPES OF LABELS IN ONE EXHIBITION

The number of different types of labels used in any one exhibition will be driven by communication goals, size, budget, and other factors, but it is probably a good idea to limit the number of different types of interpretive labels to fewer than 10. More than that, the exhibition design will begin to look cluttered and disorganized, and visitors will have a hard time figuring out what the "system" is and how to follow it. Labels on every available surface—on rails, kiosks, walls, stanchions, glass, and mounted so that they flip, turn, flow around and over graphics, plus labels that are printed as static, or are scrolling, projected and pixilated—together in one exhibition are too much!

LABEL LENGTHS

All types of labels should be kept as brief as possible. Titles are usually fewer than 10 words. Orientation, introductory, and section labels, which are typically too long—over 300 words—should be edited down and broken into shorter

FIGURE 8
Prohibitive signs can be friendly and reflect their context.

labels (50 words each). Longer introductory labels may be necessary if that is the only type of interpretive label in the exhibition, as might be the case in an art museum. Simple captions (one or two sentences) or extended captions (short paragraphs, plus illustrations) should be visually oriented, concrete, and interrelated.

The next chart reviews typical label lengths and types, but bear in mind that the question, How many words should there be in a label? is better asked as, How many words does this label need to have? And remember: stick to the point or ideas that support the big idea best.

Main types of Interpretive labels	Purpose	Number of words
EXHIBITION TITLES	to attract attention to inform about the theme to identify	1–7
INTRODUCTORY LABELS	to introduce the big idea to orientate visitors to the space	20–300
GROUP LABELS	to interpret a specific group of objects to introduce a subtheme	20–150
CAPTION LABELS	to interpret individual objects, models, phenomena	20–150

The logical order in which visitors encounter different types of labels is important in the flow of information, especially when different types of information are placed on the same label. Interpretive text should be set apart from donor or ID information by space, typeface, or type size.

"RANDOM ACCESS" TO THE TYPES OF LABELS

To test the idea that labels are able to stand alone, or can be read out of order, take all the labels of a certain type (e.g., all the captions, all the section labels) and scramble them up. Pull one out. If this is the first label that a person reads in the exhibition, will it serve as a good entry point? Select a set of three or four at random out of the pile and read them. Do they make sense in that mixed-up order? If you read only one-fifth of the labels, will they still convey the big idea? If labels can pass this test, they will serve visitors well.

BEYOND LABELS

More lengthy exhibit interpretation can be presented in formats other than labels. Besides inexpensive single-page handouts, newsprint, or brochures to use in the museum or take home, there can be books or the catalog to browse through (tables and chairs provided), laminated portable

labels to carry around the gallery and put back, and catal
for purchase. Videos, audio tours, computer databases, a
demonstrations by staff can provide other means and mo
of presenting information and interpretation. All of th
supplementary forms of interpretation will allow interpret
labels on walls or in cases to remain brief, as they should be

CASE STUDY

ENCOUNTERING LABELS IN A MANUSCRIPTS EXHIBIT

The **title** over the door leading into the room reads *Devotion and Desire,* an unusually sexy title for a manuscripts exhibit, I think.

The **subtitle,** on the same panel, says "Views of Women in the Middle Ages and Renaissance." For a historically challenged visitor like myself, th actual dates would be helpful.

Just inside the door, to the left, at eye level, on a free-standing kiosk, is a 15-inch-by-30-inch **introductory panel** that repeats the title and subtitle. Five paragraphs of text follow, all in the same typographic style. The first paragraph turns out to be a quotation. If it had been printed in italics, it would have been a strong clue or signal of that fact. The next paragraph explains the exhibit's purpose to "investigate different perceptions and actions of medieval and Renaissance women that were considered in some way ideal." I wonder to myself, Does that mean that all women were considered ideal or just some? Are medieval and Middle Ages the same thing? The next three **theme paragraphs,** in a legible, attractive typeface, are each set off with a subhead and numbers: Religious (1–9); Ideals of Love (10–13); Patronage and Piety (14–20). This clearly clues me that the room and the modest collection on view—which is fully in view, with eight free-standing cases containing open books of various sizes inside—are organized around three main topics.

