

Visitors Comment
on
Flight Time Barbie:
Dolls from the Popular Culture Collection
of the National Air and Space Museum

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Flight Time Barbie:
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of the National Air and Space Museum

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Abstract

Many museums use comment cards, visitor books, and bulletin boards to capture the reactions of visitors. Whether they are collected, counted, skimmed, read, or simply filed, the utility of these documents is rarely questioned. This paper suggests some pros and cons of comment systems and presents an analysis of the comments to an exhibition, *Flight Time Barbie*, at the National Air and Space Museum, Smithsonian Institution, in Washington, D.C. The responses to this exhibition included judgments about the subject matter of the exhibition, opinions about its presentation, and remarks regarding its appropriateness to the museum. The paper concludes by suggesting a practical approach to the analysis of visitor comments.

I. Introduction¹

Yes I was surprised by this because all that was in here was boring old airplanes! But then I saw the Barbies. I think it was pretty cool. (female, age 10, local, first time to NASM, owns 32 Barbie dolls)

This is a far cry from the other parts of the museum. It's pathetic. Barbies have nothing to do with Air & Space. (female, age 17, non-local, first time to NASM, owns no Barbie dolls)

Visitors who feel strongly about their experience in a museum -- whether positively or negatively -- generally welcome the opportunity to make their feelings known to the staff. Even visitors who do not write, tend to appreciate the museum's interest in their views. When they see visitor books or bulletin boards, some visitors also enjoy reading and responding to the opinions of others.

The benefits of visitor comments for staff may be less clear. Few staff have the time to read all of them and, when they do, they may find it difficult to put these remarks in perspective. An isolated eloquent negative or positive comment can easily lead to misinterpretation or misunderstanding of the overall audience response.

Those who choose to write remarks on a display do not adequately represent the total population of visitors who saw it. Generally only a small percentage of visitors leave comments. Some visitors may not have felt that it was worth the trouble. Others may have been pressed for time, may not feel comfortable writing, or may have been distracted by other members of their group. We cannot assume that because a large (or small) proportion of comments expressed a particular viewpoint, a similar proportion of the overall audience also felt that way.

¹ I am deeply indebted to Zahava D. Doering, Director, Institutional Studies Office, for her many helpful comments on this paper and especially for her insights into methodological issues.

In addition, unlike responses to survey questions, recorded comments do not necessarily address the same issues. Visitors write whatever seems most important or most appropriate at the moment, and do not reveal their feelings on other subjects. This makes it impossible to use the frequency of particular responses as a measure of audience attitudes.

Therefore, the number or proportion of a particular remark or type of remark is not only irrelevant, but potentially misleading. When visitor opinions diverge widely, it is particularly dangerous to use these impressions as a basis for decision-making. The only way we could obtain reliable information on the complete population of visitors would be to select a representative sample of visitors and get answers from each of them to the same questions.

Consider this hypothetical example. Imagine that you receive ten comment forms -- two are very positive, four are very negative, and four discuss other issues -- from a total of 100 visitors who see something in a museum. We cannot draw any statistical conclusion about the popularity of the exhibit from these comments. The ten visitors who voluntarily made comments may not represent the views of all 100 visitors. It is possible, for example, that the 90 people who didn't write comments all had a positive response. Perhaps only four people in 100 had a negative reaction.

We cannot even draw conclusions from the numerical relationship between the two positive and four negative comments. To claim that twice as many people who commented had negative feelings about the show as had positive feelings is erroneous. The four people who wrote about other things might all have had positive feelings as well, but did not mention them. Or they might all have had negative feelings. Or perhaps some had positive feelings and some had negative feelings.

The fundamental unreliability of these data contradicts our instincts. Flipping through hundreds of enthusiastic comments and a few critical remarks, for example, we would tend to feel satisfied with the result.

If drawing conclusions from the number of pro and con comments is potentially harmful, then how can visitor comments serve the decision-making and evaluation interests of museum staff?

Structuring the Issues

Because comments tend to be written by people with strong emotional or ideological responses to the exhibition or museum, they can reveal, directly or indirectly, issues that visitors care deeply about. They describe some of the types and patterns of ideas that were aroused by the exhibition. We can see the range of these ideas, the themes around which they coalesce, and the relationships between them, even if we cannot determine to what degree any of these ideas might have been shared by the overall audience.

The most comprehensive way to extract structures of meaning from visitor comments is to code them comprehensively and systematically. In this method each comment is assigned one or more codes designed to reflect an aspect of the remark that seems important to the analyst. What is the comment about? Does it represent a position on that topic? Does that position have identifiable subcomponents?

Every time a new code is identified, it can be incorporated into an overall diagram that summarizes all the content items already assigned. When this process is done on a computer with analysis software designed for this kind of activity, it is a simple matter to merge categories, change identifiers, and shift codes as the analyst's understanding of the comments evolves.

This inductive method takes considerable time when comments are rich or numerous. The effort is justified when there is reason to believe that the issues revealed by the analysis have importance for the institution.

In an ideal world, the issues identified among the comments would then be converted into survey questions and asked of a representative sample of visitors. Only then could we determine the frequency of opinions within the visitor population. Usually we are left with the comments alone. What can be done with these hundreds or thousands of comments?

The Exhibit

Such a situation arose at the Smithsonian Institution in connection with a display at the National Air and Space Museum (NASM). *Flight Time Barbie* was open for ten weeks, from mid-June to Labor Day 1995. This mini-exhibition consisted of two cases, each approximately six-feet long by one-foot deep, and one label panel, placed in the entry way to the "Flight and the Arts" gallery, while it was closed for the installation of an exhibition. Within the cases were 32 Barbie and Ken dolls, dating from 1961 to 1994, displayed in aerospace-related outfits, along with other associated dolls and toys. The exhibit included Caucasian, African American, and Hispanic dolls.

Through this mini-exhibition the curator² hoped to "engage the interest of very young female children with a display of dolls representing some of the changing roles of women in aerospace." Overall approximately six out of every ten NASM visitors are men, and this effort to reach women, especially young women, reflects long-standing concerns among museum staff regarding gender distribution within the audience and a desire to encourage women's participation in scientific careers.

Although the display itself was small, the gender issues that it addressed were significant. Unfortunately, there were no resources for a systematic study of the

² Mary Henderson, Department of Art and Culture, National Air and Space Museum.

visitors who saw it. Visitor comment forms offered our only means for an understanding of audience reactions.³

A comment form was printed and bound as a tear-off pad. At the top it asked visitors to "PLEASE share your thoughts with us. Were you surprised to find this here? What did you think of the exhibition? What comments do you have?" At the bottom of the page visitors were able to indicate their gender, age, residence (local area, elsewhere in the U.S., or outside the U.S.), number of visits to NASM (first, 1-10, more than 10), and how many Barbie dolls they own. Pads of comment sheets and pencils were placed on a counter adjacent to the display, along with a box labeled "Deposit Forms Here." Above the counter was a small panel which read: "We are always interested in what you think. If you have comments about this exhibition, please share them with us. You may deposit your comments here." Each morning the sheets were collected from the box, and the supply of forms and pencils renewed. Altogether 1,766 comment sheets were collected.⁴ We estimate that 950,000 different individuals visited NASM during this period; we do not know, of course, how many of them passed by and/or observed the exhibit.

Because we included demographic questions on the form, we know that the profile of these individuals was very different from that of visitors to NASM as a whole. Nine out of ten *Barbie* comment forms were filled out by women. Six out of ten forms were completed by those under age 19, although individuals in this age group make up no more than three out of ten visitors in the entire NASM audience. In summer about one in four visits to NASM are made by people from other countries, but foreign residents were seriously under-represented in the comments (only 7 percent of those who made *Barbie* comments live outside the United States). This might be explained in part by a hesitancy of some foreign visitors to write in a language that is not their native tongue.

In studies both at NASM and in other Smithsonian museums, we have found that visitors' level of involvement with the museum frequently helps explain differences in responses to exhibitions and the museum. In this respect the profile of those who made *Barbie* comments was very close to the NASM average: One-half of *Barbie* commentators and one-half of NASM summer visitors were making their first visit to the museum, and just over one-third of the people in both cases had made between one and ten visits previously. Likewise, about the same proportion of those who made *Barbie* comments and those who came to NASM in the summer (about one in eight) had been to the museum more than ten times before.

