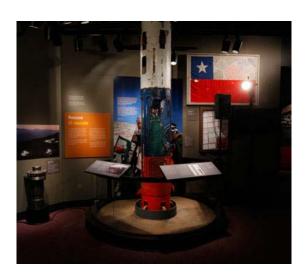


Smithsonian Institution National Museum of Natural History

Against All Odds: Rescue at the Chilean Mine Bilingual Study Final Report



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EXECUTIVE SUMMARY

This bilingual study for the *Against All Odds: Rescue at the Chilean Mine* exhibition was conducted by the Institute for Learning Innovation (ILI) for the Smithsonian Institution's National Museum of Natural History (NMNH). The *Against All Odds* exhibition was a partnership between NMNH, the Chilean Embassy in Washington, DC, and the U.S. State Department, and tells the story of the 69-day saga that ended when 33 miners were lifted to the surface as heroes.

Against All Odds is one of the first bilingual exhibitions at NMNH, and the interpretive team chose to use bilingual graphics for three primary reasons:

- (1) for English, Spanish and other-language speakers, to appropriately set the scene for the story in Spanish-speaking Chile;
- (2) to attract new Spanish-speaking audiences to the Museum; and
- (3) to make the current Spanish-speaking visitors feel that the Museum speaks to them and their needs.

The purpose of this study was to determine the extent to which the bilingual exhibition was being received positively by visitor groups, with a focus on both Spanish-speaking groups and the general public. As one of the first NMNH efforts in bilingual interpretation, there was a primary interest in seeing see how Spanish-speaking visitors reacted to and received the bilingual exhibitions. A secondary focus of the study was to determine the opinions of non-Spanish speakers of the feasibility and continued support for bilingual approaches. The results of this study are also meant to inform future bilingual efforts by NMNH.

METHODS AND CHARACTERISTICS OF THE SAMPLES

Methods included the following:

- 1) in-person interviews with members of Spanish-speaking visitor groups (n=77)
- 2) surveys with general audience members (n=301).

Interviews with Spanish speakers were conducted with groups who spent at least one minute in the exhibition, and they were intercepted and interviewed after completing their visit to the exhibition. Likewise, survey respondents were intercepted after they had finished in the exhibition as asked to fill out a short survey about their experiences in the exhibition.

Of the 77 Spanish-speaking respondents to the interview, the large majority were between the ages of 25 and 54, about half were visiting with children under 18, and half were from other US states outside of the DC area. A little less than one third were from foreign countries, and the large majority spoke Spanish at least half of the time or more at home.

Of the 301 respondents who filled out a survey, 280 filled the survey out in English and 21 filled it out in Spanish. The largest age group for the survey consisted of those 45 years and older (38%). More than three-quarters were Caucasian, which included an overall proportion of 20% Hispanic/Latino. Almost three-quarters were from outside the DC metropolitan area, an additional

16% were from outside the United States, and 13% were from the Washington DC area (including suburban Virginia and Maryland).

MAIN FINDINGS

This study focused on the four main outcomes listed below. As such, the Main Findings section of this summary focuses on these outcomes as well. More detail about these and other issues around the bilingual approach can be found in the body of the report.

- 1. The impact of the bilingual interpretation on Spanish and bilingual speakers to what extent are the bilingual approaches positively received by Spanish speakers
- 2. The impact of bilingual interpretation on English/other-language speakers what are non-Spanish speaking visitors' perceptions of the bilingual Spanish/English approaches currently being employed
- 3. How to employ bilingual approaches in the future what can be gained from this study that informs future bilingual approaches
- 4. Surprising outcomes of the exhibition were there any unanticipated or surprising outcomes

Impacts on Spanish speakers

While the exhibition did not necessarily drive attendance among Spanish-speaking visitors (only 8% knew it was bilingual before a visit), it did seem to have an impact for Spanish speakers once they were on site. General reactions to the exhibition were positive, with the large majority (90%) of Spanish speakers rating it Excellent or Superior. The most surprising thing to Spanish speaking visitors about the exhibition was the presence of the capsule, which was mentioned by almost two-thirds (61%) of respondents as something that was surprising to them.

Looking specifically at how the exhibition impacted their experience, 82% of Spanish speakers said that it helped them better understand the exhibit content. Reasons given include that it's their native tongue, they understand something better when it's in Spanish, some members of the group don't speak English, and that having content in both languages helps them understand the content better. When asked whether having the exhibition in both Spanish and English changed how they interacted with other members of their group, they said it helped them understand the exhibit better, they could share their thoughts with other members of the group, and some members of their group didn't speak English. When asked whether the exhibition being bilingual changed how they felt about NMNH, more than three quarters (78%) said yes. Mostly, they felt this way because they perceived there to be a lot of Spanish speakers, it was generally thought of to be better, it made the content more accessible, and because it was easier to understand if it was bilingual.

Overall, the Spanish-speaking visitors responded positively to the bilingual approaches, thought the exhibition was well done and perceived the bilingual approach as positively impacting their visit, in terms of their understanding, interactions, and feelings towards the museum.

Impacts on non-Spanish speakers

When considering bilingual approaches, there is a general perception in the museum field that including Spanish could negatively impact the experience for non Spanish speakers (i.e., there is too much text, it could be distracting, hard to figure out which text to read). To address this concern, a survey was included in the study focusing on how the current bilingual approach in *Against All Odds* was being perceived by the general audience.

Similar to Spanish speakers, the general audience rated the exhibition highly: more than 4 out of 5 (84%) rated it Excellent or Superior. When asked to describe the exhibition, visitors used words like Interesting, Informative, Inspiring and Amazing. In terms of learning, visitors reported a variety of concepts, such as learning about how the miners were rescued (29%), how and where the miners were trapped (24%) and learning about what life was like trapped in the mine (17%). As in the Spanish interviews, a large proportion of non-Spanish speaking respondents (18%) focused on the rescue capsule; it was the highest individual specific code (and not a meta code) for the item asking what people learned in the exhibition.

There was a difference noted between English and Spanish speakers in whether visitors were surprised the exhibition was in Spanish. Interestingly, Spanish speakers tended to be more surprised that it was bilingual (29%) compared to non-Spanish speakers (8%). In addition, 80% of Spanish speakers and 39% of non-Spanish speakers said having the bilingual approach added to their overall exhibition experience. When asked how it added to their experience, many of the comments talked about accessibility (e.g., someone doesn't speak English as their primary language), and about bilingual approaches being more inclusive for diverse audiences. Only one individual out of the 263 respondents to this survey item said the bilingual approach detracted from their experiences. Fully 60% of non-Spanish speakers said it made no difference to their experience.

