

EXHIBITIONS AND THEIR AUDIENCES: ACTUAL AND POTENTIAL

September 2002




Smithsonian Institution

Office of Policy and Analysis
Washington, DC 20560-0039

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FOREWORD

The main purpose of this report is to identify some of the issues involved in the relationship between exhibitions and museum audiences. Consistently, museums are urged to be sensitive to the needs of visitors and to provide meaningful experiences for them. Yet, in discussion after discussion, we find that many professionals try to impose their particular views of visitors and their desires, rather than take visitors' views and wants into account. This paper is intended to add to the discussion at the Smithsonian and—hopefully—elsewhere. Much of what is applicable to the Smithsonian applies to museums everywhere.

The central theme, museum visitors, is a continuation of work performed by researchers within the Office of Policy and Analysis (OP&A) during the past decade. The familiarity afforded to portions of the materials presented here chiefly stems from work done by Zahava D. Doering and Andrew Pekarik, the authors of this white paper. They and I appreciate the critical and helpful reading of this paper by David Karns, Kerry DiGiacomo and Cynthia Kaufmann.

As with other papers in this series, OP&A staff will consider parts of this paper as they prepare the upcoming report on Smithsonian exhibitions.

Carole M. P. Neves
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Office of Policy and Analysis

INTRODUCTION

Every year approximately 10 million people visit Smithsonian museums. Although this is only one portion of the total Smithsonian audience—which also includes people who read Smithsonian publications, visit Smithsonian websites, participate in Smithsonian outreach programs, and collaborate with Smithsonian researchers—on-site visitors are the Institution’s core constituency. Their experiences in Smithsonian museums shape public perceptions of the Smithsonian across the nation and the world.

This discussion has three aims: first, to highlight key issues regarding the relationship between exhibitions and audiences; second, to summarize what is known about the characteristics, attitudes, expectations, behaviors, and experiences of exhibition visitors; and third, to suggest some possible directions for improving visitor outcomes and expanding audiences. The ultimate goal of any improvement is to enable the Smithsonian to serve the nation more effectively. Since much of what follows is based on studies conducted at the Smithsonian and at other museums, an appendix includes a brief history and current status of visitor studies.

Visitors and Mission

Traditionally, at the Smithsonian and at other museums around the world, exhibitions are regarded as the primary means by which collections are appreciated and knowledge disseminated. Accordingly, exhibition making emphasizes the selection of objects, the accuracy of texts, and, to a lesser extent, the design of spaces in an attempt to appeal to relatively knowledgeable audiences. In recent years, much more attention has been paid to the interactions between exhibitions and their visitors. Concepts such as audience draw, educational outcomes, and the quality of visitor experiences have joined, and sometimes even overshadowed, objects and texts as critical issues in exhibition planning. Scholarly analyses and professional debates have concluded that museums are in the midst of a basic shift from a focus on objects and subject matter to a focus on audiences. Explicitly, this has meant a shift from well-educated middle and upper-middle class audiences to audiences that are more representative of populations and of local communities.

Many at the Smithsonian would like not only to follow emerging trends in the museum field, but also to help lead the way forward. The Smithsonian, as a Federal organization,

has a special obligation towards its visitors. Its public service role obligates it to serve a broad public, to be publicly accountable, open, fair, and diverse.

SMITHSONIAN VISITOR PROFILE

The Smithsonian exhibition audience varies greatly with the ebb and flow of seasonal American visitors. Nine out of ten Smithsonian visitors live in the United States; eight out of ten live outside the Washington, DC Metropolitan Area; and seven out of ten Smithsonian visitors come to the Mall in spring and summer. Most American visitors include a Smithsonian visit as a major part of a “pilgrimage” to Washington, DC.

Families are common. Excluding organized tours, four out of ten visitors are visiting as part of a group that includes at least one adult and one child; another four out of ten are adults visiting with at least one other adult; and only two out of ten visitors are adults visiting alone.

Most visitors, seven out of ten, have been to the Smithsonian before. Five are visiting museums they have visited previously, and two are visiting a Smithsonian museum they have not been to before.

High education levels are the distinguishing demographic feature of Smithsonian audiences. Compared to museumgoers elsewhere in the United States, Smithsonian visitors are more likely to be college graduates, as shown in Figure 1.

Figure 1
Formal Education of U.S. Residents Ages 25 and Above¹
(in percent)

	Total Population	Museum Visitors	Smithsonian Visitors
High School or less	52	45	16
Some College	25	24	19
Bachelor's Degree	15	20	35
Graduate Degree	08	11	30
Total	100	100	100

¹Sources: Total Population: Day & Curry (1996). Museum Visitors: Smithsonian Institution Marketing Study national sample, 1994. Smithsonian Visitors: Year-long surveys at the National Air and Space Museum, the National Museum of Natural History, the National Museum of American History and the Freer and Sackler Galleries (available from OP&A). There are very few reliable sources of data about museum going in the general population. Our data may differ somewhat from other published sources.