³ The curator asked the Institutional Studies Office to obtain information about the reactions of visitors to the display. The Institutional Studies Office is administratively independent of NASM and undertakes studies throughout the Smithsonian. Out-of-pocket expenses, e.g., costs of interviewing and data processing, are paid by institutional "clients."

⁴ Out of the 1,766 comment sheets, only 40 were returned with all of these background questions unanswered.

Another question on the comment form was "Do you collect Barbie Dolls?" If visitors answered "Yes," they recorded how many Barbie dolls they had. Of those who responded, two out of five people owned no Barbie dolls, one out of five owned up to ten, and another two out of five owned ten or more.

There was a large gender difference in Barbie doll ownership. One-third of the females who commented had no dolls, 22 percent had ten or under, and 44 percent had more than ten. The males, on the other hand, were much more likely to have no Barbie dolls; 74 percent had none; 9 percent owned one to ten; and 16 percent owned more than ten.

More than half (55%) of children (under 12 years old) owned more than ten Barbie dolls, slightly more than one-quarter (27%) owned up to ten, and only 18 percent reported owning no Barbie dolls. Teens (ages 12 to 19) had fewer Barbie dolls than children, with 40 percent having more than ten, 14 percent having one to ten, and almost one-half (46%) having no Barbie dolls. Adults (those 20 years or older), not surprisingly, had the fewest number of Barbie dolls. Fifty-eight percent had no Barbie Dolls, 17 percent had ten or under, and 25 percent had more than ten.

II. The Results

A computer file was created from the statements on comment forms, along with the demographic and background data recorded on them. All the statements were then coded according to their content, using QSR NUD*IST,⁵ a program that allows text segments to be assigned freely to codes, and that provides extensive searching and indexing functions. Statements were labeled with as many codes as necessary to cover the range of their meaning. The program was also used to summarize the demographic characteristics of those who made comments. The coding structure was revised as new categories emerged in the process of assigning codes or as old categories were folded together (See Figure 1). After the diagram was completed and all comments are coded, those with the same code were read together in order to clarify the implications of each code. The following summary of opinions arose from this final stage of the analysis.

⁵ Revision 3.0.5 for Macintosh. The program is developed by Qualitative Solutions and Research Pty Ltd. and distributed by SCOLARI, Sage Publications Software.

Figure 1
Coding Structure for *Flight Time Barbie* Comments

RESPONSE CATEGORIES				
Exhibition Presentation	Exhibition Judgment		Exhibition Appropriateness	Barbie
	Like	Dislike		
Small	Love it	Hate it	Good for kids	Good image
Humor	Memories	Disappointed	Popular culture	Bad image
Other	Kids like it	Commercial	American History	Ethnic diversity
			Wrong for NASM	

In response to the three questions at the top of the comment forms (Were you surprised to find this here? What did you think of the exhibition? What comments do you have?), the comments clustered around two central themes: personal like or dislike of the exhibition and the appropriateness of the exhibition. Some visitors also made a distinction between the concept of the exhibition and its execution.

For the reasons cited at the start of this article, the frequency of particular opinions among the comments cannot be used to estimate how many of the overall audience felt that way.⁶

Like and Dislike

Like or dislike of the exhibition concept was strongly influenced by an individual's attitude towards Barbie. Young females were especially enthusiastic about both Barbie and the exhibition. The median age of females who made the most enthusiastic comments about either the exhibition or Barbie dolls was around ten.

I was very surprised to find Barbie in Flight! The first exhibition came out before my birth. But the second one I remember when I was young. I believe this exhibition is great, I love Barbie and I have 18 now. I hope this exhibit can be everywhere. Barbie is best-selling. She is a friend to all. The creator of Barbie should get an award. I love Barbie! Barbie is great! Barbie's the best! Go Barbie! (female, age 10, non-local, visited NASM 1-10 times, owns 18 Barbie dolls)

Not all of Barbie's greatest fans were young. A 45-year-old woman with a collection of 200 Barbie dolls said,

⁶ Cited comments are quoted in their entirety. The presentation of results in the following section does not exactly follow the structure of response categories, since it is derived from a careful consideration of the statements contained in those categories.

Yes [I was surprised], and as an avid Barbie collector, I'm very pleased you chose Barbie to show the strides women have made in flight - stewardess to astronaut! Way to go, Barbie. I love the exhibit. Now I want to find the Shimmerons in the doll shows to bring my Barbie in aviation collection up to date. Thank you for including Barbie.

Those who did not like the exhibition fell into two clearly different categories: those who strongly disliked Barbie dolls or the idea of the exhibition, and those who were disappointed by the exhibition's presentation.

The majority of the individuals who expressed strong dislike for Barbie or the exhibition were male, and nearly all of them do not own any dolls. They are not Barbie's fans. Some of them, especially eleven- and twelve-year-olds, do not give elaborate reasons. Their response is emotional:

It was horrible. (male, age 11, D.C., visited NASM over 10 times, owns no Barbie dolls)

Why do you have a display of Barbie Dolls? They look like the ones you can't buy in stores. They're dumb. (female, age 11, non-local, first time to NASM, owns no Barbie dolls)

Some older visitors felt just as strongly:

Ridiculous garbage. Get rid of it. (male, age 30, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Expectations

Many visitors who expressed a favorable opinion of the exhibition concept were unhappy with its execution. A 35-year-old woman from the local area who is not a collector, put her disappointment succinctly, "Yes, very disappointed. Didn't capture the true spirit of Barbie." A 40-year-old woman from the area said, "What happened to the rest of the exhibit? We brought out-of-town guests here especially to see it, and we were all greatly disappointed." A 72-year-old woman who owns 100 Barbie dolls was also frustrated, "From all the advertising hype on the BIG Barbie and Ken exhibit, this is very disappointing. I expected to see a beautiful exhibit of dolls and accessories, and there is nothing!"

Too small. The core complaint was its small size. Those who wanted to see a larger exhibition included the complete range of ages, genders, residence, NASM experience and Barbie ownership. Here is a sample of their remarks:

I have read about this in several publications and expected much more than two small cases. Very disappointed in this display, I came to this museum solely to see it. (female, age 61, non-local, first visit to NASM, owns 250 Barbie dolls)

I was excited when I heard about the Barbie exhibit and so I came today to look at Barbie - that's the only reason & all I found were 2 cases of Barbies - what a waste of a trip. Don't make such a big deal over tiny exhibits! Please, it would have saved me a lot of time & energy. (female, age 15, non-local, visited NASM 1-10 times, owns no Barbie dolls)

That's it? I think that it could have had a larger exhibit, the write-up in the Washington Post told us more. (female, age 44, visited NASM 1-10 times)

I was very upset that it was so small. My cousin invited me here to join the Barbie celebration, and I live in Arizona. I wish it would have been bigger! I hope next time you have another exhibit it will be bigger. I loved the Barbies but I just wish it would have been bigger. (female, age 11, non-local, visited NASM 1-10 times, owns 10 Barbie dolls)

I was surprised that Barbie of all things was here. The only thing I disliked was that it was so small. It was sort of a let down. "That's all?" is what I thought. But I do enjoy the Air and Space Museum. It is so interesting. Keep up the good work! (female, age 12, local, visited NASM over 10 times, owns no Barbie dolls)

It was a rather small exhibition. The map led me to believe it could be much larger. The previous exhibit that I had seen in this area occupied most of the hall. Is this all you could find? You have more Snoopy material. I am disappointed. (male, age 45, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Somehow I expected more. You can do better than this. Was this some sort of joke? (female, age 60, local, visited NASM over 10 times, owns no Barbie dolls)

Better presentation. Visitors suggested other ways, in addition to size, that the exhibition could have been improved. Their remarks suggest an expectation that an "exhibition" will include clear labels, a fairly extensive interpretive structure, live people or large objects, and presentations in different media.