When asked why they thought the Smithsonian decided to make the *Against All Odds* exhibition bilingual, the two most common responses were that it was more inclusive (39%) and that it tied to the country in which the rescue occurred (33%). Using a bilingual approach for this exhibition made sense to visitors, especially given the content. The survey also asked whether the Smithsonian should present future exhibits in more than one language, and responses to this item were somewhat mixed and seemed more conditional. While Spanish speakers overwhelmingly supported this idea (79% said yes and 16% said it depends), non-Spanish speakers were more evenly split (42% said yes and 44% said it depends). Many visitors also seemed to believe that whether the exhibition was offered in more than one language would depend on the context and content of the exhibition, and whether there was a connection with Spanish speaking countries.

Recommendations for Future Bilingual Approaches

There are a number of recommendations that can be made from these studies, some that are focused on specific questions, and others that result from a combination of factors and items.

Ascertaining support for future bilingual approaches: This study suggests that there is
general support for including bilingual approaches at NMNH, even among the nonSpanish speaking audiences. Given that they don't seem to be surprised at the bilingual

content in an exhibition like *Against All Odds*, similar bilingual approaches in the future can be expected to be met with an understanding and certain level of support. However, there was some consensus that employing bilingual approaches made more sense in the case of *Against All Odds*. Additional bilingual studies with exhibitions that do not have as direct a tie to Spanish-speaking countries would allow for a more detailed understanding of the general audience's support for bilingual approaches used more broadly at NMNH.

- Specific exhibit approaches: A series of interview questions were designed to specifically inform future bilingual approaches at NMNH. Spanish speaking groups were given a list of choices and asked which ones they would find to be most useful as a Spanish speaker. The most popular choice was having Spanish subtitles for videos, mainly because they added a level of understanding and would be good for visual learners. The second most popular option was including a brochure in Spanish summarizing an exhibit or area, because you can take it with you, share it with others and use it at your own pace. Other options were included and should also be studies in a more detailed manner.
- Amount of Spanish and English: Spanish speaking groups were also asked about the
 degree to which they preferred the mix of Spanish and English in museum exhibitions.
 The large majority (78%) said they preferred museum exhibitions in Spanish and
 English equally. Only 4% of Spanish speakers said they preferred exhibitions in just
 English, and none of the respondents said they preferred exhibitions just in Spanish.
 These data support the idea that future bilingual approaches should examine whether it
 is feasible to translate/bilingually produce all of the materials in an exhibition.

Surprising Outcomes

There were also a few surprising outcomes from this study that may be helpful in thinking about and understanding bilingual approaches.

- Lack of prior awareness among Spanish speakers of bilingual nature of Against All Odds: There was a relatively low level of awareness, at least prior to the visit, among Spanish speaking visitors that there was in fact a bilingual Spanish/English exhibition at the museum. Most Spanish speaking visitors seemed to either happen upon it or hear about it once they had arrived. It would be a good idea to look into how to increase awareness of NMNH's bilingual approaches among Spanish speaking audiences. While the field is still trying to determine to what extent including bilingual approaches can positively impact attendance, increasing the awareness of these exhibitions would be a good step in reaching out to the underserved segments of the Spanish-speaking community.
- Support for bilingual approaches among non-Spanish speakers: It was not of course surprising that there was support among Spanish speakers for bilingual efforts at NMNH. However, there seemed to be a lot of support among non-Spanish speakers for these bilingual approaches. Perhaps this was influenced by the fact that they were neither surprised nor negatively impacted by the bilingual approaches being employed.

Additionally, non-Spanish speaking audiences spoke about the inclusivity of these approaches.

• Spanish speaking visitors more surprised at bilingual exhibition than non-Spanish speaking visitors: When asked directly whether they were surprised to see a bilingual exhibition at NMNH, the Spanish speaking visitors were more surprised than the general audience. This may suggest that including more bilingual exhibitions at NMNH would not only be accepted but to some degree expected. Understanding even more deeply how the general audience perceives bilingual exhibitions could result in an even more positive reaction to these efforts, should they be increased in the future.

TABLE OF CONTENTS

EXECU	JTIVE SUMMARY	2
	FINDINGS	
TABL	E OF CONTENTS	7
LIST (OF TABLES	9
LIST (OF FIGURES	9
INTRO	DDUCTION	10
Proji	ECT BACKGROUND	10
Ехнів	BITION GOALS	10
EVAL	UATION FOCUS	10
OVER	VIEW: METHODS & SAMPLE	12
1.	Interviews with Spanish speakers	12
2.	SURVEYS WITH ENGLISH AND SPANISH-SPEAKERS	12
Interv	/IEWS WITH SPANISH SPEAKERS	14
Purp	OSE AND DESIGN OF THE STUDY	14
Метн	ODS	14
SAMP	LE CHARACTERISTICS	14
RESU	LTS & DISCUSSION	16
1)	What motivated a visit to the exhibition?	16
2)	Did visitors know or expect that the exhibition would be bilingual?	
	If they knew, did it influence their decision to come to the museum	
2)	or visit the exhibition?	17
3)	What were their general reactions to the exhibition and its	
	translation? What did they enjoy most about the exhibition? What did they find to be most satisfying?	1Ω
4)	How did the exhibition being bilingual influence their experience	10
1)	in the exhibition? Were they better able to understand the content?	
	Were they able to more meaningfully engage with others?	20
5)	How did having the exhibition in Spanish make them feel? And did	-
,	it change their attitudes towards the museum?	21
Surve	VS WITH ENGLISH AND SPANISH-SPEAKERS	24