On the Mall, education levels are highest at the Freer Gallery of Art and Arthur M. Sackler Gallery, where half of visitors have graduate degrees. They are lowest at the National Museum of American History, where 29 percent of visitors have graduate degrees.

There are probably two reasons for the unusually high education levels of current Smithsonian audiences. First, the tourists to Washington who dominate the Smithsonian audience have the personal resources—leisure and money—to enable travel. Such people are more likely to have higher levels of education. Second, Smithsonian museums draw educated audiences because they, like museums generally, tend to direct their offerings to those with an existing commitment to intellectual questions and academic subject matters, which are often only remotely related to issues that interest non-museum-going audiences.

Audience composition shifts when museums present exhibitions that depart from their usual practices. The examples are many. When the American Museum of Natural History offered its 1909 exhibition on tuberculosis, when *Natural History of the Dog* was at the Carnegie Museum of Natural History in 1985, when the Brooklyn Museum of Art presented its exhibition *Hip-Hop Nation: Roots, Rhymes, and Rage*, and when the Guggenheim showed the *Art of the Motorcycle*, observers reported an apparent shift in the museums' audience. Because these exhibitions were one-time efforts, rather than sustained changes in exhibition programs, the audiences reverted to their traditional composition when the specific exhibition closed.

It is reasonable to conclude that if the Smithsonian museums regularly offered more exhibitions that departed from traditional subjects, they would appeal to the interests of a broader range of visitors.

THE SMITHSONIAN VISIT AND VISITOR EXPERIENCES

The 10 million people who enter Smithsonian museums each year have a wide range of interests, needs, and intentions and a similarly wide range of responses to their experiences here.² Nonetheless, the existing research on Smithsonian visitors is rich enough to

² Smithsonian museums have been studying their visitors extensively for over a decade, primarily through the Institutional Studies Office (now integrated into OP&A), and various outside contractors. This summary of visitor attitudes towards the Smithsonian is based both on earlier studies and recent interviews conducted for this paper. Some of these studies are currently available on the OP&A website. Others are

allow some reasonable generalizations. The boxed quotations presented here are representative comments excerpted from interviews with Smithsonian visitors.

Visitors' Perceptions of the Smithsonian

Nearly all Smithsonian visitors are familiar with museums to some degree. Most of them have visited museums of different types and have a sense of what they are about. They know, for example, what art museums are like, whether a particular type of museum is likely to interest them, and whether it is appropriate for them or for their group to visit.

I know people who won't step inside a museum—they think they're dull and boring. We've done that to my brother—dragged him to the museums—and now he won't come visit us anymore!

Quite a few adult visitors had been brought to the Smithsonian by their parents many years ago and are returning to share their experiences and memories with their children and grandchildren.

When I was a kid I had a book on the Smithsonian with pictures of the dioramas [in the National Museum of Natural History] in it, and I thought, 'Wow, I want to see that.' When I finally did see them I was very satisfied with what I saw. I thought, 'Wow, this is great!' And I'm still like that. My son, he's the same way. He walked in here with me and the first thing he said was, 'Wow! Look!'

Although a small percentage (3%) of first-time tourists to Washington do not visit the Smithsonian, the Smithsonian is generally seen as one part of a visit to the Nation's Capital. It is important to note, however, that very few tourists come to Washington just to visit the Smithsonian.³

available by mail and will soon be added to the website, <http://www.si.edu/opanda/reports>. For an annotated bibliography of visitor studies conducted elsewhere see <http://museumlearning.com/Annotatedlit.html>

³ Unpublished data collected as part of survey conducted by Fuller (1994). In general, of all visits made to the Washington metropolitan area by those who live at least fifty miles away, about 75% are made for pleasure, including vacations, recreation, visiting friends or family, shopping, or for school-related purposes. The remaining 25% were made primarily to conduct business.

We got here Saturday morning. We did as much as we could...We saw Air and Space, did the Capitol, did the museum of art, tried to go... Oh yes, the Library of Congress—we had to run around Jefferson’s library in about four minutes. That was unfortunate. The Vietnam wall. Pretty much all the highlights.

When visitors talk about the Smithsonian, they most frequently mention its size. First-time visitors are not sure what the Smithsonian encompasses. Some assume that it is only the Castle, while others can name one or two of the major museums. They are usually surprised to realize its total scale.

My original thought was that the Smithsonian was one place, but later I realized how many different locations and places it’s filled with. I knew that before this visit, but for years I didn’t know it. I always said that I can’t wait to get to the Smithsonian and it will take weeks to get through--and today I verified that.

Along with its scale, the Smithsonian stands out for visitors in its scope. It is larger than most first-time visitors expect.