At the most basic level, visitors recommended clearer labeling:

The Barbies are neat, but you should put name tags on them so you can tell who is who. The exhibit is great. I love it." (female, age 10, non-local, first time to NASM, owns 2 Barbie dolls)

A little brief. Expected more to see. Labels not clear as to which Barbie it applies to. Exhibit should be more spread out. (female, age 15, non-local, first time to NASM, owns 6 Barbie dolls)

I wish the descriptions, especially of the military uniforms, had more details-unit, etc. Very good. Space outfits also need more detailed descriptions. (female, age 48, D.C., visited NASM 1-10 times, owns 150 Barbie dolls)

Some thought there should have been a more extensive interpretive framework:

Very surprised. Didn't think it was an exhibit, just a collection. Thought it was a bunch of dolls on stands. It was absolutely disappointing and barely 1950s. (age 38, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Saw a write up the City Paper. This is a sad, pathetic exhibit. Not that I am a big Barbie fan, but I was expecting a little more social commentary with historical perspective. (female, age 24, D.C., first time to NASM, owns no Barbie dolls)

This was disappointing. Anyone can throw dolls in a case, where is the exhibit? Creativity? You failed as entertainers of Barbie collectors. I hope that Barbie remembers how you treated her. (female, age 35, non-local, visited NASM 1-10 times, owns 27 Barbie dolls)

We came on purpose especially for this exhibit. My 3 year-old son loves Barbie. More for grown-ups to read and maybe a photo spread would have been interesting. (female, age 35, non-local, first time to NASM, owns no Barbie dolls)

Interesting, but not enough. I expected more material. It seems as if the museum didn't take this exhibit seriously. Text was superficial. You could have done better! (female, age 32, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Yes [I was surprised]! Loved it! Wish it were treated more as a real exhibition. The installation seems like an afterthought, stuck away in a corner. Considering the publicity it got, I expected the exhibition to be more substantial. It would have been nice to have an illustrated brochure, too. (female, age 59, non-local, first time to NASM, owns no Barbie dolls)

Some young visitors expected to find people dressed as Barbie or life-sized Barbie dolls in the exhibition. They may have been influenced by presentations they had enjoyed in non-museum settings:

I think it's an interesting idea but it needs to be bigger and maybe have some life-size Barbies. I was not surprised to find it here. I think it is very creative and it draws different people to the museum (especially kids). (female, age 16, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I would like to see a human being dressed as Astronaut Barbie. (female, age 8, non-local, visited NASM 1-10 times, owns 50 Barbie dolls)

Exhibit too small - we wanted more Barbie! We want movies of Barbie, pictures of Barbie in space, real Barbies (person dressed up like Barbie) who we could ask questions about space and have a good time with. That's what we'd prefer. (female, age 6, non-local, visited NASM 1-10 times, owns 20 Barbie dolls)

Some visitors sought interactivity or movement, rather than static displays:

I was surprised that this was all there was. The same in which this had been advertised through newspaper articles and other reports. I thought there was a more elaborate exhibit with Barbie in astronaut suit but actually in a spaceship, etc. No lights, no movement, no spectacle? I came all the way from home for this! Very disappointing. (female, age 30, local, visited NASM 1-10 times, owns 4 Barbie dolls)

You should have more interactive activities and maybe even a play area/play room like the Liberty State Science Center!! But, overall, not that bad! (female, age 14, non-local, visited NASM 1-10 times, owns 12 Barbie dolls)

Boring! You need more interactive stuff. (female, age 13, non-local, first time to NASM, owns no Barbie dolls)

This was a very interesting place. I think this is very cool! I was very surprised when I found out that Barbies had a lot of things in space and air. It would be a little more interesting if you had a real live astronaut come and talk to the children. (female, age 11, non-local, first time to NASM, owns 200 Barbie dolls)

A few visitors noted that the display was not fully accessible to young children:

The exhibit is too tall for little ones. The case should be lower. (female, age 65, non-local)

I think this is great - it's interesting to see the historical perspective of Barbie going from stewardess (aka flight attendant) to Desert Stormtrooper (interesting choice of words). I think a survey of any "female-related" flight information is especially important to young girls. I think as well the explanation of cultural significance of each era is great. Have you thought about placing the information lower down to make reading more accessible to children? (female, age 41, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Some visitors who were drawn to the display idea longed for a more comprehensive presentation in general:

I was both pleased and disappointed with this exhibition. Pleased because the exhibition, although small and spatially marginalized, considers the important reflections for our culture and lifestyles that toys make. A more ambitious exhibit might have included other "flight specific" toys and now they are used as instruments of gender identification. I am especially displeased with the phrase "number one girls toy brand". Did the curator not have brothers who played/destroyed w/Barbies? "toy brand" will suffice. Specifying it as a girls toy brand undermines your message. But, overall, thanks for a wonderful exhibition idea. You caught people's interest. (female, age 23, local, visited NASM 1-10 times, owns no Barbie dolls)

I was very surprised and sorry to find this exhibit in the museum. The exhibit does not analyze the impact Barbie has had on American culture and how people view women's roles in the flight industry. It seems only to be a "cute" form of advertising for the Mattel Company. Americans expect to find interesting, informative, educational displays in the Smithsonian; not advertising for a toy company. If Barbie must be in the Smithsonian, she belongs in a display about American toys at American History. I hope in the future you will put more time, effort and consideration into your displays. (female, age 16, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Knew the exhibit was planned, but was a little disappointed. There are a set of mass-market dolls. Perhaps context on the role of aviation in the Barbie line would help. Did Mattel develop prototypes, or models in larger sizes? They would make a good focus. (male, age 55, D.C., visited NASM over 10 times, owns no Barbie dolls)

The sense of disappointment was most acute for visitors who had heard about the exhibition through the media coverage it received. The exhibition was featured prominently in the press, on radio, and on television. As a result, many people assumed that *Flight Time Barbie* was a full-scale exhibition rather than a display of 32 dolls in two cases. A 23-year-old woman making her first visit to NASM wrote, "I traveled to D.C. just for this exhibit. I was VERY disappointed to find only two display cases. What a wasted three-day drive!!!"

Some came from even farther away. A 17-year-old girl who does not own any Barbie dolls wrote,

I have traveled to Washington, D.C. three times. I was here last week and was very excited to hear that Barbie was coming, so excited that I traveled all the way from California to see her! Now that I am here I am very disappointed in the display as well as lack of Barbie merchandise. I will never forget this and although I love D.C. and plan to return I will always remember your treatment of Barbie. (female, age 17, non-local, owns no Barbie dolls)

Visitors came from other countries just to see this show. A 63-year-old male who lives outside the United States said, "We have been planning this trip ever since we saw its name in the paper earlier this month. But it is disappointing. My girls expected more."

The distance record among those who came to see Barbie may belong to the 63-year-old man and Barbie collector (with 300 Barbie dolls) making his first visit to NASM who wrote, "I come all the way from Japan. Too small!"

Appropriateness

Even visitors who loved Barbie and were pleased by the exhibition did not ignore the larger issue of why it was being presented at NASM. An eleven-year-old girl expressed approval when she said, "I really liked it because I love Barbies but I'm not real interested in space. This made my trip interesting. I hope you do this kind of stuff again." A nine-year-old girl who owns 95 Barbie dolls put it differently, "I love Barbie! This exhibit is great! But it is weird that this exhibit is at the air and space museum. I like the way you tried to make it like space and an airport to fit in better."

A 37-year-old male, owner of 210 Barbie dolls, expressed this ambivalence most directly, "What the hell does Barbie fantasy have to do with the great actual accomplishments of Apollo, Gemini, SS-20/Pershing, etc.? We collect Barbies and love her, but this is a waste of taxpayer's money."

Yes, NASM should do exhibitions like this. Some visitors, although surprised to see Barbie at NASM, accepted her presence in the museum without any difficulty. Here are a few examples.