Good exhibitions will skillfully combine several different types of labels, using them in a consistent manner. They need not conform to the exact types described here, but whatever form they take, each type of label should have a recognizable function that is clear to visitors. Size, typeface, color, graphic design, length, placement, and content will all be cues for

---

Although 20 books does not strike me as an overwhelming number of objects to look at, I want to start with Ideals of Love, but which way do I go? There is no floor plan that relates the topics and numbers on the panel to the room's layout. I take a guess. After glancing at one or two books, I find a caption label that begins with some **ID information** about *A Woman Accused of Breaking Her Betrothal Vow* (so, this must be the "Love" section). The title is followed by words that have little meaning to me, a nonexpert in manuscripts: "Gratian, Decretum (Decretals). Bologna, circa 1300. Ms. Ludwig XIV 3, fols. 277v–278." Perhaps those details could come last, not first? Then comes in small black type against a gray background, under dim illumination, about 60–75 words about the book and the picture in view. The caption begins with some history and background; in the second paragraph, finally, there is information about what I can see. It is detailed and interesting, but not particularly memorable. After glancing at a few more books and caption labels, I leave, picking up the *Devotion and Desire* **handout** from the wall-mounted holder near the door.

These seven types of written material for a small exhibit successfully attracted my attention and engaged me briefly. The labels seemed to cover the topic thoroughly (although I did not use many of them). Could the organization of the types of labels have been better? Only with the minor changes noted above, such as using italics or quotation marks for quotes, having a simple floor plan of the exhibition's layout of the themes, and putting the technical identification information last, not first. Otherwise, the function and label system of this exhibition, including the titles, subtitles, introduction, themes, captions, and IDs were easy to follow.

what the label's purpose is. Multiple cues should be employed to ensure that visitors will easily follow the logic of the exhibition designers' intent and messages.

The exhibition's big idea, the way the stories are told and the system of types of labels, all must take into account the needs, motivations, interests, and knowledge level of the people who come to visit. The next section will discuss popular notions of learning styles, levels of information, label vocabulary and style, and ways to reach audiences of diverse backgrounds.

NOTES FOR CHAPTER 3:

1. There are multiple references in Valerie Crane et al., *Informal Science Learning: What the Research Says about Television, Science, Museums, and Community-based Projects* (Dedham, Mass.: Research Communications Ltd., 1994). See Lankford and see Conroy in bibliography for special issues of *Visitor Behavior* that have focused on orientation issues.

2. Ava Ferguson, personal communication. Ferguson is an exhibit developer and label writer who works with a variety of museums. Her company is called Learning Designs.

4

Who Is the Audience (and What Do They Want)?

Museum visitors are a diverse group of fairly well-educated, mostly middle-class people seeking a culturally oriented, leisurely, social outing. They come to the museum with a variety of interests, but despite their diversity, they have many expectations and needs in common.

As museums strive to increase attendance and reach new audiences (non-Anglo, non-affluent, non-college educated), the audience for exhibit labels will become even more diverse. Museum practitioners need not, however, become overwhelmed by the diversity of visitors' demographics, interests, and motivations. Although there is no such thing as "the average visitor," we have learned through visitor studies that there are such things as trends and patterns in an otherwise heterogeneous sample of visitors to a particular museum or exhibition.

As a population, museum visitors and their behaviors are fairly predictable. Given a representative sample, there are often many similarities in who they are, what they like, and how they visit at many museums.[1] For example:

- A significant proportion of visitors comes for a social occasion, as a social group. Many of these groups include children.
- Gender ratios (percent males and females) are often not significantly different.
- Teenagers are under-represented in many different types of museums.

- A diverse cross section of visitor types is attracted to the most popular elements in an exhibition. When something "works," it tends to work for many types of people.
- More people read short labels than long labels.
- If visitors cannot understand or personally connect with a part of an exhibit, they will skip it.
- Visitors of all ages are attracted to exhibit elements that are more concrete and less abstract.