Interviewer: *What does the word ‘Smithsonian’ mean to you?*
Visitor: *I just know that it is a collection of different museums and it’s huge. And it’s probably the biggest collection in the world...There are a lot of incredible things here.*

Because most Smithsonian visitors have been here before, the Smithsonian is a place to remember past visits, especially those that were important childhood moments. Non-local visitors put so much effort into a Washington visit that Smithsonian experiences are often especially memorable. For local visitors, visiting the Smithsonian can be a more casual matter.

[DC Metro Area resident:] I sort of get into [visiting the Smithsonian] and then I kind of get out of it and then get back into it. This summer I decided to get back into it. I come down for a couple of years, and then for three or four years I don't make it. This is my second time this summer. I do everything. Today, I just did the Castle and then the African museum. Last week I did the American History Museum. I am just interested in the Smithsonian, not any particular museum.

The particular Smithsonian moment that stands out over the years for an individual visitor is usually the result of a personally relevant connection. In some cases, the connection is sparked by something in the museum, such as an object or story. In other cases, it is produced by the social context of the visit, such as the family member who accompanied the visitor.

One of my favorite places when the children were little was the Air and Space Museum. My little boy, who is now [my granddaughter's] father, loved that.

The specific benefit that visitors anticipate from their visit is often unclear. Although visiting is a purposeful activity and is directly related to self-development in some way, it is usually expressed only in very general or vague terms.

[Although I visited the National Museum of African Art, and am now in the Sackler Gallery,] I have no background, no reading in Africa or Asia. I just want the exposure. I'm not trying to become an expert on it. As a matter of fact, I think it might kill it. Just the exposure. You just like it or don't like it--no analysis or anything. I will read, but I'm not interested in doing anything in-depth. Just exposure. Broadening.

In general, visitors consider a visit to the Smithsonian as being especially beneficial for young people, and this motivates many family groups to come here together. Some see the museum's importance for children as its very purpose. Nevertheless, it is not clear exactly what role parents see for museums in the socialization of their children. Is it oriented towards gaining knowledge and skills? Instilling and reinforcing values and models? Forming habits of mind?

My five-year-old son does well at the Hirshhorn, where there's sculpture...He's better in scenes that have more sculpture...He's not so good in museums that have a lot of paintings. And I wasn't good in museums that have a lot of paintings when I was his age, either. When we were kids my parents used to drag us to the museums and I remember not liking it very much. But I think it's really important to bring kids, and we try to pick out a few things, and tell him stories about the paintings, and I think eventually he will get to like it, but I think right now it's a little bit difficult...He's figured out that we'll leave very quickly if he makes a lot of noise.

There is a deeply held perception of the Smithsonian as the “keeper” of the nation’s treasures. The relationship between visitors and issues related to American national heritage and identity is little understood. We assume that most visitors want the Smithsonian to present a mainstream story, but many visitors resonate with themes that reflect their own point of view.

I just came from the portrait exhibition ... American Women. What I thought was great was seeing the different feminists and the different African American women who made an impact on the world.

Types of Experiences

Smithsonian visitors report that they enjoy seeing, learning, thinking, talking, imagining, sharing, discovering, remembering, appreciating, socializing, and understanding. They speak of experiencing excitement, surprise, wonder, and curiosity. They are moved by the horrific, the tragic, and the sad, and are delighted by the absurd, the comic, and the charming.

The particular type of experience that a visitor reports anticipating or enjoying at the Smithsonian depends on the individual, the visit, and what the museums offer. Certain types of experiences have come to be more associated with some museums than others. For example, visitors to Smithsonian museums are about equally interested in object experiences (such as being moved by beauty or seeing rare and uncommon things) and learning experiences, except at the Renwick Gallery, which displays crafts. There, object experiences matter much more than learning experiences.⁴

To a great extent, the museum staff and exhibition designers also seem to have experience preferences. The art museums, for example, present objects in reverential settings, but provide relatively little information. The non-art museums, on the other hand, tend to offer abundant information but rarely present objects, even extraordinary ones, in focused, aesthetic settings. The mutually reinforcing dynamic of staff perspectives and visitor expectations tends to divide and limit the Smithsonian audience.

Visitors, especially those who are pressed for time, tend to avoid some museums on the basis of generalized perceptions about the types of experiences available inside them. Even if museums offered more varied experiences, the challenge would be breaking through the visitor’s mental scenario for visiting a specific museum.

⁴ See Pekarik, Doering & Karns (1999).

Comparative Differences

Some recent interviews elicited opinions of how the Smithsonian compares to other museums in visitors' minds. Most respondents distinguished the Smithsonian from other museums primarily on the basis of its large scale and broad scope. According to some visitors, Smithsonian quality also stands for authoritative presentation, fine graphics, technology, and educational focus. They consider free admission an advantage.