This is a really cool place. I was very surprised. I love this exhibition. This is my third day here and my last and this is the best exhibition by far. Keep up the good work. This museum is a very successful place and it will continue to grow in many ways. Thanks. Keep up the terrific work!! (female, age 14, non-local, NASM 1-10 times, owns no Barbie dolls)

Wow! I was very surprised to find this here of all places. But it does fit in nicely with the space "memorial" theme. Calling Barbie a girl's doll is extremely sexist, especially since you did not justify it by putting it in quotes. What & where is the "Popular culture collection of the NASM"? Is this part of your mission statement? How much control did Mattel have over this exhibit? You could have broadened the range of objects by including other space-related toys, especially that relate to "women". But I am glad this was part of the museum. Please display more objects from the popular culture collection which explore the gender roles in the air & space industry. Nice big comment card - I like having room to write! Thanks. (female, age 24, local, visited NASM 1-10 times, owns no Barbie dolls)

Yes, I was surprised to see Barbie here. Nowhere else, possibly!! As a mother of two daughters, and gram of six granddaughters, I know of their infatuation with Barbie. As a part of this culture collection, I find Barbie right at home. (female, age 69, non-local, first time to NASM, owns no Barbie dolls)

It interests children. As one might expect, a number of visitors favored the idea of the exhibition because they knew it appealed to children and felt that more child-oriented exhibits were important for the museum.

Yes, I was surprised. My daughters love this exhibit. She spent almost a half hour in front of it. She wants to collect it. I wish you had more children's items for 5-10 year old kids. (female, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Yes [surprised]. Cute. They should have more exhibits like this for little kids. (female, age 8, foreign, first time to NASM, owns 3 Barbie dolls)

Yes, I was very surprised to find Barbies here. I think it's neat to see Barbies from a long time ago. I think you should keep putting Barbies in from every year, it will interest young people. (female, age 11, non-local, first time to NASM, owns 12 Barbie dolls)

I was very surprised to find that sort of collection in here. But I think it's a good idea, while also "little" children can find out something with air and space, if something like this is here to attract them. Then they want to know more, like what? where? why? A great idea, just make it bigger next time (female, age 16, foreign, first time to NASM, owns no Barbie dolls)

Yes I was quite surprised to discover a Barbie section. I think it's a good idea - a nice change and contrast to the rest of the museum. Very interesting - you should make it a bigger thing. It would certainly appeal to kids. The exhibition was too small - you could make much more out of it. (female, age 19, foreign, first time to NASM, owns no Barbie dolls)

I thought this was a great comparison of how Barbies and space exploration developed. I must admit, I was surprised to find this, but my kids love it! I am glad that there is something for the little ones to check out. And it makes me remember my little dolls. I really enjoy seeing how you have made a thing like "desert storm" something kids can understand. (female, age 29, non-local, first time to NASM, owns 20 Barbie dolls)

I think the Barbie exhibit is very positive - especially since it intrigues the interests of young children. "Barbie" has been a cultural phenomenon and if it helps children to appreciate the possibilities of space/space travel it's worth it. (female, age 38, non-local, over 10 times to NASM, owns no Barbie dolls)

It interests girls and women. Many female visitors were aware of the fact that NASM is more interesting to males than to females and they saw this exhibition as valuable primarily because it would interest girls and women.

My daughter enjoyed this display. I was surprised to see it. Maybe this will get girls more interested in space. (local, first time to NASM)

Yes [I was surprised]. It struck us as odd, but we did continue to examine it. It's something for little girls in a museum mostly young boys enjoy. (female, age 16, non-local, visited NASM 1-10 times, owns 15 Barbie dolls)

Pleasantly [surprised]. This museum needs more exhibits like this--more popular culture, less macho-related concerns. (female, age 47, foreign, visited NASM over 10 times, owns no Barbie dolls)

I was very surprised to see the Barbie collection together with all the space things, but it's good to show the collection. I think that the girls will wake up and think that it is interesting to know about space. (female, age 13, foreign, first time to NASM, owns no Barbie dolls)

[Written by parent] Yes [surprised]. "Please have more!" "My brother can see the space ships - I'll go see Barbie anytime" (female, age 4, non-local, first time to NASM, owns 20 Barbie dolls)

I was surprised. But a wonderful exhibit, because sometimes only boys are fascinated with astronauts and space. With the Barbie exhibition, the girls can thoroughly enjoy also! (female, age 22, local, first time to NASM, owns 33 Barbie dolls)

I was very, very surprised. I thought it was cool. I wish it was much bigger. Thanks for adding something cool for girls. (female, age 11, local, visited NASM over 10 times, owns 110 Barbie dolls)

I was surprised and delighted, although I'm no more interested in Barbie than I am in this museum. Why I liked Barbie was because I could at least relate to it. My husband and every other man I know loves this place and could stay here for days. (female, age 70, non-local, visited NASM over 10 times, owns no Barbie dolls)

Great way to display various roles women have & continue to play in aviation. Glad to see Barbie made it to Captain and AF Thunderbird pilot, and astronaut! Need more to encourage girls to be interested in aviation careers (female, age 39, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Was surprised. Great idea - especially for girls. Great to show young ladies the evolution of "Women in space" opportunities. Anything to keep all interested in space exploration. (female, age 65, non-local, owns 6 Barbie dolls)

Great! Need more exhibits that are relevant to children, especially girls. From little girls playing Barbie to leader of Thunderbirds will come women to expect to be leaders of Thunderbirds! Yes! (female, age 45, visited NASM over 10 times, owns no Barbie dolls)

It shows America's history. Visitors who responded conceptually to the exhibition noted that it reflected American popular culture and the changing perceptions of the roles of women. These visitors were almost exclusively adults. First, here is a sample of comments that linked Barbie with American culture in general:

Barbie reflects our culture--easy to see here. (male, age 39, local, visited NASM 1-10 times, owns no Barbie dolls)

I was surprised - but enjoyed it very much. It is definitely a part of Americana and it was interesting to see the changes through the years. (female, age 42, non-local, visited NASM 1-10 times, owns 50 Barbie dolls)

I was surprised, but I found it interesting because the exhibit reflected the society that the dates indicated (female, age 33, non-local, visited NASM 1-10 times, owns 15 Barbie dolls)

What a riot! We loved it - a surprising reflection of America space-flight path. (female, age 40, non-local, first time to NASM, owns no Barbie dolls)

Representation and popular conception/constrictions of space are perhaps some of the most fascinating discursive modes representative of our technology-reduced culture. Interestingly, while the Barbies here seem to embrace technology and science, Barbies quip "Math is hard." This paradox is highly symptomatic of American culture at once seduced by and hesitant/afraid of science. Keep up the examinations of popular culture. (male, age 31, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Changing Views of Women. When visitors spoke more specifically about the message of the exhibition, they usually pointed to the changing views of women, as in the following comments:

Pleasantly surprised. It's an innovative idea that could bring a little fun with some knowledge of how women have progressed in flight & U.S. society (male, age 31, non-local, visited NASM over 10 times, owns no Barbie dolls)

Yes, I was surprised - but what a neat idea! It is interesting to see the advance in attitude towards women - from stewardess/service to "whatever she wants to be". I hope maybe you can find a permanent spot in an appropriate museum for the exhibit. (female, age 63, local, visited NASM 1-10 times)

Surprised...yes! I thought it was great, but I was hoping for more! I enjoyed seeing Barbie progress from more passive role to professional astronaut (female, age 38, non-local, first time to NASM, owns no Barbie dolls)

I was surprised to find this here. Always good to refer to culture past and current. Good evidence of woman's increase in career choices. Who says science can't be fun!! (female, age 43, local, visited NASM 1-10 times, owns no Barbie dolls)

Yes [I was surprised]. Interesting. Our granddaughter's liked it very much - age 8 & 10. It shows that ideas come to us in advance of things happening. Ideas can be listened to this way and used advantageously. This often happens. (female, age 55, non-local, visited NASM 1-10 times, owns no Barbie dolls)

We were pleased to see the progress of Barbie from an ornament to a leader. Thank you from my daughter and myself! (female, age 38, non-local, visited NASM 1-10 times, owns 11 Barbie dolls)

A worthwhile example of popular culture and changing gender roles. Now how about an exhibit about the contributions of real women? (female, age 26, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Great! It's wonderful to see how peoples' views of others and themselves have grown. It's great to be able to share the past and present attitudes with my children. Thank you! (female, age 27, non-local, visited NASM 1-10 times, owns 5 Barbie dolls)

I thought it was very interesting to see how Barbie changed over the years. For instance, how in the 1960's she was a flight attendant then changed in the 1990's to the pilot. (You might want to make the exhibit a little longer.) (female, age 10, local, visited NASM 1-10 times, owns 30 Barbie dolls)

It brings back memories. *Flight Time Barbie* inspired some women to think back on their childhood.