There are also some interesting, but not surprising, differences in types of audiences:

- There are more groups without children in art museums than in most other types of museums.
- Children are more likely to touch and manipulate interactives before adults.
- Children are less likely to read labels than adults are.
- Groups with children allocate their time differently than groups of adults only, but both groups may spend the same amount of time overall.

FIGURE 9
Even though the button is large and obvious, adults probably need an invitation to "Push." Children are typically less inhibited. (A five-second audio plays while visitors read the 45-word label.)

The most striking differences between types of visitors are age-related, and these differences are primarily associated with children's uninhibited exploratory behavior. Children instinctively investigate things with their hands, but adults may need to be invited to touch and participate (see figure 9). Where adults seek structure or directions, children charge ahead without them.

Audience differences along lines other than age are more difficult to detect, probably because human adults are highly variable. Other than the differences noted above, there are few trends that hold true across many types of museums. Many of the expected differences between subaudiences (e.g., by group size, gender, or visitation patterns) that we think might be significant often turn out to be less so than expected. For example, The Cleveland Museum of Art reported, "We learned that even frequent visitors are not as familiar with the Museum, its art works, and art history as we had assumed them to be."[3]

While every visitor's experience will be unique, experiences of human beings are governed by many factors that most of us have in common. Diverse interests, intellects, and educational and economic backgrounds are all grounded in many fundamental similarities of human drives, such as the need for physical comfort and nonthreatening spaces, feelings of hunger, or fatigue, as well as the desire for self-actualization through our successful dealings with personal challenges, which help us feel competent and confident. Museums must constantly be aware of these factors and integrate visitors' basic drives ("Where's the toilet?") before attempting to help them achieve higher levels of consciousness ("What the heck is that?"). We must keep in mind the visitors' emotions, their yearning for continuity, love of a good story, and natural spirituality. By understanding the way the whole multicultural, multigenerational audience uses exhibitions, exhibit developers can have a more realistic basis for planning displays that will work for more people, and label writers will be gratified because their words will be read.

CASE STUDY

AN UNEXPECTED UNIFORMITY

This short case study documents how a museum changed its assumptions about its audience, from expecting to find differences to finding similarities.

When the Canadian Museum of Civilization decided to make an exhibition about the life of Samuel de Champlain—one of the best-known and most colorful figures in Canadian history—they anticipated that English Canadians and French Canadians would have different viewpoints about the topic. To help the museum decide how to meet these different audiences' needs, they conducted front-end evaluations with visitors of both groups, including different ages and backgrounds.

They were very surprised by the results of their evaluations. There were no appreciable differences in how Champlain was viewed by the Anglo and Franco populations. People also had a better idea of Champlain's chronological place in history than the exhibit team had expected. They concluded that there was really only one audience to target.

Although it had already been in the planning stages for two years, the exhibition was completely redesigned around the results of the evaluation. It proved to be one of their most popular exhibits ever.

SURVEYING VISITORS

Visitor surveys are a common means of finding out more about who the visitors are. But many of the questions asked do not illuminate the answers in ways that can help exhibitions and labels. Information about the visitor's zip code, income level, educational history, or gender offers the label writer little. More useful are visitors' answers to questions that relate directly to their understanding and self-relevance to the exhibit's topic, such as, "Do you have any special interest,

knowledge or training in (the subject of the exhibition)?" Their feedback will reveal information about hobbies and other leisure activities and family history, as well as school or job-related interests. These will give label writers the "hooks" to interest readers. For example, from data gathered in Chicago area museums, we know that the planetarium attracts visitors with interests in telescopes and surveying.[1] Visitors to the natural history museum often have pets, are bird watchers, and have taken courses in biology. Aquarium visitors like to go fishing, eat fish, and keep fish at home. The maritime museum attracts people interested in shipwrecks, boat building and boat operation. There are also specific interests that some visitors to a maritime museum, a planetarium, a natural history museum, and an aquarium have in common, such as antique collecting, scuba diving, navigation, and employment as a teacher. Including references in labels to the interests your visitors are most likely to have in common can make labels more appealing to more people.