LIST OF TABLES

Table 1: Summary of study methods and samples1	12
Table 2. Summary of Interview Sample Characteristics, Interviews1	15
Table 3. Why Visitors Went to Chilean Miners Exhibition, Interviews 1	16
Table 4. Overall experience ratings, Interviews1	18
Table 5. What surprised visitors most1	19
Table 6. Ratings of translation, Interviews1	19
Table 7. Bilingual approach and understanding2	20
Table 8. Bilingual approach and social interaction2	21
Table 9. Changes to feelings about the museum2	22
Table 10. Preferences for bilingual options, Interviews	23
Table 11. Summary of Sample Characteristics, Surveys2	25
Table 12. Overall experience ratings, Surveys2	26
Table 13. Visitor responses to the prompt, "I never realized that", Surveys	27
Table 14. Did you notice the exhibit was in both English and Spanish, Surveys2	28
Table 15. Were you surprised the exhibition was in English and Spanish? Surveys	28
Table 16. Were you surprised the exhibition was bilingual? Why or why not? Surveys 2	29
Table 17. Why do you think the Smithsonian decided to do this exhibit in both English and	
Spanish? Surveys3	30
Table 18. Add to, detract from, make no difference, Surveys3	31
Table 19. Why did visitors feel the bilingual exhibit added to, detracted from, or made no	
difference in their visit? Surveys3	31
Table 20. Should the Smithsonian present exhibits in English as well as other languages?	
Surveys3	32
Table 21. Which kinds of exhibitions should be presented in other languages? Surveys	33
Table 22. In which other languages should exhibits be presented? Surveys	34

LIST OF FIGURES

Figure 1. Word Cloud for words used to describe the *Against All Odds* exhibition, Surveys....... 26

INTRODUCTION

PROJECT BACKGROUND

Against All Odds, located in the Museum's Geology, Gems and Minerals Hall, is a unique exhibit for the Museum. Developed in only five months in partnership with the Chilean Embassy in Washington, DC, and the US Department of State, the exhibit tells the story of the 69-day saga that ended when 33 miners were lifted to the surface as heroes. The temporary exhibit, in the former Plate Tectonics Theater, sets this very human drama within the geologic context of northern Chile, explaining why the miners were collecting copper there, deep inside the earth. The exhibit, which incorporates fully bilingual graphics, features the 13' capsule used for testing the rescue plan and a powerful video of the rescue footage. In addition, many original objects are on display, including a Bible from the miner's spiritual leader, the boots and hardhat from another, and a Chilean flag signed by the miners and sent up to the doctor monitoring their health.

Against All Odds is one of the very first bilingual exhibits at the National Museum of Natural History (NMNH). The interpretive team chose to use bilingual graphics for three primary reasons:

- (1) for English, Spanish and other-language speakers, to appropriately set the scene for the story in Spanish-speaking Chile;
- (2) to attract new Spanish-speaking audiences to the Museum; and
- (3) to make the current Spanish-speaking visitors feel that the Museum speaks to them and their needs.

However, the team did wonder whether the bilingual labels would be off-putting for English speakers because of the added length of the text and the foreign language.

EXHIBITION GOALS

The exhibit has ambitious primary messages, including:

- Plate tectonics processes have enriched the Andes Mountains region, particularly in Chile, which is rich in copper and gold deposits that are recovered by both hard rock and open pit mining.
- The collapse forced the 33 miners to live in the hot, dark confines of the corkscrew mineshaft for more than two months. The confinement deep in the mine tested the miners' patience, perseverance and organizational skills.
- The Chilean government led the complicated rescue, coordinating the efforts of public and private institutions in Chile and calling on other governments and international corporations for additional expertise.

Although the exhibition is not large, it includes a wide array of information. Displays include one of the three original rescue capsules, items the miners had with them while trapped, and an HD video celebrating the rescue, as well as text and graphics.

EVALUATION FOCUS

The Institute for Learning Innovation (ILI), a non-profit educational research and evaluation organization based in Edgewater, MD, was contracted by the National Museum of Natural History to conduct a visitor study for *Against All Odds: Rescue at the Chilean Mine* to examine the impact of bilingual interpretation in this small temporary exhibit. The purpose of the evaluation contract is to document the

pros and cons of bilingual interpretation on English-speaking, Spanish-speaking and other language speakers in order to better understand whether and how to incorporate bilingual/multilingual exhibitions at the Museum in the future.

This visitor study incorporated a variety of methods and was designed to address the following expected outcomes:

- 1. The impact of the bilingual interpretation on Spanish and bilingual speakers. The Museum seeks to understand whether and how Spanish speakers approach the exhibit differently than they might other mono-lingual exhibits in the Museum. Did they come to see this exhibit in particular? Did they know it would be bilingual? Does the bilingual interpretation give them added access to the exhibit (either to the content itself or to discussing with family/friends)? Does it make them feel more valued or included?
- 2. The impact of bilingual interpretation on English/other-language speakers. The Museum also wants to understand how the bilingual interpretation affects English or non-Spanish speakers. Do they notice it? Does it change the way they perceive the tone of the exhibit or its content? Does it overwhelm them? Does it make them feel excluded because their language is not represented?
- 3. <u>How to employ bilingual approaches in the future.</u> As a learning institution, the Museum would like recommendations for using bilingual interpretation in exhibitions to make its messages more accessible to all audiences. Is it worth the Museum's investment to do bilingual exhibits? Does it reach new audiences? Satisfy our current audiences in useful ways? Such recommendations could also inform the development of future exhibitions.
- 4. <u>Surprising outcomes of the exhibition.</u> As with any exhibition, visitors come with their own agendas and outcomes are often as diverse as the visitors themselves. The Museum would like to get a sense of whether or not there are clusters of unintended outcomes our visitors are experiencing, and in which domains those outcomes are encompassed (knowledge, affect, behavior, identity, etc.). In particular, this exhibit is a surprising topic for our gems and minerals hall both because of its current-events perspective, and because it has a personal, emotional bent. Do those features add/detract significantly from the visitor experience?

The following report is organized into two sections representing the key methods of the study: 1) **Spanish-Language Interviews**, and 2) **English- and Spanish-language surveys**.

OVERVIEW: METHODS & SAMPLE

All data for this study were collected between November 16, 2011 and January 6, 2012. Instruments and procedures utilized for this evaluation study were developed by ILI in consultation with staff from the National Museum of Natural History. Data were collected by ILI staff (or affiliate contractor) on-site at the museum, and were coded and/or entered into statistical analysis software (SPSS, Version 19) or analyzed using qualitative methods.

The following table (Table 1) summarizes the methods and samples from each method of the visitor study. A total of 378 unique visitors were included in the overall study.