Although a study focused on the meaning of the Smithsonian brand would clarify and qualify these points, the limited data that we have suggest that the Smithsonian is perceived as being special in degree rather than in type. In other words, it does what other museums do, but does it more extensively or more prominently.

Some visitors describe the special character of the Smithsonian in terms of mission rather than offerings, by emphasizing that it is about "America" or about "the world." In these conversations, and in a range of studies, visitors also want the Smithsonian to represent and uphold a national ideology. For example, an analysis of conversations with visitors at the National Museum of American History confirmed that visitors want the museum to focus on the celebratory aspects of history and to underscore and promote a set of acknowledged national values.

The growing interest in the experience of visitors in exhibitions has paralleled calls for a different type of accountability with respect to museums on the whole. As Smithsonian scholar Stephen Weil has neatly phrased it, the shift is "from being *about* something to being *for* somebody."⁵ If the purpose of museums is to serve the public, what will museums provide? The most common answer, the one most in keeping with the familiar idea of museums as being "about something," is learning.

Visitors and Learning

Many Smithsonian museums, as well as many museums nationwide, identify exhibition "learning objectives" that visitors are expected to achieve. Studies of Smithsonian visitors have found that many of these objectives are already familiar to entering visitors, due to their prior interest in the subject of the museum or exhibition. Among visitors not familiar with the core ideas in advance, only disappointingly low percentages acquire these ideas by visiting exhibitions.

⁵Essay title in Weil (2002).

Some researchers found more learning outcomes by shifting to an expanded, more general definition of “learning” and a research method based on group conversation.⁶ From this broader perspective, museums promote “learning” simply by involving visitors in a set of activities, such as identification and interpretation that facilitate group interaction and “meaning-making.”

Open-ended research on visitor responses conducted at the Smithsonian and elsewhere has revealed that visitors’ meaningful experiences in exhibitions cover a much wider spectrum than even the broadest definition of “learning” encompasses. Experiences range from the pleasure of spending time with friends or family to very personal memories triggered by objects or settings. Identification with America shows up in Smithsonian conversations. Some museums, especially science centers and children’s museums, promote non-educational exhibition objectives, such as “entertaining,” “fun-filled,” “family-oriented,” and other experiential language.

Visitor Motivations

Because museum visiting is a voluntary, leisure-time activity, it serves, like other leisure activities, to meet participants’ personal needs. Those who go to museums regularly in their free time are most likely to be seeking either a confirmation of personal self-definitions or an opportunity to carry out their agendas for self-development: the two fundamental needs that underlie most voluntary leisure activity.⁷

Many Smithsonian visits are generated by the desire for outings with family and friends. The vast size of the Smithsonian promotes a practice of trading and negotiating within visit groups, as they determine the best way to satisfy the needs of each group member. Other visits are driven by the circumstance of being in Washington, such as being on a business trip, when visiting the Smithsonian is seen as a fringe benefit.

Although visitors tend to articulate their motivation in terms of “fun,” “learning,” and “seeing,” a close look at what they say and do suggests that “fun” means much more than entertainment, “learning” means much more than gaining knowledge, and “seeing” is more than making a check on a “must see” agenda. The Smithsonian provides an opportunity to enhance and reinforce ideas and values that individuals consider important or feel the need to clarify. The Smithsonian visit is not an isolated event, even when it is

⁶See Leinhardt, Crowley, & Knutson (2002), for a collection of papers resulting from the Museum Learning Collaborative.

⁷ Kelly & Godbey (1992), p. 25-26.

a rare occurrence, because it is linked to past events and everyday experience, and is integrated into a broader range of exploratory and developmental experiences.

A principal motivating factor for many visitors is a personal topical interest of some kind, whether expressed generally, as “art” or “science,” or more specifically, as “volcanoes,” or “First Ladies’ dresses.”

Some extended interviews with visitors reveal deeper levels of motivation, such as the desire to understand oneself or to resolve unarticulated questions about the world. Because the Smithsonian is seen as a setting appropriate for intellectual and (to a lesser extent) emotional exploration, for sharing experiences, and for experimenting with ideas, it offers the potential to clarify, resolve, and expand individual perspectives.

In interviews with Smithsonian visitors, these two basic drives tend to be described as a prior connection to the subject matter (an aspect of self-definition), and as emotionally or intellectually satisfying moments (an aspect of self-development). From this point of view, we might even say that the museum visit is a less a cause of new attitudes than it is a behavioral response to existing attitudes. Thus, the major impacts of museum visits may be the breadth and depth of opportunities that museum visits provide for visitors to exercise their individual emotional and intellectual agendas.

EXPANDING SMITHSONIAN AUDIENCES

Over the last decade, many in the museum community have stressed the importance of extending audiences. Three main strategies towards this goal are:

- increasing the frequency of visits,
- diversifying the mix of people who come to the museum, and
- increasing the percentage of the population that attends museums.