Other ways to find out more about your visitors through front-end and formative evaluation strategies will be covered in chapter 13, "Evaluation During Development."

THE TRAP OF VISITOR TYPOLOGIES

Visitor studies have led some people to believe that there are different types of visitors who can be identified by the way they use exhibitions, such as "streakers"—people who go through fast and stop at only a few elements; "samplers" or "browsers"—people who spend some time, and stop at a few things that seem to interest them; and "studiers"—people who spend more than the average time, looking at one thing for a long time, or looking at lots of things.

Much of what we know about visitor behavior in museum exhibitions is based, unfortunately, on poor examples of what effective educational exhibitions should or could be. Visitor typologies, such as "streakers" or "browsers," have evolved based on visitor behavior in exhibitions that encourage streaking, or that make browsing the most viable exploration

tactic. The infrequency of "studiers" does not surprise me, given the propensity for displays with numerous, long, technical labels that discourage the reading behavior of adults, not to mention children. I have seen many cases in which children used an interactive device (such as a computer) by themselves—not with their parents—because the exhibit made the adults feel stupid or intimidated. When they cannot quickly understand what is going on and explain things easily to their children, parents hang back.

MISUNDERSTANDINGS ABOUT HOW TO APPEAL TO DIVERSE AUDIENCES

There are several common assumptions about audiences that, I believe, do not enhance the goal of making exhibitions more effective, visitor-oriented, and thoroughly utilized by diverse audiences. Although these ideas may sound good on the surface, further scrutiny reveals some misunderstandings. For example:

1. The assumption, "Exhibit planners should decide which portion of the audience is most important to reach with each exhibit message, and communicate that message using media that appeals to that portion of the audience," can easily lead to an exhibit with too many different messages. A better, more focused exhibit plan reads, "Exhibit planners should decide what the important exhibition messages are and communicate them using whatever media is most suited to that message in a way that will reach the broadest possible audience." While the intent—to appeal to broad audiences—for each of the above statements is the same, the implications for how to do it, and the potential for doing it successfully, are quite different.

According to the first statement, specific media are assumed to be more appealing to certain types of people than others. This has some limited validity in different age groups (children vs. adults), but it does not tend to be true for adults as a group. This assumption encourages too many messages

for too many supposedly different people. If the revised assumption guides exhibition planning, media are selected for their appropriateness to deliver the message, and each message is aimed to reach as many people as possible. Thinking about diversity should lead to inclusiveness, not exclusion.

2. The assumption, "All visitors will find something of interest to them if you put lots of information in labels in an exhibition," is misinformed. Instead, it makes for an overwhelming environment dominated by walls covered by words, which will decrease visitors' willingness, ability, and motivation to explore labels carefully. Given that most visitors have a limited amount of time to spend in an exhibition, visitors to a large, dense layout will find it difficult to experience a high proportion of it. Instead of feeling intrigued, satisfied, and energized, many visitors become overwhelmed and worn out. They will feel as if they need to come back again to "do it all." Justifying the addition of labels or exhibit components because you want something for the minority of "more interested visitors" or "studiers" will decrease visitors' overall utilization of the exhibition. When you delete things that do not appeal to the broadest possible range of visitors, utilization of all elements can actually increase (see the case studies in chapter 12, "The Number of Words").

When visitors get to select from a smaller array of elements, each of which is appealing, they spend more time doing something that is interesting to them ("Oh boy, another neat thing") instead of spending time searching for something to connect with ("Nope, not that one; nope, not that one either.")

3. This assumption, "It is difficult to enable visitors to relate the subject to their lives and to examine their attitudes, values, and beliefs because most visitors arrive with limited time and knowledge about the subject," simply passes the buck. More likely, it is difficult for visitors to relate because

the detailed, complex nature of the subject present
the exhibition is not geared to the limited time and k
edge most visitors bring with them. Should we
change the visitors (e.g., increase their visual lit
before they arrive), or should we change the exhibit
To me, the latter seems far more within museum p
tioners' area of responsibility.