Table 1: Summary of study methods and samples

Method	TOTAL Sample size (n= # of visitors)
Interviews (with Spanish speakers)	n=77
Surveys (with English and Spanish	n=301
speakers)	
 English speakers 	• n=280
 Spanish speakers 	• n=21

While more detailed descriptions of methods and samples are available in each individual section of this report, the following provides a brief description of each method used.

1. Interviews with Spanish speakers

Interviews with Spanish speakers were used to gather more qualitative, open-ended feedback about the bilingual experience in the exhibition, as well as other exhibition-related outcomes.

2. Surveys with English and Spanish-speakers

Surveys with English and Spanish-speakers were used to gather more quantitative, representative data about the bilingual approach, as well as other exhibition outcomes.

LIMITATIONS OF THE STUDY

As with any study, in planning and carrying out the study there were limitations in what was possible. So that the results may be interpreted in the proper context by the reader, below are reported a number of circumstances that likely affected the results of the study. The main areas identified as limitations in this particular study are who was eligible for the study, the sample sizes, and the particular methods chosen for the study.

• Who was eligible for the study -

o Since the study was conducted at the exit to the *Against All Odds* exhibition in the Gems and Minerals Hall, only NMNH visitors who passed through this area were eligible to participate in the study. As such, the results may or may not be representative of NMNH visitors overall, depending on whether there is any difference between visitors who go through this area and those who don't.

- o For the interviews with Spanish speakers, only those who spent at least 1 minute in the exhibition were eligible to be included. For the surveys, only those who spent at least 30 seconds were eligible for participation. These minimum times were included primarily so that those who answered the questions had spent at least some time in the exhibition and could thus provide an informed opinion about the exhibition. However, it almost meant that some visitors would be excluded, and it is possible that they did not share similar opinions to those who participated.
- **Sample sizes** Given the timing (winter) and scope of the study, the sample sizes were not as large as might have been desirable. As a result, the interviews with Spanish speakers should be seen as more a range of how Spanish speakers react than as representative of all Spanish-speaking NMNH visitors. The surveys had a larger sample size, but still have a margin of error of plus or minus six percent.
- **Methods chosen for the study** The methods chosen were included to maximize the resources available in addressing the expected outcomes listed above. As such, an approach maximizing sample sizes was included and favored more quantitative methods such as the semi-structured interviews and surveys. More in-depth and qualitative methods may have revealed more subtle distinctions in the audiences' preferences and allowed for a more in-depth understanding of the outcomes, although in a less generalizable manner than the current study.

The authors of this study do not believe that the limitations adversely impact or severely limit the current findings, and are included so that the reader of this report can understand the findings and results in the proper context.

INTERVIEWS WITH SPANISH SPEAKERS

PURPOSE AND DESIGN OF THE STUDY

The main method for collecting data from Spanish-speaking visitors about the bilingual interpretation was in-person interviews conducted bilingually in Spanish and English. Once the visitor was identified as speaking Spanish and they agreed to participate in the study, they were given a choice to complete the interview in Spanish, English or both.

Data were collected to answer the following questions, which determined all aspects of the study:

- 1. What motivated a visit to the exhibition?
- 2. Did visitors know or expect that the exhibition would be bilingual?
 - a. If they knew, did it influence their decision to come to the museum or visit the exhibition?
- 3. What were their general reactions to the exhibition and its translation? What did they enjoy most about the exhibition? What did they find to be most satisfying?
- 4. How did the exhibition being bilingual influence their experience in the exhibition?
 - a. Were they better able to understand the content?
 - b. Were they able to more meaningfully engage with others?
- 5. How did having the exhibition in Spanish make them feel? And did it change their attitudes towards the museum?
- 6. How can findings from this study inform future bilingual exhibitions at NMNH? What other resources in Spanish would they like to see in an exhibition?

METHODS

The Institute for Learning Innovation (ILI) developed the instruments and procedures utilized to collect data on-site at the Natural Museum of Natural History. ILI evaluators collected and entered the data into statistical analysis software (SPSS, version 19).

Visitors who were observed speaking Spanish or reading Spanish text, and who engaged with the exhibition for at least one minute¹ were approached as they were leaving the exhibition and asked if they were willing to be interviewed about their experience. For this method, only Spanish-speakers were interviewed. The interviews took 10 to 15 minutes to complete, with the interviewer writing down responses in the language in which they were given.

See Appendices A and B for the interview form in Spanish and English, respectively.

SAMPLE CHARACTERISTICS

Between November 16, 2011 and January 6, 2012, a total of 76 Spanish-speaking groups were interviewed (some groups did have one person in them). More than three quarters (82%) were conducted in Spanish, 14% were conducted in English, and 4% were conducted in both English and

¹ A minimum of one minute was used so that visitor groups would be able to answer content-related questions and have experienced enough of the exhibition to provide specific feedback.

Spanish. This shows the bilingual nature of Spanish-speaking groups and the fact that while only Spanish-speaking groups were included, there are varying degrees of preference for speaking in English and Spanish. When considering the ages of everyone in the group, a little more than one half (53%) were visiting with kid(s) under the age of 18, while 47% were adult-only groups. The three largest groups were three or more adults (26%), Three or more adults with kid(s) (22%), and two adults with kid(s) (19%). Only 5% of Spanish speakers were visiting as single adults.

As summarized in Table 2, about half of the sample was female (54%) and half was male (46%). The largest age group consisted of those visitors between the ages of 35 and 44 (40%), followed by those between 45 and 54 (17%) and 25 and 34 (16%). Almost three-quarters (73%) were between the ages of 25 and 54.

Half of the Spanish-speaking visitors (47%) were from the US but outside the DC metropolitan area. A relatively equal proportion of visitors were from outside the United Sates (29%) or from the DC metropolitan area (25%), including the city of DC as well as parts of Northern Virginia and Maryland). A bit less than three quarters of the visitors were Caucasian (68%), while 29% cited a different ethnicity than Caucasian. Almost all of the visitors self-identified as being Hispanic (97%); the largest group by far was from South American (49%), followed by Central America (23%).

Almost all of those interviewed (93%) spoke Spanish at least some of the time at home, with almost half of all respondents (47%) saying they spoke only Spanish at home. Another 12% spoke mostly Spanish at home, while 22% spoke Spanish and English equally. Of all respondents, one out of five (20%) spoke Spanish less than half of the time at home.