Experience has shown that expanded evening hours, marketing programs, advertising campaigns, and “blockbuster” exhibitions, among other activities, do increase the frequency of visits.⁸

Museums have generally attempted to increase diversity in their audiences through initiatives to attract specific racial/ethnic minority communities. These efforts have often had a temporary impact on the attendance patterns of specific racial/ethnic groups.

⁸ A review of approaches is in OP&A (2002a) available on www.si.edu/opanda/reports/htm.

However, their members have rarely become permanent members of general museum audiences. The main reason for museums' lack of success has been their failure to permanently modify their offerings to meet the needs of these groups and create a feeling of membership. Education is also a factor. Racial/ethnic minorities with less schooling than most museum visitors avoid museums for the same reasons that non-minority individuals with low educational attainment avoid museums. The reluctance of museums to make more than occasional, superficial changes has prevented them from substantially changing the ethnic composition of their audiences. Existing evidence shows that increasing ethnic visits entails the allocation, or reallocation, of substantial resources.⁹

In comparison with these two strategies, relatively little effort has been made to make museum going attractive to those who now avoid it. Since the reluctance to visit museums is based on the perception of their offerings, a serious attempt to expand the characteristics of the audience would threaten existing practices at a fundamental level if museums change sufficiently to change their public image.

Within the limitations that museums have set upon their willingness to change, research has indicated several approaches that can be effective.

Specialized Audiences

The strategy of dividing up populations into smaller groups (segments) defined by one or more audience characteristics is called "segmentation." The motivations, interests, attitudes, and opinions of these segments can be used to plan effective strategies for meeting their needs.

As already noted, most initiatives to expand the diversity of audiences have been directed towards racial/ethnic minority groups. However, there are many other types of demographic characteristics that can be used to segment audiences, including broad occupational groups, age-specific cohorts, and life-cycle stages.

At the Smithsonian, one segment with growth potential is regional families. As pointed out earlier, outside of organized groups, four out of ten visitors come to the Smithsonian in a group that includes at least one adult and one child. In the peak summer season at the National Museum of Natural History (NMNH), 18 percent of all visitors are under 12

⁹ In another study, conducted for Smithsonian art museums, the OP&A (2001) explored how some non-Smithsonian art museums have attempted to increase gallery visits and program participation from ethnic communities, specifically, African Americans, Asian Americans and Latinos. The OP&A staff reviewed publications, a recent multi-year Lila Wallace-Reader's Digest Fund initiative, and talked with professionals in non-Smithsonian art museums.

years old and an additional 13 percent are between the ages of 12 and 17, yet the number of exhibitions aimed specifically at this demographic segment among the major museums on the National Mall is very limited, and some of them are very small and are open only irregularly.

Another segment with potential is people with disabilities. At this juncture, Smithsonian public facilities are fully accessible to people with physical disabilities. This means that entryways, circulation routes, and access to public spaces meet Federal standards. However, exhibition design is not as inclusive as it could be for people with physical disabilities. While such visitors can enter, circulate in, and exit exhibition spaces, some aspects (e.g., interactives, labels, lighting, and object placement) are not designed to meet the needs of a broad range of people. And virtually no attention has been paid to potential visitors with cognitive and intellectual disabilities. The potentially most important area is adapting to older visitors (i.e. lighting, eliminating inclines, temperature, seating, etc.) since this population is growing rapidly and visitation rates fall among older populations.

The challenge, of course, is to find ways to provide exhibitions targeted to particular segments, such as families, without alienating existing audience segments. Fortunately, the large Smithsonian museums have enough space to make a variety of offerings possible.

Variety of Exhibition Types

Another, less linear strategy for expanding audiences is to deliberately vary the presentation styles of exhibitions, realizing that different types of experiences appeal to different people. As we have indicated before,¹⁰ there are four different orientations with respect to the way exhibitions function for their visitors:

- Exhibition as artifact display
- Exhibition as communicator of ideas
- Exhibition as visitor activity
- Exhibition as environment

In an ideal case, the theme or content of an exhibition matches a particular model. Some exhibition themes and stories call for one type of approach over another. A theme such as optical illusions, for example, would probably suggest an emphasis on visitor activity.

¹⁰ See OP&A (2002b) paper on exhibition concept models, available at <http://www.si.edu/opanda/reports.htm>.

Tropical rainforests as a topic have generally been treated as environments in natural history museums, zoos, and aquaria.

When the preferences of the visitor and the approach of the exhibition are not well matched, the visitor may respond unenthusiastically. At the same time, an exhibition that tries to be all things equally to all visitors risks losing character and can give the impression of being a bland, committee-consensus product that pleases everyone slightly and no one strongly.

If each visitor can find an exhibition that suits his or her preference, the museum will establish a much stronger relationship with that visitor, assuming that all other aspects of the visit experience are good. If the museum wishes to encourage repeat visits and to expand its audiences, it is in the museum's interest to cater to the widest possible range of preferences by providing exhibitions based on all the conceptual models, rather than one or two dominant orientations.