Yes, [I was surprised]. It's great. Barbie brings back lots of great memories and she is an accurate reflection of our culture throughout her lifetime. (female, age 36, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I remember playing with the Friend Airlines with my friends. What a neat surprise to see that here! I think 'fun' exhibits are as educational as any other. (female, age 26, non-local, first time to NASM, owns 12 Barbie dolls)

We were pleasantly surprised to find Barbie in a national museum. As women in our early twenties, this exhibit reminded us of the fun we had as young girls. This is an inspiration to children to see Barbie as an astronaut, but I do not think they do her hair like this in space. (female, age 21, non-local, visited NASM 1-10 times, owns 12 Barbie dolls)

Common experience. A few comments suggest that the exhibition provided an opportunity for mothers and daughters to share common experiences:

I was surprised to find Barbies here. My mother thought it was cute. She said she used to have her own. It was very neat. (female, age 12, non-local, first time to NASM, owns 20 Barbie dolls)

Yes I was [surprised]. It was cool. I like seeing my Mom's Barbies and my Barbies. (female, age 8, non-local, first time to NASM, owns 52 Barbie dolls)

It offers good role models. There was a sharp difference of opinion between those who saw Barbie as a role model for little girls and those who regretted Barbie's influence over children because they saw her as an unreal or sexist image. Visitors who saw Barbie in a positive light tended to approve of the exhibition.

I thought it was cool because it showed Barbie as a positive female role model involved in previously male-dominated career areas. I was kind of surprised to find Barbie in the Smithsonian Museum, though. (female, age 16, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I'd heard about this on the news, so it didn't surprise me. I thought the exhibit would be longer, though. I heard someone say, "That's good; it teaches girls they can grow up to be something besides housewives or schoolteachers or stewardesses." My thoughts - I like the way Barbie has developed, & the way the museum has shown this. I think it would be better if the big pink poster info had been put with the dolls, though. I love the NASM! (female, age 24, local, visited NASM over 10 times, owns no Barbie dolls)

Our children need role models. There are so few for young females. To make a vision visible is a great thing to do. Advertisement does a great part, but also children's play. If girls find a way to get their visions being astronauts, this is perfect. I am on the board of EWMD in Brussels, Belgium, the European Women's Management Development Network. (female, age 35, foreign, first time to NASM, owns no Barbie dolls)

I am always glad that Barbie portrays real people, not super heroes or Ninja turtles. What Barbie does is set role models for real aspects of life. (female, age 41, non-local, first time to NASM, owns 1 Barbie doll)

I thought it was the greatest thing I ever saw! Barbie is a real woman--doing real jobs. Thanks. No Power Rangers. (female, age 16, non-local, first time to NASM, owns 9 Barbie dolls)

These Barbies are so cool. I like the different air/space outfits. It makes me more interested in space - I know what Barbies are about, this was great! Ladies can do the air/space things they want. (female, age 8, non-local, visited NASM 1-10 times, owns 4 Barbie dolls)

It was cute. Please continue to have Barbie be a strong, intelligent role model. She's had to come a long way. More dark-haired and darker-skinned Barbies and a smaller bust line would help. (female, age 25, local, visited NASM 1-10 times, owns no Barbie dolls)

Barbie, what can I say, she brings out the universal child in us all, the many roles, the many professions, the possibilities; everything seems possible! The opportunities, wow. (male, age 55, foreign, visited NASM over 10 times, owns 4 Barbie dolls)

What fun! Nice to see all ranges of ethnic Barbies. Barbies have been too easily dismissed culturally. They actually provided some role models. Just wish they didn't look so anorexic! (female, age 55, non-local, visited NASM over 10 times, owns no Barbie dolls)

This is my fifth visit to the Air & Space Museum. I was looking forward to see the exhibit of Barbies in Aviation. Although it is cute, it seems to be rather small. Of course, an entire gallery would be too big for this. However, a permanent display case (like the size by the gift shop) would be great! Barbie had a big influence on me as a young girl and I hope she will influence my daughters. Who knows, this exhibit could influence some young lady to become the first woman to explore our other planets! (female, age 41, non-local, visited NASM 1-10 times, owns 4 Barbie dolls)

A few visitors went so far as to call Barbie a feminist:

Barbie seems to be the most underrated feminist figure in modern pop culture. Years before American women were venturing into space, little children (and a fair number of adults) were launching "Barbie & friends" into the far reaches of the universe. One question, though, regarding Astronaut Barbie: Her hair looks a bit too long to fit under NASA regulations. (male, age 26, local, visited NASM over 10 times, owns no Barbie dolls)

It was quite nice to see the history of the Barbie Doll, especially as it relates to aerospace. I didn't realize how "feminist" the history of the Barbie truly is. However, as a feminist who happens to be African-American I was quite shocked to see no mention of Dr. Mae Jimeson, the first African-American woman astronaut. She made history during the 90's just as Eileen Collins and Peggy Wagstaff. It's nice to have black Barbie Dolls in the exhibit as a show of diversity. However, the Smithsonian's commitment on what African-American women (and America's other ethnic groups) have contributed to the aerospace industry! (female, age 25, local, visited NASM 1-10 times, owns no Barbie dolls)

As if in response, one agitated visitor commented angrily on the idea that Barbie might be encouraging girls to consider careers outside the home:

This is disgusting! It only promotes "women above men" - not equality! What is wrong with women as mothers and housewives? However, we all know Heyman would never promote women as moms or housewives. It's not part of his "political agenda" which our tax money and my membership pays for! (female, age 60, non-local, first time to NASM, owns no Barbie dolls)

Even among those who approved of the exhibition, however, there were some suggestions that Barbie's value as a role model is a contested position:

Yes [I was surprised]. Weird. It was kinda good for the younger people to see. A little more exciting than other exhibits. It could have been bigger and, well, some people think she's dumb. But some, a role model... (female, age 14, non-local, first time to NASM, owns 2 Barbie dolls)

Yes, I was surprised - but pleased. In its own way, the Barbie exhibition reflects growth, but just like Barbie, the exhibition is attractively packaged. There is nothing wrong with an attractive exterior, if there is something meaningful inside. As a practicing physician, and as the mother of a teen bent on becoming a civil rights lawyer, I do believe first impressions count. (female, age 42, non-local, first time to NASM, owns no Barbie dolls)

No, NASM should not do exhibitions like this. Visitors who disliked the exhibition or thought it inappropriate included both genders and a wide range of ages, but most of them do not own any Barbies. Some of them may have negative feelings about Barbie in general, as suggested, for example, in these remarks:

Yes, I was surprised to find this exhibit here. I also think it is an insult to mankind. It's like Barbie taking over the universe. The only thing I want astronaut Barbie to do is pee in her pants during launch like John Glenn. (male, age 12, local, visited NASM over 10 times, owns no Barbie dolls)

I was very surprised. But that's life. Boring!! Why do you have Barbies in the space museum? (female, age 14, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Get a clue. Whose idea was this? Waste of space. (female, age 31, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Yes, I was surprised. What exhibit? Pleased to see that more space was not used. (female, age 50, local, visited NASM 1-10 times, owns no Barbie dolls)

Inappropriate to NASM's mission. Some visitors did not accept the Barbie imagery as part of air and space history and, hence, rejected the exhibition as inappropriate:

Yes, I was surprised to find a Barbie exhibit here-- Not being fond of Barbie and all she represents, I don't enjoy the exhibit. But-whether it should be here depends on whether the purpose of the museum is to show all related to air and space, including the popular culture, or whether it is related to scientific/historical aspects of air and space. (female, age 46, non-local, first time to NASM, owns no Barbie dolls)