Table 2. Summary of Interview Sample Characteristics, Interviews

	Spanish Speakers (n=77)	
	Frequency	Percent
Age of Respondent	75	
Under 18	14	4%
18 to 24	8	11%
25 to 34	12	16%
35 to 44	30	40%
45 to 54	13	17%
55 to 64	8	11%
65 and older	1	1%
Group Type	74	
Single adult	4	5%
Two adults	11	15%
Three or more adults	19	26%
Single adult, with kid(s)	10	14%
Two adults, with kid(s)	14	19%
Three or more adults, with kid(s)	16	22%
Visitor Origin	77	
Outside DC Metropolitan Area (US)	36	47%
Outside the United States	22	29%
DC Metropolitan Area	19	25%

Race/Ethnicity	72	
Caucasian	49	68%
Black/African American	1	1%
American Indian or Alaska Native	1	2%
Other	21	29%
Hispanic Origin	77	
Not of Hispanic Origin	2	3%
South American	38	49%
Central American	18	23%
Mexican, Mexican American,	6	8%
Chicano		
Puerto Rican	6	8%
Other Hispanic, Latino, Spanish	3	4%
Cuban	3	4%
Spanish Caribbean	1	1%
At home, do you speak	77	
Only Spanish	36	47%
Mostly Spanish, some English	9	12%
Both equally	17	22%
Mostly English, some Spanish	10	13%
Only English	2	3%
Mostly another language	3	4%

RESULTS & DISCUSSION

Findings for this evaluation study are organized by the six evaluation questions stated in the beginning of this section.

1) What motivated a visit to the exhibition?

Spanish-speaking visitors were first asked why, given all the different possibilities at the museum, they stopped at this particular exhibition (see Table 3). The three main reasons were that they happened upon it (38%), because they wanted to learn more about it or were interested (34%), or because of a personal connection to the exhibition topic (31%). One out of ten Spanish-speaking visitors specifically said they went to it because they were Chilean, while an almost equal number said they went because they were Latino(a).

Table 3. Why Visitors Went to Chilean Miners Exhibition. Interviews

Categories	Spanish Speakers (n=51)	
	Frequency	Percent
Happened Upon It	29	38%
Learning/Interest	26	34%
Amazing, moving story	9	12%
Learn more about it (in general)	6	8%
Learn about something specific	4	5%
It's a recent, historical event	4	5%
To see the capsule	3	4%

Personal Connection	24	31%
Watched it as it happened	9	12%
I'm Chilean	8	10%
I'm Latino/Latina	7	9 %
Non-NMNH Source	9	12%
Saw something at NMNH	6	8%
Someone mentioned it to us (before visit)	3	4%
Seeing the Whole Museum, This is Part of it	8	10%
Knew About It From A Previous Visit	3	4%
Miscellaneous	4	5%

NOTE: Some respondents gave more than one answer, so percentages total more than 100%.

2) <u>Did visitors know or expect that the exhibition would be bilingual? If they knew, did it influence their decision to come to the museum or visit the exhibition?</u>

Q. Before you visited the museum, did you know that this exhibit was in both English and Spanish?

Of the 77 individuals interviewed, only 6, or 8%, knew it was bilingual before they visited the museum, which means that for the large majority of Spanish speakers they weren't aware of the bilingual approach being used. When the six respondents who knew it was bilingual were asked how they knew it was in both Spanish and English, responses included the following [original responses in brackets]:

Q. How did you find out it was bilingual? (n=6)

- "We came to the Museum before and saw that it was in Spanish."
 [Venimos antes (en otra ocasión) al museo y vimos la exhibición]
- "Because the question is Chilean!"

[!Porque es Chilena la cuestión!]

• "I've been here before and saw the announcement."

[Ya había estado acá y lo vi en un noticiero]

• "In Chile they publicized the exhibition."

[En Chile se le ha dado publicidad a esta exhibición]

"By seeing the posters outside."

[interviewed in English]

• "On television."

[En la televisión]

These six visitors who knew the exhibition was bilingual before visiting were also asked if the exhibition being bilingual affected their decision to visit either the museum or the exhibition. Three of the six (50%) said it did influence their decision to visit the museum, while five of the six (83%) said it influenced their decision to visit the exhibition. Please note that these percentages are from a very small sample size and thus not representative.

Since very few individuals knew the exhibition was bilingual before visiting, generalizing and making conclusions from their responses is not possible. However, the preliminary indications from this report suggest that while there may be potential for bilingual exhibitions to attract Spanish-speaking visitors to go to the museum, that would necessitate a larger group having heard about the exhibition prior to visiting. For now, the bilingual nature of the exhibitions is likely a pleasant surprise for Spanish speakers; see following sections that suggest the bilingual nature of the exhibitions is perceived as a positive experience.

3) What were their general reactions to the exhibition and its translation? What did they enjoy most about the exhibition? What did they find to be most satisfying?

To understand Spanish-speaking visitors' most general reactions to the exhibitions, they were asked to rate the exhibition overall.

Q. Based on your visit today, please rate your overall experience in the Against All Odds: Rescue at the Chilean Mine exhibit (Poor, Fair, Good, Excellent, Superior)? (n=6)

Most visitors (90%) rated the exhibition as either Excellent or Superior; 56% Excellent, and 34% Superior (see Table 4). Only 9% rated it as Good and only 1% rated it as Fair. This rating system was adopted so that comparisons could be made to other NMNH exhibitions and experiences; this is the scale NMNH uses for rating various visitor experiences.

Table 4. Overall experience ratings, Interviews

Rating	Spanish Speakers (n=77)	
	Frequency	Percent
Poor (1)	0	0%
Fair (2)	1	1%
Good (3)	7	9%
Excellent (4)	43	56%
Superior (5)	26	34%

In addition, visitors were asked what surprised them the most about the exhibition (see Table 5). By far the most surprising thing, mentioned by 61% of respondents, was that one of the actual capsules was in the exhibition:

"That the original capsule is here and not in Chile." [Que está la capsula original aquí y no en Chile.]

"To see the capsule, because I wasn't imagining that it could be here." [Ver la capsula, porque no me imagine que estaba aquí.]