Which exhibition type works best depends on the individual visitor. Research on visitor experiences conducted recently at the Smithsonian demonstrated that people have preferences for different kinds of experiences in museums. Looking at visitor experiences across eight Smithsonian museums, for example, it was found that visitors under age 25 were more likely than other visitors to find introspective experiences most satisfying and less likely to find cognitive experiences most satisfying, while those between the ages of 25 and 44 were more likely to say that social experiences were most satisfying.¹¹ (The latter age range is most likely to be visiting with a family.)

Some museums have varied exhibition types, shown different types of temporary exhibitions, or changed the museum from one type to another, to expand audiences. For example, around 1993, the Fort Worth Museum of Science and History introduced a series of visitor activity exhibitions into a museum with collection-based exhibitions.¹² The Museum of Science, Boston, developed a permanent exhibition plan that focuses on science processes, such as observation, experimentation, classification, etc., instead of content.¹³ The Strong Museum opened as a decorative arts museum in 1982 and, after several transitions, became a family history center using its American popular culture collection.

¹¹ Pekarik, Doering & Karns (1999), contains the data from all the museums.

¹² This included *DinoDig*, an outdoor experience and *Whodunit? The Science of Solving Crime*, an exhibition that is still traveling.

¹³ The museum has adopted a Constructivist approach to its exhibition developed. See Bailey et al. (1998), and Hein (2001).

When *Microbes: Invisible Invaders... Amazing Allies* was exhibited in the S. Dillon Ripley Center's International Gallery and *The Brain: The World Inside Your Head* in the Arts & Industries Building, the number of families with kids increased disproportionately in those buildings as visitors sought to experience these highly interactive exhibitions.

Variety of Exhibition Aims

Because the Smithsonian's audience greatly over-represents people with high levels of formal education, the greatest potential in audience expansion is with those who have less schooling. This is a difficult audience for most museums to attract, because museums are deeply rooted in academic approaches to their subject matter, and because they are accustomed to seeing visitors as the passive recipients of their messages.

The adoption of a model to describe the interaction of museum and visitor, whether it is the museum-centered communication model or the visitor-centered, personal meaning-making model, affects how a museum approaches the large portion of the population that avoids museums altogether. When we accept the communication model of the visitor-exhibition interaction, we assume that non-visitors have a problem with the museum's messages or the way they are delivered. When we accept the meaning-making model of the visitor-exhibition interaction, we conclude that our museums are not providing the service that meets non-visitors' needs for self-development, fulfillment, or expression, or that competes with other leisure-time activities.

In struggling to find a way to make museums more inclusive, these two positions point in very different directions—do we need to learn how to restate our same messages and refine our delivery systems (i.e., to “promote” better), or do we need to learn how to respond to non-visitors' use of objects, ideas, and spaces to support their sense of identity and their personal growth (i.e., to “listen” better)? Do we want to convert non-visitors to visitors by convincing them that *our* messages are important and relevant, or do we want to change museums and exhibitions by adding opportunities that are meaningful to a broader range of people?¹⁴

No matter which direction museums take, there are other barriers to the participation on the part of those who currently do not visit. Changes inside the museum would have to be accompanied by efforts to change the existing perceptions of museums as well as to remove practical barriers such as lack of transportation or limited hours of access. Currently, as pointed out in a related paper, museums are not particularly oriented

¹⁴ Even if the major changes were made correctly, major, long-term communications efforts would be necessary.

towards marketing themselves or their offerings.¹⁵ Changes will be necessary if museums are to effectively address non-visitors' questions, such as "Why should I go?" "What is there for me?" and "Is it for people like me?"¹⁶

If the Smithsonian is the museum for the entire nation, is it enough just to serve that well-educated portion of the public that feels comfortable here now? As O'Neill writes in connection with art museums:

If art museums reflect the interests and identity of the dominant groups in society, not by accident, but because that is what they are for, then it is possible to argue that it is impossible for art museums to change. The question for staff and governors of publicly funded art museums (or museums funded by private donations which have received tax relief) then becomes: What is an acceptable level of inequality in access to our museum?¹⁷

Just as Smithsonian museums are large enough to contain a variety of exhibition types, so too are they large enough to contain a variety of exhibition aims. There is adequate space for exhibitions targeted to people who avoid museums as well as exhibitions targeted to more traditional audiences. Exhibitions to inspire emotional responses do not rule out exhibitions to present knowledge. It is appropriate for the national museums of a country as varied as ours to strive to attract unusually diverse audiences by presenting unusually diverse offerings.

¹⁵ See Office of Policy and Analysis (2002a).