This is it? Sorry, I just don't see how Barbie relates to time and space. This is sexist, tasteless and poorly displayed. I expect more from such a wonderful museum. It is totally inappropriate. I really think that if you were going to choose something sooo ridiculous to display on, you could have presented it better. (female, age 12, non-local, first time to NASM, owns no Barbie dolls)

I didn't think there would be a Barbie doll exhibit in such a famous museum. I personally find it dull and unrelated to the science of aeronautics. I definitely would not miss this exhibit if it were not here. I think the museum should be for more scientific important exhibits. I could care less about the history of Barbie dolls. (female, age 14, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Yes, I was [surprised], even though I read about it in the Washington Post. Really does not seem relevant--but good publicity for Mattel. (female, age 73, local, visited NASM 1-10 times, owns no Barbie dolls)

I think that it is strange to have Barbie dolls in a space (flight) history museum. I mean, what is the point? If people didn't want to see the history of flight and space they wouldn't be coming here. It's kind of a pointless unfitting display. (female, age 21, local, visited NASM 1-10 times, owns no Barbie dolls)

Not enough space in NASM. A few visitors protested the exhibition on the grounds that the space it took up could be better used:

Yes [I was surprised]. Considering how often your museum seems to complain about the lack of space it has available to display the many items that are in its collection, I am rather surprised to find this display here. It seems as if this space could have been better utilized. On the display itself, it just doesn't have anything to do with aviation or space history. In fact, it seems to have little to do with history, period, since over half of the items in the display were produced during 1987 or later. I am somewhat disturbed that the display seems to be more a promotion for Mattel toys than an educational tool. Such displays make me reconsider whether or not Congress should continue funding your museum and its projects. Perhaps if you wanted to do a future display that would illustrate the "expanding choices" available to women today, you could do a display on "Women in Aviation Art" focusing on Amelia Earhart, Mary Haizlie, Jackie Cochran and Amy Johnson, among others. This would be much more appropriate for your museum. (male, age 35, local, visited NASM over 10 times, owns no Barbie dolls)

Yes [I was surprised]. An incredible disappointment to see the Smithsonian produce such a ridiculous and superficial exhibit. This could be included in a larger toy/popular exhibit, but all the hype surrounding this is uncalled for. Your space should be better utilized. (female, age 29, local, visited NASM 1-10 times, owns no Barbie dolls)

It belongs in another museum. Among visitors who rejected the exhibition idea, as well as among those who accepted it, were those who felt that the exhibition should have been presented in another museum. The National Museum of American History was specifically cited by visitors as a better location for Barbie.

I was expecting more of an actual Barbie show with more perspective than only space and air travel Barbies; however, considering this museum focuses on that, it seemed appropriate. I thought it could have been larger and less cluttered. It was a surprise to find this here; it may have been better in a different museum as more of a feature in "history of Barbies" sort of thing. I also thought the description was a bit narrow. It was essentially too much of an ad for Barbies rather than an objective show. (female, age 14, non-local, first time to NASM, owns no Barbie dolls)

While I appreciate that you're trying to show U.S. historical objects: 1. Please leave this type of display to the "day-to-day" section of the Museum of American History 2. Educate the children of the U.S. through lessons that emphasize the real, not fake and superficial. Note: this doll has done a great job of messing up many girls' expectations of what their body should be. Shame on you! (female, age 43, non-local, visited NASM 1-10 times, owns no Barbie dolls)

You did a nice job displaying the dolls, but I wish you had more dolls on exhibit. Overall, I expected to see more dolls on display, so I feel a little let down. An exhibit of all Barbie dolls would be more appropriate for a national museum. (Probably in the Museum of American History) If you plan on doing a more in-depth exhibit, I would lend some of my Barbies and accessories. (female, age 19, local, visited NASM over 10 times, owns 150 Barbie dolls)

Loved it - I think it's time for a room in American History museum! They should bring these dolls back. The evolution from German Barbie to then to now to the Happy to Be Me Doll would be one interesting thing too. Interesting how Barbie does all this stuff before women could do it. (female, age 24, local, visited NASM over 10 times, owns 2 Barbie dolls)

As a child in the late 60's and early 70's Barbie was an important part of my life. I'm sure others feel as I do, that a permanent exhibit of Barbie and her accouterments should belong in the Museum of American History. I think it would be a real draw. (female, age 31, non-local, visited NASM 1-10 times, owns 10 Barbie dolls)

This exhibit is too small; makes it painfully clear that a full-fledged Barbie exhibition needs to be staged at the American History Museum. (male, age 34, local, visited NASM 1-10 times, owns no Barbie dolls)

This is totally inappropriate waste of museum resources! It belongs at American History, not in NASM. (male, age 43, local, visited NASM over 10 times, owns no Barbie dolls)

I knew this exhibit was supposed to be here. I thought it would be larger. I think a Barbie exhibit should be included in the Museum of American History because these dolls have had a major impact on American life. (female, age 35, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I enjoyed this exhibit and wish that: a) it could continue beyond Sept. 4; b) it could have been presented in a less superficial manner, could have included more information (for example, why did Mattel show an Astronaut Barbie in 1965, when there was little reason to expect high demand for such a doll at that time?) P.S. If you cannot continue this exhibit beyond scheduled closing date, perhaps you can suggest to your colleagues at Natl. Museum of American History the possibility of their putting together a Barbie exhibit with a more general theme. Surely Barbie is as important an icon and a much more important mirror than an Archie Bunker chair. (female, age 38, non-local, visited NASM 1-10 times, owns 1 Barbie doll)

It is too commercial. Some visitors expressed concern over what they saw as "commercialism" in the display:

Yes I was surprised to find it here. I think it is an example of gross commercialism. I hope at least that the museum is getting a lot of money from "Barbie" as "Barbie" is getting from the girls who "have to" buy at least one costume. (female, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Flagrant commercialism. Not appropriate as an aviation or space hero. Mattel sure got its advertising. (female, age 45, local, visited NASM more than 10 times, owns no Barbie dolls)

You are advertising a product - others should be given the same consideration. I would have liked to have seen something on Captain Video or Buck Rogers. This was not relative to history of flight in the true sense of the word. But the rest is fantastic!! (male, age 53, non-local)

Nice job (as usual)! Shows "that was then...this is now" Free ad for Mattel but that's o.k. since Barbie does help to shape young girls'/boys' perceptions. (female, age 41, local, visited NASM over 10 times, owns 4 Barbie dolls)

Barbie fans, however, often asked for more Barbies and Barbie materials to buy. They had no objections to commercialism:

I like the Barbies. I think you guys should sell Barbies because I don't have Barbies. I need them. (female, age 12, local, first time to NASM, owns no Barbie dolls)

I loved it. I wish you would sell the old ones in the store, and I just loved it. (female, age 10, non-local, first time to NASM, owns 17 Barbie dolls)

I was surprised, and this is what brought me to the museum today. Very disappointed that gift shop was sold out of Barbie cards. (female, age 35, non-local, first time to NASM, owns 112 Barbie dolls)

I really liked the exhibit. I would have liked to have seen Barbies of other races (Asian and Native American) in the exhibit. Also, it would have been

super if you had commemorative Barbies for sale in the gift shop to coincide with this exhibit. Thanks for including the African-American Barbies!
(female, age 35, non-local, visited NASM 1-10 times, owns 12 Barbie dolls)

I liked your exhibit. I am 7 years old. Are your dolls for sale? Thank you. Someday I would like one. I would like more on the display of spaceships and planets. Have children-size spaceships for one to sit in and look through windows to observe the surface of planets and outer space. Thank you.
(female, age 7, non-local, first time to NASM, owns 5 Barbie dolls)

Barbie is a bad role model. Some visitors felt quite strongly that Barbie is a bad influence on girls and certainly not an appropriate role model:

Yes [surprised]. It doesn't belong in a science museum. There are so many real women who have contributed to science that a doll that mainly makes women and girls feel bad about their appearance doesn't belong where girls should be finding intelligent role models. (female, age 38, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Why is beauty a central characteristic of an astronaut? Where are provocative questions about role of women, role of African-Americans, role of minorities? What effect does Barbie have on the self-esteem of the children who use them e.g.. overweight, short, poor. What influence do dolls have as role models? How educated is Barbie? Is Barbie within the normal height/weight, etc.? (female, age 47, non-local, owns no Barbie dolls)