4. Here's another common one: "We must be careful n
take all exhibits down to the lowest common denomin
Shortening label copy to the point that virtually any vi
will read it denies the more sophisticated or repeat vi
the opportunity to learn more." It is hard for me to be
that some museum practitioners think this is true. I
they ever closely watched visitors in their galleries and
how hard they try to understand what is going on,
how they typically underutilize what is there? Have
ever surveyed their visitors for their prior visits, or kno
edge, interest and training in the subject and seen w
percent of them are actually "sophisticated" or repeat v
tors? Have they ever observed and listened to a focus gr
of visitors talking about their feelings of being intimida
overwhelmed, or lost in museums? Have they ever t
out a mock-up of a label or interactive device with a sm
sample of visitors and seen that it did not work the first
the second time? Any one of these visitor studies w
quickly dispel the notion that there is such a thing a
"lowest common denominator" and will make it clear th
all of our visitors are worthy of our best efforts, and th
we should always seek to please the *commonest* comm
denominators.

The key is to include sophisticated concepts as long as th
appropriately support the big idea, and to be sure to use
nonexclusionary vocabulary. Chapter 6, on layers of inform
tion in exhibitions, will describe how to provide that range
exhibition experiences in a broadly accessible way.

FIGURE 10
Everyone over the age of seven is a potential label reader. Motivated label writers should write so that any one of these motivated readers can understand. Stereotyping people with supposed levels of interest, knowledge or ability is not the most productive way to think about visitors.

The tendency to subdivide audiences into "types" and pigeonhole them with stereotypic characteristics will not lead, in my opinion, to better, more thoroughly used labels and effective exhibitions overall. Predetermined categories of visitor behavior are not as useful in exhibit design and evaluation as one might like to think.[4] If exhibit developers would think about the whole audience as time-limited, motivated nonexperts, in which almost everyone is a nonsequential "sampler," they would be much closer to the truth (see figure 10). The overarching challenge is to encourage and make possible more and longer sampling by more visitors.

Imagine an exhibition where the majority of visitors use the majority of available exhibit experiences—where children work with other children or adults, where adults talk and read out loud to each other and to their children, where visitors interact with others in different social groups, where people of all ages and learning styles are tempted to linger longer instead of rushing on to the next exhibit or exiting at the first opportunity. It is possible! Good orientation, a clear big idea, and good labels all will help make it happen.

BUT WHAT DO THEY WANT?

Given that most exhibit elements and their labels are currently not used by the majority of visitors (Anglo, affluent, college-educated, and otherwise), a radical transformation in label content and form is needed if we expect to enlarge our appeal both to current and broader audiences. This transformation can be guided in part by what visitors say they want, and what to them are the characteristics of ideal exhibitions.

In a study by Alt and Shaw, visitors to the Natural History Museum in London compared old and new exhibitions and, in their own words, described what they thought contributed to the "ideal" one.[3] Of the 13 characteristics of ideal exhibitions listed, more than half are directly related to labels that captivate and communicate quickly, easily, and clearly:

- It makes the subject come to life.
- It gets the message across quickly.
- You can understand the point(s) it is making quickly.
- There's something in it for all ages.
- You can't help noticing it.
- It allows you to test yourself to see if you are right.
- It involves you.
- It deals with the subjects better than textbooks do.
- The information is clearly presented.
- It makes a difficult subject easier.
- It gives just enough information.
- It's clear what you're supposed to do and how to begin.
- Your attention isn't distracted from it by other displays.

In focus groups done at Brookfield Zoo in preparation for renovations of their bird exhibits, visitors discussed the positive factors that contribute to museum learning experience using these expressions and words:[4]

- It is memorable.
- It's an experience that involves your senses.
- You are gently guided to make discoveries.
- It is a personal experience.

- You get lots of opportunities to investigate and make observations.