Table 5. What surprised visitors most

Categories	Spanish Speakers (n=77)	
	Frequency	Percent
Specific artifact/object	58	75%
Fenix capsule being here	47	61%
Video of them emerging	6	8%
Signed flag	4	5%
Other artifact/object	1	1%
Was recent, just remembering it	5	7%
Exhibit was here at NMNH	4	5%
How they rescued them	4	5%
Story, what they went through	4	5%
Was inspiring, emotional	4	5%
Learning about mining	2	3%
Letters, how they communicated	2	3%
Miscellaneous	7	9%

As this was one of NMNH's first bilingual Spanish exhibitions, Spanish-speaking visitors were asked about the quality of the translation.

Q. What do you think about the quality of the translation into Spanish? Would you say it was... Excellent, Good, Fair, Poor

Overall, people thought the quality was of very high quality, as 45 of the 75 respondents (60%) rated it Excellent, another 29 respondents (39%) rated it Good, and only 1 respondent (1%) rated it lower, giving it a Fair rating (see Table 6).

Table 6. Ratings of translation, Interviews

Rating	Spanish Speakers (n=75)	
	Frequency	Percent
Poor (1)	0	0%
Fair (2)	1	1%
Good (3)	29	39%
Excellent (4)	45	60%

When asked why they rated it the way they did, those who gave Excellent rating said it was well translated, there weren't any errors and it was easy to understand (see both quotes below):

"There weren't any errors and nothing was out of place, everything was easy to understand." [No vi algún error o nada fuera de lugar, se entiende todo muy bien.]

"I didn't compare the Spanish and the English but the Spanish was super clear." [No compare lo que está en español con el inglés pero el español esta súper claro.]

Those who gave it a Good rating also said it was a solid translation (see first quote below), although multiple people also said that it was difficult to translate language perfectly or that there are different kinds of Spanish spoken so there will always be some differences of opinion of what is a good translation (see second quote):

"It's faithful enough to what you want to say in Spanish." [Es bastante fiel a lo que se quiere decir en español.]

"It's never going to be perfect but we Latinos express ourselves in different ways." [Nunca va a ser perfecta pero se entiende los latinos nos expresamos de maneras diferentes.]

4) How did the exhibition being bilingual influence their experience in the exhibition? Were they better able to understand the content? Were they able to more meaningfully engage with others?

For Spanish-speakers, the exhibition being bilingual did influence their experience:

- 82% (63 of 77) said it helped them better understand the exhibit content.
- 68% (52 of 74) said it changed how they interacted with other people in their group.

Bilingual Approach and Understanding Content

For those who said it helped them better understand the content, for the largest group it was about understanding something better if it is in their native tongue (39%; see Table 7). Some said they understood the content better when it was in Spanish (14%), while others mentioned that not everyone in their group spoke English (12%). Certain visitors mentioned that they spoke both Spanish and English, so having access to both languages in the exhibition helped them understand better (11%).

Table 7. Bilingual approach and understanding

How did it [being bilingual] help you understand the exhibit?	Spanish Speakers (n=65)	
	Frequency	Percent
Understand Spanish better than English / It's my native tongue	25	39%
Understand the content better when it's in Spanish	9	14%
Some members in my group don't speak English	8	12%
Speak both Spanish and English, having both helps me understand	7	11%
Don't speak English (much or at all)	4	6%
Speak Portuguese, Spanish is close enough for me to read it	2	3%
The two languages are slightly different, having both helps	2	35
Miscellaneous	5	8%

NOTE: Some respondents gave more than one answer, so percentages total more than 100%.

Bilingual Approach and Social Interaction

For those who said the exhibit being bilingual changed how they interacted with others in their group, they were most likely to say it helped the group understand the exhibit better (25%), because they could share their thoughts with others about the exhibit (24%), and some people in their group didn't

speak English (18%; see Table 8). Other reasons given included not having to translate for others (9%), speaking Spanish (7%), being more comfortable in Spanish (7%), and being able to see things in two languages (7%).

Table 8. Bilingual approach and social interaction

How did it [being bilingual] change how you interacted with the other people in your group?						
	Frequency	Percent				
Better able to understand in Spanish	14	25%				
Can share thoughts with others about the exhibit	13	24%				
Someone in group doesn't speak English	10	18%				
Didn't have to translate for others	5	9%				
I speak Spanish	4	7%				
More comfortable/easier in Spanish	4	7%				
Can see it in two languages	4	7%				
Miscellaneous	9	16%				

NOTE: Some respondents gave more than one answer, so percentages total more than 100%.

5) How did having the exhibition in Spanish make them feel? And did it change their attitudes towards the museum?

Q. As a Spanish speaker, did the museum having the exhibit in Spanish change, even a little bit, how you feel about the museum?

When asked whether the exhibit being bilingual changed how they felt about the museum, 55 of 77 participants (71%) said yes. It is important to note that including the phrase "even a little bit" likely raises the likelihood of respondents saying yes to this question; further studying the degree to which including bilingual interpretation changes attitudes towards the museum would be useful. When asked how it changed how they felt, the most common responses were that there are a lot of Spanish-speaking visitors (16%), it just made it better in some way (16%), it's more accessible to people (14%) and it's easier to understand and learn (14%; see Table 9). Additionally, visitors also mentioned that it was better because it was multicultural (9%) and helped them feel more included (9%).

Table 9. Changes to feelings about the museum

How did it change how you feel about the museum?	Spanish Speakers (n=56)		
	Frequency	Percent	
Are a lot of Spanish-speaking visitors	9	16%	
It's better(non-specific)	9	16%	
More accessible to people	8	14%	
Easier to understand, learn	8	14%	
Multicultural	5	9%	
Feel included, more inclusive	5	9%	
Was a surprise, unexpected	4	7%	
Is the only bilingual exhibit here	3	5%	
Would recommend it to others	3	5%	
Miscellaneous	8	14%	

NOTE: Some respondents gave more than one answer, so percentages total more than 100%.

6) How can findings from the study inform future bilingual exhibitions at NMNH? What other resources in Spanish would they like to see in future bilingual exhibitions?

Q. When you go to museums, do you prefer that the exhibits are in: Only Spanish, More Spanish than English, Both equally, More English than Spanish, Only English?

Of Spanish-speaking respondents, the large majority (78%) said they preferred museum exhibitions in both Spanish and English equally, while the next largest group (14%) said they preferred museum exhibitions with more English than Spanish. The same proportion of respondents said they preferred the exhibitions to be more in Spanish (4%) or only in English (4%). None of the respondents said they preferred museum exhibits only in Spanish.