Barbie is a bad influence on young girls. She is a beautiful, wealthy, popular woman who didn't have to work for anything. Barbie doesn't respect diversity and she stands against all self-confident values. We need a more diverse, realistic model for our children. (female, age 14, non-local, first time to NASM, owns 29 Barbie dolls)

I think this is a disgrace to the American culture. It is degrading to women. And I think this display was done in poor taste. (female, age 63, local, visited NASM over 10 times, owns 47 Barbie dolls)

I think that this exhibit is a waste of money & space. Barbies are poor examples of women and are ridiculous. To waste money on Barbie dolls is an unwise and useless investment. They do not provide proper role models for young children. (female, age 19, local, visited NASM over 10 times, owns no Barbie dolls)

The glorification of Barbie sends out a re-enforcement of typical stereotypes of Americans to foreign visitors. I don't like it. (female, age 20, local, visited NASM over 10 times, owns no Barbie dolls)

This exhibit supposedly portrays Barbie as a model for women's roles and progression in career roles in society. I fail to see the significance of the very few and scant productions of Barbie in "real world roles and careers." All the

Barbies I've seen on shelves when going to purchase them for my daughter are either scantily-clad or "Cinderella types" waiting for Prince Charming in elaborate ballroom gowns. When Barbie producers make a concerted effort to provide a 90's version of career choices and options available to the young girl today... perhaps this display will have relevance. If you don't believe me... take a walk into any toy store and see how easily you can find Barbie's offering depicting true career choices other than the above two mentioned choices - beauty contestant or Cinderella Barbie. Thank you!! (female, age 38, first time to NASM, owns no Barbie dolls)

Some visitors who rejected Barbie as a role model took the exactly opposite position of those who saw Barbie as a feminist image. They viewed her as a sexist stereotype:

I'm insulted. Barbie is no feminist and Mattel is catering to the lowest common denominator in sex stereotyping. The Air and Space Museum is insulting all people by utilizing Barbie as the "model female" rather than the real heroes found in Sally Ride and Christa McAuliffe. (female, age 22, local, visited NASM 1-10 times, owns no Barbie dolls)

Barbie is a sexist toy & should not be getting publicity in a federally-funded museum. This is a waste of space & money. (female, age 19, local, visited NASM over 10 times, owns no Barbie dolls)

Oh, gee - Flight Barbie? How cute. I especially like the form-fitting uniform that perfectly fits to her exaggerated body. What are this doll's qualifications? Does she cater to Flight Ken's every need? Mattel really knows how to make an adolescent girl feel good about her body and sex. How feminist. (female, age 20, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I liked it because...well, I don't know. It was kind of corny but everything was in good shape & it just appealed to me for some reason...even though Barbies are sexist. (female, age 11, non-local, visited NASM over 10 times, owns no Barbie dolls)

Off in the corner - I just noticed this exhibit. I understand why you don't show it that well. Barbie Dolls are sexist images of women. I do not like them - or your exhibit!! (female, age 14, non-local, first time to NASM, owns no Barbie dolls)

A little sparse - we were hoping to see more, not enough space and time devoted to an important American icon. Appreciate the gender-flipping roles - Barbie as pilot and Ken as steward, but unfortunately that does not devoid the Barbie Doll of its inherently sexist nature. (female, age 21, local, visited NASM 1-10 times, owns no Barbie dolls)

Other visitors objected to Barbie as a presumed role model because she seems so "unreal," especially in appearance:

Well, Barbie seems to have permeated our children's image of beauty since I was a kid. I brought my children here to experience the beauty & power of space. Too bad Barbie has invaded even this place. Instead of elevating her, she brings us back to Earth! (female, age 44, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Barbie does not portray the "regular" woman. Young girls are expected or feel like they need to have big breast, tall, and thin. I feel you need to make the doll more like real life. Barbie hasn't worked for anything, that is teaching our young girls to depend on men! Clean up your act. (female, non-local, first time to NASM, owns no Barbie dolls)

I hated it. Barbie is too ideal and unattainable - 36x24x34 for little girls to learn science from. (female, age 22, local, visited NASM 1-10 times, owns no Barbie dolls)

Yes [I was surprised]. It doesn't belong in a science museum. There are so many real women who have contributed to science that a doll that mainly makes women and girls feel bad about their appearance doesn't belong where girls should be finding intelligent role models. (female, age 38, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Nice exhibit, but... Barbie is an unrealistic portrayal. Who actually has a body like that? (female, age 19, non-local, visited NASM over 10 times, owns 4 Barbie dolls)

I understand the intent of the exhibit, but do not feel you achieved your goals. Real astronauts do not wear hot pink suits, & NASA would not allow a woman in space whose measurements were as unrealistic and unhealthy as Barbie's are. You're still perpetuating the stereotypes you intend not to promulgate. (female, age 21, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I am surprised by the gender-specific nature of this exhibit. It is clearly geared toward young girls, though it should pertain to both genders. Are young children to equate their scope of career opportunities to Barbie fashions? I know this isn't what you intended; I hope it isn't the result! (female, age 20, non-local, visited NASM 1-10 times, owns no Barbie dolls)

I loved my Barbie dolls but am happy that her image is changing with the times. If only they would change her face & figure. Too pretty and too shapely - not realistic. Young people need realistic icons. Too much pressure to look a certain way takes energies away from what's really important! (female, age 38, non-local, visited NASM 1-10 times, owns 2 Barbie dolls)

You shouldn't glamorize Barbie. She reflects much of what is wrong with our values today. (female, age 43, non-local, visited NASM 1-10 times, owns no Barbie dolls)

There are better ways to interest girls in space. Some visitors felt strongly that the museum should provide real-life role models for girls in the museum:

Yes [surprised] - actually disappointed to see Barbie here! (or anywhere for that matter!) Is this one of the ways to "attract" little girls to the NASM? What a terrible way to continue perpetuating an impossible beauty ideal for many little girls behind the facade of "advancements for women"! If this icon must be marketed (through Mattel's support) please keep it in a POP CULTURE museum! Girls and women should have other role models in the NASM! Why not an exhibit on Sally Ride or even the thirteen women who passed (and even surpassed) NASA tests during the early 60's? I am terribly disappointed; but in light of the Enola Gay's current exhibit, I cannot be completely surprised. Good luck. (female, age 28, first time to NASM, owns no Barbie dolls)

I can't believe that the only exhibit to interest little girls here is a two-case exhibit of Barbie dolls. What about Amelia Earhart or some other story line of interest--to show involvement of women in air space history. (female, age 41, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Why an exhibit on Barbie instead of a full, permanent exhibit on women aviators and astronauts from Bessie Coleman to Sally Ride and beyond? If Ms. Coleman can be placed on a stamp, then the heritage she and other women aviators started should merit serious attention by the Smithsonian. Barbie does not help girls to develop real heroes [sic] it may get a kid's attention, but you need to follow the fluff up with substance. (female, age 38, local, visited NASM over 10 times, owns no Barbie dolls)

Other comments

Do more popular culture exhibitions. Some visitors were inspired to request more extensive exhibitions on popular culture and toys:

No [I'm not surprised]. Good idea! Should be more extensive! More similar exhibits of American popular culture! (Paperback art, for instance) (male, age 58, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Yes, I did [feel surprised]. But in addition to Barbie you ought to consider including a wide variety of dolls and toys that focus on air and space. It will be more interesting and educational. (female, age 29, local, visited NASM 1-10 times, owns no Barbie dolls)

Have an entire show on air-related toys. This was too small. (male, age 53, non-local, visited NASM over 10 times, owns no Barbie dolls)