¹⁶ Museums must recognize that there are some people whose personal preferences or beliefs will never include museum going. There is also the reality that some of the change necessary to draw non-visitors may not be acceptable to museums or current visitors (e.g., individuals opposed to the display of war memorabilia or certain types of art).

¹⁷ O'Neill (2002), p. 37.

APPENDIX A

WORKING TO UNDERSTAND VISITORS

*A Capsule History of Visitor Studies*¹⁸

For nearly a century, social scientists have been studying visitors in exhibitions. Loomis describes an article in the first issue of the *Scientific Monthly* for 1916 entitled, “Museum Fatigue.” The author, Gilman, concluded that visitor fatigue could be attributed to poor case design. His work took place as museums began to focus on their social role. Loomis suggests that the origin of studying visitors, at least in the United States, was heavily influenced by the move to make museums public institutions with a two-fold public function: “an educative role to instruct the public in the technical knowledge of collections; and a culture role of uplifting communities through the presence and programs of museums.”

Loomis underscores the concerted efforts made from the late 1920’s to the onset of World War II to document the educational value of museums. He specifically identified the importance of work undertaken by two Yale University psychologists, under the auspices of the American Association of Museums (AAM) and supported by the Carnegie Foundation. To estimate the educational value of museums, they relied on observations of visitors in galleries. The results of this work identified issues related to museum architecture (e.g., the impact of exits on circulation), exhibit installation (e.g., the density of objects), and interpretive materials (e.g., label placement).

Some studies before World War II tried to ask visitors directly “what they learned,” but these were declared unsatisfactory. Other studies asked visitors and experts to rate exhibitions. The lack of consistent results was blamed on the method. As Loomis points out, “it is well to consider the possibility that real differences may exist both within expert and lay audiences over what constitutes a ‘good’ exhibit.” Many museum professionals are not ready to consider Loomis’ hypothesis that visitors may legitimately differ with them regarding exhibition quality. The evidence is the many museums (at the Smithsonian and elsewhere) that do not actively solicit visitor views or are reluctant to apply the results of visitor studies.

¹⁸ The summary through the 1980’s is based on Loomis (1987).

Following World War II, survey methods first appeared in museums. Surveys of audiences were undertaken at the Royal Ontario Museum, the Milwaukee Public Museum, and of visitors to traveling exhibitions sponsored by the United States Information Service. By the late 1960's, a focus on exhibitions as learning environments is evident, especially in the work of researchers such as Shettel, whose work emphasized the need to state criteria that could be used to measure the educational effectiveness of exhibitions (Shettel, 1968, 2002).

The 1970's and 1980's saw continued increases in museum visitor research and evaluation. The studies conducted in those decades can be classified under five major areas:

- Evaluation identifying visitor responses at different stages of exhibition making, including reactions to ideas during the concept development stage, to prototypes during design development, and to the finished exhibition. Methods included surveys, focus groups, "talk back" boards, and informal conversations.
- Audience description to help guide marketing efforts, in addition to earlier studies of visitor characteristics. Methods included interview surveys, handout questionnaires.
- Behavioral studies based on both observation and interviews, and focused on the ways visitors behave or react in exhibitions. Methods included timing and tracking studies, and exhibition elements that generated data on their use.
- Experimental studies used controlled changes to look at specific aspects of exhibitions.
- Theoretical discussions.

The last decade has seen a continuation of earlier work to incorporate visitors into exhibition planning with two major shifts in focus. First, some researchers made a concerted effort to understand the experience of visitors in museums without assuming that the goals of visitors and of museums were necessarily the same, namely "education" or "learning." Second, researchers have been defining "learning" more broadly. Most generally, researchers have drawn on both communication theory and constructivist theory to emphasize personal "meaning-making" in exhibitions (Hein, 1999, 2001a and 2001b; Silverman, 1993 and 1999). The "meaning-making" literature stresses the view of museum visitors as active agents in the museum, rather than passive recipients of messages. It recognizes that individuals bring to the museum visit their own backgrounds, experiences, orientations and attitudes and are not necessarily predisposed to "learning" what the museum has in mind for them (Doering and Pekarik, 1996).

Thus, the actual measurement of outcomes continues to plague researchers. Despite the rising importance of constructivist perspectives, most museums still continue to assume that their aims are the ones that best serve visitors.