Q. Sometimes it is not possible to include Spanish text, but there are options that could be included for Spanish speakers. If it weren't possible to include Spanish text, which <u>two</u> of the following options would you find most useful as a Spanish speaker, and why?

- A. A brochure that summarizes the exhibit or area
- B. Spanish subtitles for the videos
- C. Someone who could answer questions in Spanish
- D. A cart with objects and a Spanish-speaking volunteer
- E. Interactive instructions in Spanish

Table 10. Preferences for bilingual options, Interviews

BILINGUAL OPTIONS	Spanish Speakers (n=77)		
	Frequency	Percent	
Spanish subtitles for the videos	50	65%	
A brochure that summarizes the exhibit or area	42	55%	
Someone who could answer questions in Spanish	25	33%	
Interactive instructions in Spanish	16	21%	
A cart with objects and a Spanish-speaking volunteer	11	14%	
[Additional options created by respondent]	8	10%	

NOTE: Some respondents gave more than one answer, so percentages total more than 100%.

The two most popular options from the list above (see Table 10) were Spanish subtitles for videos (65%), and a brochure that summarizes the exhibit or area (55%). The following is a summary of the comments made by respondents for why they selected these particular options. In addition to selecting from the list above, some respondents gave their own "write in" votes.

<u>Video subtitles</u> – helps you understand what you're looking at, is good for visual learners, easier than carrying something around or looking for someone to translate it

<u>Brochure</u> – you can take it with you, can share with others, will be able to read it at your own pace, would be easy to read

<u>Spanish-speaking person</u> – they can respond to questions, easier if someone explains something, for audio learners, if people don't understand English,

<u>Interactive instructions</u> – people won't do it if it's in English, more in control of the learning, everyone likes interactives

Cart with objects, volunteer – easier to understand from a person, good for kids touch something

Other (write-in) responses included the following:

- "You don't have to read audio and can call more attention to the exhibition." [audio no te de tienes para leer y podes poner mas atención a la exhibición]
- "Audio guides in Spanish I used them before and liked them, at a museum in Tallahassee."
 [audifonos en español los me usado antes y me gusto, en un museo en Tallahassee]
- "Audio guides to listen to the content in Spanish." [audífonos para escuchar el contenido en español]
- "A way to listen to it (the content)" [interview in English]
- "Audio in Spanish, it could be that there are people who don't know how to read and it helps them." [audio en español puede que hay a gente que no sabe leer y en les ayuda]
- "Audio guide, it's the most comfortable option, one you carry with you, it's interactive." [audio guía, La opción mas cómoda, uno lo lleva consigo, y es interactivo]
- "Guides in Spanish, I like to have someone to carry with me explaining things." [guías en español, me gusta tener a alguien que me ande llevando y explicando]
- "Guided visits in Spanish." [visitas guiadas en español]

SURVEYS WITH ENGLISH AND SPANISH-SPEAKERS

PURPOSE OF STUDY

While the interviews provided more in-depth feedback about Spanish-speakers' reactions to the exhibition, the survey with Spanish and non-Spanish speakers provided a more representative sample of the museum visitors' reactions to the bilingual approaches currently being used. Data were collected to answer the following questions:

- What are visitors' general reactions to the exhibition?
- What are visitors learning from the exhibition?
- Do visitors think it is appropriate for this exhibition to be in Spanish?
- Do visitors perceive the bilingual approach as adding to, detracting from, or not making a difference in their exhibition experience, and why?
- Do visitors think other exhibitions should be bilingual/multilingual?
- What other comments do they have about the bilingual approach?

METHOD

Visitors were approached by ILI evaluators as they were leaving the exhibition and asked if they were willing to fill out a short survey about their experience; for this method, both English- and Spanish-speakers were eligible for the sample as the survey was printed in both languages. To avoid having visitors feel the need to self-identify as preferring a Spanish version of the survey, the instrument was available in English on one side of the survey and Spanish on the other. It is estimated that the survey took between 3 and 10 minutes to complete. The paper-and-pencil survey was administered to a continuous sample of NMNH adult (18+) visitors who spent at least 30 seconds in the exhibition. School group chaperones and visitors who only stopped to watch the video of the miners being released were not approached. ILI evaluators collected and entered the data into statistical analysis software (SPSS, version 19).

SAMPLE CHARACTERISTICS

A total of 301 visitors were surveyed between November 16, 2011 and January 6, 2012. 280 surveys were completed in English and 21 surveys were completed in Spanish. The majority of the surveys were completed on weekdays (59%). An NMNH docent or volunteer cart was in the space just over one third of the time (35%).

As summarized in Table 11, about half of the sample was female (54%) and half was male (46%). The largest age group consisted of those visitors over the age of 44 (38%). More than three quarters of the visitors were Caucasian (86%), which included Hispanic (20%). All other ethnicities were represented by less than 5% of the sample. Almost three-quarters of visitors (71%) were from outside the DC metropolitan area, with an additional 16% of visitors coming to the museum from outside the United States. Only 13% of the visitors came from within the DC metropolitan area (which includes the city of DC as well as parts of Northern Virginia and Maryland).

Just over one quarter of the visitors regularly spoke a language other than English at home (29%). Of these visitors, nearly half of them spoke another language in the home all of the time (47%). The most common language spoken was Spanish (53%).