Yes, I was indeed surprised. I was unaware that Barbie had so many professional careers in "high-tech" fields. I think that if this much time and

energy was spent on Barbie and Ken, there should be a nice display for GI Joe. He did, in fact, fly many aircraft during his career with the U.S. Army. If my memory serves me, I seem to remember my GI Joes even attended a few USO shows starring Barbie & Ken. In all seriousness, though, I do feel that a GI Joe exhibit would be a good expansion of this exhibit or a good "follow-up" exhibit. (male, age 38, local, visited NASM over 10 times, owns no Barbie dolls)

Glad to see non-white Barbie dolls in the exhibition. Some visitors expressed their appreciation for the inclusion of Barbie dolls of color:

I am always glad to see exhibits which show women and people of color in scientific exhibits. (female, age 22, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Congratulations! On the multi-racial Barbie exhibit, but you need some Native-American, Hispanic and Asian representatives as well. (female, age 10, local, visited NASM over 10 times, owns 5 Barbie dolls)

Hmm, I'm excited Barbie is branching out. Why do you make African-American Barbies with the same facial structure and hair as White Barbies just painted black. It's such a farce. Children see this and it reflects the culture, that's good but Black Barbies should look more like black people, not whites. Think about your market people. (female, age 19, non-local, first time to NASM, owns 1 Barbie doll)

I never knew Barbie was in the Armed Forces or she was Black. (female, age 8, non-local, first time to NASM, owns 10 Barbie dolls)

I wish there were Cambodian Barbie, too. I live in Michigan. (female, age 6, non-local, first time to NASM, owns 13 Barbie dolls)

Appreciating the museum's sense of humor. Visitors young and old directly expressed their appreciation for the museum's sense of humor in this exhibition:

The Barbie exhibit is why we came. It would have been nice to see a wider variety of toys/figurines with this focus. Nice to see this museum exhibit a sense of humor and recognition of popular culture. (male, age 42, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Our kids thought this was hilarious! My reaction was "Gag me with a spoon." Thanks for the humor. (male, age 48, non-local, visited NASM 1-10 times, owns no Barbie dolls)

Great light moment in this visit - I loved the Barbie pilot and Ken steward. What a hoot! Thanks. (female, age 47, local, visited NASM over 10 times, owns 20 Barbie dolls)

Yes. I think that the exhibit was hilarious, I would add more just to get people to laugh. It was so funny it was stupid, where did you get the idea? (female, age 11, non-local, first time to NASM, owns no Barbie dolls)

I think it was nice and my little sister loves it but my Dad is making all kinds of jokes. I don't really care for Barbies , that dog in the robot suit is so funny! That robot girl is a riot. I'd rather check out the space ships! (female, age 10, owns no Barbie dolls)

III. Discussion

Discussion of Results

The diversity of opinions on *Flight Time Barbie* is striking. Each comment, viewed from the perspective of the individual writing it, is convincing and reasonable. Together they offer a mixed message, since they range from adoring to hostile.

The subject of Barbie clearly excited the visitors who left comments. Many of them seem to feel a close, personal relationship with Barbie. Even for those who do not feel a special attraction to Barbie, the doll is not a neutral object. Many of those who commented had already taken a stand regarding their opinion of Barbie.

Because Barbie elicited strong emotional responses, visitors placed their attitudes towards Barbie within broader perspectives, both personal and social. In this public setting, elevated through its presentation at the Smithsonian, Barbie became a focal point for issues of gender-identity, self-image, the power of popular culture, and the nature of the National Air and Space Museum.

Visitor perceptions of NASM as either a history museum or a science museum are especially interesting. Some visitors saw NASM as a history museum, whether or not they approved of popular culture and, specifically, Barbie as a subject within that history. More importantly, statements of disappointment with the exhibition showed that not all visitors are content to accept passive displays of authentic objects as adequate presentations of historical material.

Other visitors specifically spoke of NASM as a science museum. From their viewpoint a Barbie exhibit was especially hard to justify. A number of comments pointed out that Barbie is not "realistic." Dolls as objects may seem to fall outside the purview of science when they serve to inspire imaginative play rather than represent the natural world.

Perhaps as important as this history/science dichotomy itself is the implication that the museum must deal only with one or the other. While the museum staff might be willing to embrace both history and science, the blurring of these differences leaves some visitors uneasy.

The comments on *Flight Time Barbie* also displayed attitudes towards the role of the museum in visitors' lives. The visitors who commented on commercialism, for example, showed a primary concern for the image of the museum as a national institution. Those who commented on the appropriateness of Barbie as a role model, whether they were for or against it, implied that they saw museum-visiting as an educational, formative experience for the young. Others seemed to see it more as simply a place to have a good time with the family.

Discussion of Method

If you want to make decisions based on visitor opinions, you should use a method, such as a professionally conducted survey, that yields a scientific sample of adequate size. If you are less concerned about the distribution of opinions but want a rich, detailed understanding of how some visitors think, then you should use in-depth interviews conducted and analyzed by experienced researchers. By comparison, visitor comments are not a very good method for learning about your visitors. They lack statistical reliability on the one hand and detailed context on the other. Visitor comment forms should be viewed only as a source of supplemental information. If you are willing to give each opinion equal weight, they can reveal some of the sensitive issues, outline the range of existing opinions on these topics, and suggest some of the ways that visitors conceptualize the museum.

The analysis described in this paper was labor intensive and beyond the technical sophistication of many museum staff members. Is there an alternative approach, a simpler method that uses less resources? One possibility is to analyze only a random selection of the comments. While visitor comments may not be representative of the entire audience, there is no *a priori* reason to believe that we need to examine all of them in order to identify the structure of issues. Could the same conclusions have been reached using only a random selection of the comments?

To test this hypothesis, we shuffled and reshuffled all 1,766 forms until they were in random order. We then selected approximately 10 percent of the comment forms for re-analysis.⁷ Analysis of this smaller, more manageable set of forms showed that key information was lost. In particular, there was no longer evidence for the positions coded in Figure 1 as Commercial, Wrong for NASM, and Ethnic diversity.

These three concepts, two of which express negative opinions of the exhibition, were relatively rare within the complete dataset. Whenever a random selection is made in a mechanical way, rare events are likely to be lost. But these minority viewpoints might be fairly common among the total population of visitors and they are important for this analysis. Could we reduce this large set of comments to a reasonable size while preserving more diversity?

⁷ The comment forms were numbered sequentially. After shuffling all numbers between 1 and 1800, we selected every 10th number. The resulting numbers identified the selection.

In our experience, visitor comments tend to favor approval. Visitors probably feel more comfortable expressing supportive favorable judgments in a museum. They have overall positive images of museums and may feel deferential towards the experts who staff them.

How could we preserve more of the minority, negative positions? One possible solution is to begin by deciding how many comments it is practical to analyze. It seems that 200 is a reasonable number, since this many forms can be coded by hand without much difficulty. In order to obtain a selection of 200 that would be likely to cover the key issues, we first divided the comments into three groups: Positive, Negative, and Neutral. There were over 1,000 comments in the first group and over 300 in each of the other two groups. If the comments in any of these three groups had numbered 50 or under, then no further selection would have been necessary. Since each set contained more than 50 comments, we randomly selected 50 negative comments, 50 neutral comments and 100 positive comments. When codes were assigned to this new set of 200 comments, all the categories of the coding diagram in Figure 1 were represented except American History (i.e., comments citing the National Museum of American History as the place for an exhibition of Barbie dolls) and Ethnic diversity (i.e., mentions of Barbie dolls representing minority ethnic groups). The loss of these code categories would not seriously affect the overall results.

Summary

Voluntary visitor comments are not representative of an audience's opinions and can be misleading if one simply compares the number of positive and negative responses. Our experience with comment forms for *Flight Time Barbie* suggests some ways that analysis of visitor comments can aid an evaluation program. With respect to format, it is useful to place a question at the top, to include simple demographic questions at the bottom, to leave a large space for writing, and to collect these forms in a box. With respect to selection of a practical set of comments for analysis, it may be helpful to choose around 200 forms by dividing the entire set into Positive, Negative, and Neutral, shuffling each set, and choosing at least 50 forms from each subgroup. Finally, the forms in this final set can be coded for meaning, so that a structure of visitor attitudes is revealed. If resources allow, the resultant set of ideas can form the basis for a survey study that will measure their precise distribution within the audience.