Visitor studies have also been limited in scope. Most studies have focused on short-term results. The long-range impact of museum visits on the public has been questioned but not subjected to serious study. The only evidence of long-term impact is found in anecdotal compilations. For example, in a series of studies conducted by Spock, museum professionals provided testimonials about the early impact of museum visits on their subsequent careers.¹⁹ Some follow-up studies of visitors have documented recall of experiences, but there is little evidence of changed perspectives or attitudes. Obviously, there are serious methodological issues connected with disaggregating the impact of “museum” from other influences in the society. At least one long-term study is currently underway to explore long-term impacts of museum visits.²⁰

The “Visitor Voice” in Museums Today

In part as a result of a shift in focus, museums are increasingly establishing systems to incorporate the “visitor voice” in the exhibition-making process. Interviews conducted by the OP&A study team with museum staff suggest that a growing number of museums (especially those focusing on science) include an individual or team with expertise in visitor-related issues at various stages of the exhibition process.²¹ In-house visitor specialists undertake informal and formal studies and frequently use external resources (contractors or universities) to supplement or provide information about potential and actual visitors. While many museums see the value of the work, some undertake it for very mundane reasons. For example, there are some funding sources, including the National Science Foundation and the National Endowment of the Humanities, which require evaluation as a condition for receiving an award. Here we provide a broad-brush survey of the current status of work with visitors.

¹⁹ One of the products of this project, tape and study guide, was published for use in training and staff development of museum professionals (Spock, 2000).

²⁰ In a study at the California Science Center, funded by the National Science Foundation, individuals are being followed for up to 18 months after their museum experience. John H. Falk, Institute for Learning Innovation is the principal investigator of the study.

²¹ The increase is reflected in the rise of membership in professional associations for visitor studies, such as Visitor Studies Association and the AAM special interest group, the Committee on Audience Research and Evaluation (CARE). An analysis of their memberships shows that they have about 650 unique members, representing about 440 different exhibiting cultural institutions and about 100 non-exhibiting organizations such as professional organizations, consulting firms, universities, and governmental organization.

In-house visitor studies. Many museums undertake one of three types of visitor-related studies: testing and prototyping to aid exhibition/program development; evaluation to assess existing products; and market research to promote the museum's offerings. The extent to which museums support dedicated, trained staff to study visitors and potential visitors varies by type and size of museum. Children's museums and science centers have been most active in involving potential users in their exhibition development activities. Most conduct informal studies at various stages of development, and sponsor extensive prototype testing. The primary locus of visitor activity in children's museums has been in the education departments. In several major science centers, such as the Tech Museum of Innovation, St. Louis Science Center, Franklin Institute, and the Exploratorium, staff has been dedicated to special work units. The units are charged with providing evaluation services throughout exhibition development and post-opening.

Several of the large science and natural history museums have embraced visitor study and have hired staff to carry out study and evaluation, such as the American Museum of Natural History, California Academy of Science, Chicago Museum of Science and Industry and Denver Museum of Nature and Science. History museums, with some exceptions, such as the Minnesota History Center and Colonial Williamsburg, have made minimal use of in-house staff for visitor study. Some organizations with "live" collections also have an in-house capability. For example, Shedd Aquarium, Monterey Bay Aquarium, and Brookfield Zoo each have at least one full-time staff members assigned to visitor study. Finally, art museums rarely have in-house evaluation staff and tend to study visitors only when required by funders or for specific marketing purposes.

Contracted activities. One alternative, or supplement, to an in-house visitor studies staff is working either with independent, individual consultants or with consulting groups. In general, the results of these studies are proprietary and very few are conducted with a view towards generalization. In the studies that are released, negative results are rare.

The number of independent consultants and specialized organizations that provide visitor study services has been growing over the years. The number of non-specialized organizations that include museum work in their portfolios is also growing. For example, an increasing number of reprint requests received by this office for visitor studies are coming from accounting and management firms, architectural and engineering firms, and market research firms.

University-museum collaborations. Compared to studies of art, music, and other culture forms, there are few academic studies of museums as social institutions, of their output

(exhibitions), or of their users (visitors).²² There are notable exceptions of scholars who developed long-standing collaborations with museums, for example, a professor at the University of Wisconsin with the Milwaukee Public Museum, another at Colorado State University with the Denver Museum of Natural History (now Denver Museum of Nature & Science) and another at Rutgers University with the Metropolitan Museum.

The most recent addition is The Museum Learning Collaborative (MLC), established at the University of Pittsburgh and funded by a consortium of public agencies.²³ It was established to further research on learning in museums and is working closely with ten museums.

Many of the programs that prepare people to work in museums, in areas such as exhibit design, graphics, and museum education, include an “introduction to visitors” in their curricula. An occasional student has become interested enough to focus on visitors in a master’s or doctoral dissertation.

As museums continue to shift their attention to visitors, it is clear that there is much more to know about visitors. However, there is now a cadre of staff, inside and outside of museums with training and experience in studying audiences. Compared to several decades ago, museums are in a much better position to make real improvements in developing exhibitions and programs that can better meet the needs of visitors.

²² Universities have, however, engaged in programs that specifically prepare individuals to work in museums. At present, at least 100 institutions in the United States offer “museum studies” curricula. They train people primarily to work in collections management, education, and exhibition development Ritzenthaler (1999).

²³ Institute for Museum and Library Services, National Endowment for the Arts, National Endowment for the Humanities, and the National Science Foundation.

APPENDIX B

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