The opposite experience from what is described above by the zoo visitors would result from an exhibition that visitors never noticed in the first place or forgot about soon afterwards; that did not attract or involve them actively or personally; that was unpleasant, irritating, obnoxious, or crowded; that was authoritative, confusing, and condescending; that did not allow them to exercise their powers of curiosity and scrutiny; that was foreign, strange, boring, obvious, unclear, or overwhelming. While few exhibitions have all these characteristics, these negative qualities exist in too many places. Most negative features, fortunately, can be eliminated through more careful planning (refer back to discussions of big ideas) and testing (discussed in chapters 13 and 19 on evaluation).

The Denver Art Museum's interpretive project looked closely at its audience and what visitors wanted.[7] Researchers found that most visitors were "art novices" with high interest in art but limited art backgrounds. The novices' criteria for liking an object were:

- that it have a pleasing kind of beauty
- that it be very intricate and detailed
- that its message be understandable to them.

For a moment, look at that list and think how it might apply to novices at any type of museum. Change art to history or anthropology or science and think about the pleasing beauty and intricacy of an animal, or a piece of rock, or an electric engine, and then think about the kinds of labels that would work in each case.

The findings from all three studies above have applicability to many other museums and situations. Most visitors are eager to learn, but they do not want to spend much time or effort in trying to figure out things. Good labels can attract, communicate, inspire, and help visitors get what they are seeking.

Visitors vote with their feet as they choose whether or not to spend time in exhibitions. If they find things they like, they stay longer. "What visitors bring to the exhibit determines the template onto which an exhibit can be expressed; but good exhibits can make this template sing!" say John Falk and Lynn Dierking, co-authors of *The Museum Experience.*[8]

Who is the audience? A self-selected group of semi-motivated, time-limited, mostly first-time visitors, who are novices but are curious about the subject matter. What do they want? They are seeking gratification through feelings of competence and an enjoyable social experience. If you select elements and write labels for *them*, chances are you will satisfy the vast majority of your visitors.

Another way to think about audiences is to realize how they, as an entity, are a vital part of the fundamental purpose of museums as places that exhibit and interpret collections and phenomena. We talk about making exhibitions come to life for the visitors; what about the way visitors bring the museum to life? American artist Michael Asher expressed the visitor's role in activating the museum's purpose in an art-work at The Art Institute of Chicago in 1982 for the 74th American Exhibition.[9] Asher hired groups of viewers to stand in front of different paintings in one of the museum's permanent collection galleries. Asher's Chicago work was the viewing process—the intersection of the museum's presentation and the viewer's perception, neither one possible or complete without the other. When museums recognize and fully appreciate the audience's vital function, they become more willing to integrate new ways to meet the needs of visitors.

Current notions about diverse audiences stress the differences between people, who they are, what they want and need, and other factors that make the differences between people seem overwhelming. Yet, within the diversity, there are also many similarities—which were the focus of this chapter. Some of the effective ways of satisfying critical differences in visitors' approaches to exhibitions are the subject of more attention in the next two chapters.

20

Ten Deadly Sins and 14 Helpful Research Findings

Many common mistakes are avoidable, and some findings from visitor studies guide the way.

In *Making Exhibit Labels,* I listed eight deadly sins that fell mainly in the categories of poor writing, poor editing, bad typographic design, and poor placement that rendered labels uninteresting or illegible or both.[1] Steve Bitgood extended the list to include two more: the use of unintelligible codes, such as color coding, time lines or charts, and icons—usually on maps, but sometimes used to "signal" a type of information; and excessive density of label copy and graphics, where the sheer number of objects and labels makes it difficult for visitors to select and focus on any one thing.[2]

Here is a revised and updated list of the common sins that label makers commit. Prescriptions for ways to avoid them have been given elsewhere in this book, but a brief summary will remind you again of what to avoid:

10 DEADLY SINS

1. Labels that are not related to a big idea, that ramble without focus or objectives.
2. Labels that have too much emphasis on instruction (presenting information) instead of interpretation (offering provocation).
3. Labels that do not address visitors' prior knowledge, interests and/or misconceptions—that don't know who the audience is.

4. Labels with no apparent system of design and content to organize the messages, codes, or context.
5. Labels written with a vocabulary that is out of reach for the majority of visitors.
6. Labels that are too long and wordy.
7. Labels that ask questions that are not visitors' questions.
8. Labels for interactives that do not have instructions or interpretations located in integrated, logical ways.
9. Labels that do not begin with concrete, visual references.
10. Labels that are hard to read because of poor typography (bad choice of typeface, design, colors, lighting, materials, or placement).

Research and evaluation of labels in exhibitions tells us that there are things that tend to decrease visitor reading and comprehension, and there are things that tend to increase it. The list above deals with the bad stuff.

Below, we will summarize some of the good stuff—findings that can help us make better decisions about exhibition design so that we can raise the number of visitors who read—an important activity in educational exhibitions.

14 HELPFUL RESEARCH AND EVALUATION FINDINGS

Effective labels and effective exhibitions are unique combinations of variables that together can enhance or deter communication. The 14 points below are based on unpublished evaluation studies, published empirical research data, and the collected wisdom of label writers, designers, exhibit developers, and evaluators who have been working to improve labels for years.[3]

1. When visitors have good conceptual and spatial orientation in exhibitions, they are more likely to spend more time and learn more.
2. When visitors spend more time, they tend to use more parts of the exhibition, and are more likely to understand what it was about.

3. More visitors read shorter labels, and read them more thoroughly than longer labels.
4. The most popular parts of a good exhibition will attract a broad cross section of the audience, not a special subgroup.
5. Among adults, those who read labels and those who use interactive devices are not two separate audiences.
6. Labels placed higher than six or seven feet off the ground are often not seen by visitors. Labels placed directly next to what they are about will be read more than labels keyed by a number on the text and placed at a greater distance away.
7. Labels next to dimensional elements in exhibits get read more than flat label panels on the wall, without objects nearby. This includes introductory and orientation information.
8. Chunking information into short paragraphs, 25 to 75 words long, increases the likelihood of reading.
9. Labels that contain concrete, visually referenced information will increase visitors' tendencies to read-look-read-look, pointing and talking.
10. Labels that visitors find interesting will be read aloud more than others. Reading aloud increases social, intragroup behaviors.
11. Visitors who read labels spend more time and do more things in exhibitions overall than nonreaders of any age.
12. More adults will read label text to children when labels are easy to read out loud without the need to paraphrase or translate unfamiliar vocabulary words (for themselves or their children).
13. Children will read labels if the labels provide them with easily accessible and useful information. Adults, who are accustomed to receiving information through the written word, will work harder to get it than children.
14. Labels with images and words working together are meaningful and memorable to more visitors than all-text labels.

The scope of these guidelines clearly takes us beyond writing interesting, short, well-crafted, visitor-comprehensible, legible labels. It makes effective communication of the whole exhibition a goal. "Our eyes are on another professional guideline—creating integrated presentations of well-written words with objects, illustrations, and interactives—that really work, and to do this requires extraordinary teamwork and lots of formative evaluation."[4] It takes more than increased knowledge and improved skills of individual professionals. But if all eyes are on the same prize, it's sure to be within reach.

The guidelines listed here will not guarantee success, but they will help you avoid problems that prevent effective interpretation. The glossary and the resource lists that follow will help label writers communicate with each other more efficiently and effectively and accomplish their task of communicating with visitors more successfully. Good luck!

NOTES FOR CHAPTER 20:

1. Beverly Serrell, *Making Exhibit Labels: A Step-by-Step Guide* (Nashville, Tenn.: American Association for State and Local History Press, 1983).

2. Stephen Bitgood, "Deadly Sins Revisited: A Review of the Exhibit Label Literature," *Visitor Behavior* 4, no. 3 (Fall 1989).

3. The most comprehesive bibliography of published studies can be found in C. G. Screven, ed. *Visitor Studies Bibliography and Abstracts,* 3d. ed. (Shorewood, Wis.: Exhibit Communications, Research, Inc., 1993).

4. Frances Kruger, former interpretive specialist, Denver Museum of Natural History, personal communication. Kruger is now doing exhibit development, writing, and editing on a free-lance basis and running a used bookstore, "Old Friends."