Table 11. Summary of Sample Characteristics, Surveys

-	Span		Non-Spa		Tot	
	Speakers	(n=57)	Speakers (1	n=234)	(n=2	91)
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Gender	55		226		281	
Female	31	56%	122	54%	153	54%
Male	24	44%	104	46%	128	46%
Age Category	55		224		279	
Over 44	14	26%	92	41%	106	38%
30 to 44	23	42%	68	30%	91	33%
12 to 29	18	33%	64	29%	82	29%
Visitor Origin	53		230		283	
Outside DC Metropolitan Area (US)	32	60%	168	73%	200	71%
Outside the United States	12	23%	32	14%	44	16%
DC Metropolitan Area	9	17%	29	13%	38	13%
Race/Ethnicity	47		228		275	
Caucasian	41	87%	203	89%	244	89%
Black/African American	5	11%	7	3%	12	4%
Asian Indian	1	2%	6	3%	7	3%
American Indian or Alaska Native	1	2%	4	2%	5	2%
Japanese	0	0%	4	2%	4	2%
Native Hawaiian	0	0%	2	1%	2	1%
Chinese	0	0%	3	1%	3	1%
Filipino	0	0%	3	1%	3	1%
Other Pacific Islander	1	2%	0	0%	1	>1%
Other	0	0%	3	1%	3	1%
Hispanic Origin	56		221		277	
Not of Hispanic Origin	12	21%	211	96%	223	81%
Other Hispanic, Latino, Spanish	35	63%	4	2%	39	14%
Mexican, Mexican American, Chicano	5	9%	5	2%	10	4%
Puerto Rican	4	7%	2	1%	6	2%
Cuban	2	4%	0	0%	2	1%
Regularly speak a language besides English at home	56		234		290	
Yes	49	88%	34	15%	83	29%
How often do you speak a language besides English at home?	53		39		92	
All of the time	27	51%	16	41%	43	47%
Some of the time	13	25%	8	21%	21	23%
Half of the time	7	13%	7	18%	14	15%
Most of the time	6	11%	5	13%	11	12%
Rarely	0	0%	3	8%	3	3%
Volunteer cart or docent in exhibit space	57		234		291	
Yes	24	42%	77	33%	101	35%

RESULTS & DISCUSSION

Findings for this evaluation study are organized by the evaluation questions stated in the beginning of this section.

A. What are visitors' general reactions to the exhibition?

1) How did visitors rate their overall experience in the exhibit?

Visitors were asked to rate their overall experience in the exhibit on a five-point scale, ranging from Poor (1) to Superior (5) (see Table 12). None of the respondents rated their experience as Poor. More than half of the respondents rated their experience as Excellent (58%) and another quarter (26%) rated it Superior.

Table 12. Overall experience ratings, Surveys

Rating	Spanish Speakers (n=56)		Non-Spanish Speakers (n=232)		Total 2) (n=288)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Poor (1)	0	0%	0	0%	0	0%
Fair (2)	2	4%	0	0%	2	1%
Good (3)	12	21%	32	14%	44	15%
Excellent (4)	25	45%	141	61%	166	58%
Superior (5)	17	30%	59	25%	76	26%

Statistically significant: yes

2) What words would visitors use to describe the exhibition to someone who has never seen it?

Figure 1 summarizes the words used by visitors to describe the exhibit to someone who has not visited. Most words used were positive and the most frequently mentioned terms included: interesting, informative, inspiring and amazing. Very few visitors used unfavorable words to describe the space.

Figure 1. Word Cloud² for words used to describe the *Against All Odds* exhibition, Surveys



² Word Cloud was created using the website <u>www.wordle.net</u>

B. What are visitors learning from the exhibition?

Visitors reported learning about a wide range of topics when asked to respond to the question, "Please complete the following statement about the exhibit: I never realized that..."

More than one quarter of visitors mentioned how the miners were rescued (29%). This included visitors who commented on the rescue capsule (18%), saying things such as "how small the rescue capsule was," and "the rescue chute was so compact." Visitors also talked about the multiple rescue plans that were in place (6%), making comments such as "there were 3 plans to get the miners out."

Additionally, 24% of visitors talked about how and where the miners were trapped, including comments about the depth of the mine (12%) and for how long the miners were trapped (9%). These categories included statements such as "the miners were so deep inside the earth," and "they were trapped for so long (69 days)."

Other visitors reported learning about life in the mine (17%). These comments were focused on topics such as food and the diet of the miners, the community created inside the mine and living conditions the miners endured, and the contact the miners had with the surface while they were trapped (4% each). Comments about community and living conditions included statements such as "they set up a mail room," and "miners were confined to such small areas."

Some visitors made specific comments about the exhibit (11%), commented about the effort of the rescue (8%), or made general comments about mining (6%). A small number of visitors indicated they knew the story and therefore didn't learn anything new (2%). Table 13 summarizes these responses, a more detailed table can be found in the Appendices. For a full coding rubric, see Appendix 6.

In general, Spanish speaking respondents and non-Spanish speaking respondents offered similar answers; however, more than three times as many Spanish speakers (16%) were unaware the Smithsonian had this type of exhibit or this specific exhibit. For example, one Spanish speaker said, in response to the *I never realized that...* prompt, "the section of the rescue of the Chilean miners was in this museum [la seccion del rescate de los mineros chilenos estaba en este museo]."

Table 13. Visitor responses to the prompt, "I never realized that...", Surveys

Categories	Spanish Speakers (n=51)		Non-Spanish Speakers (n=268)		Total (n=319)	
	Frequency	Percent	Frequenc y	Percent	Frequenc y	Percent
How the Miners were rescued	14	28%	78	29%	92	29%
Rescue Capsule/Rescue Shaft	9	18%	49	18%	58	18%
Multiple rescue plans	3	6%	15	6%	18	6%
General comments about the rescue	1	2%	7	3%	8	3%
Miners rescued Misc.	1	2%	7	3%	8	3%
Trapped Miners	11	22%	66	25%	77	24%
Depth of the Mine	7	14%	30	11%	37	12%
How long they were trapped	3	6%	25	9%	28	9%
How long it took to find them	0	0%	8	3%	8	3%
How many were trapped	1	2%	3	1%	4	1%
Life in the Mine	5	10%	50	19%	55	17%
Food and Diet	1	2%	11	4%	12	4%
Community & living conditions	2	4%	12	5%	14	4%
Supplies sent, and contact with	0	0%	12	5%	12	4%

surface						
Miners survival ability	1	2%	5	2%	6	2%
Organization and Routine	0	0%	4	2%	4	1%
No one died	0	0%	3	1%	3	1%
Life in Mine Misc.	1	2%	3	1%	4	1%
Exhibit Specific comments	9	18%	27	10%	36	11%
Exhibit Specific comments Effort of the Rescue	9 7	18% 14%	27 17	10% 6%	36 24	11% 8%
-	_			- 7 -		
Effort of the Rescue	7	14%	17	6%	24	8%

C. Do visitors think it is appropriate for this exhibition to be in Spanish?

1) Did visitors notice the exhibition was in both English and Spanish?

92% of visitors indicated that they noticed the exhibition was presented bilingually. While only 2% of Spanish speakers were unaware of the bilingual text, 10% of non-Spanish speakers were unaware, a difference which is statistically significant.

Table 14. Did you notice the exhibit was in both English and Spanish, Surveys

	Spanish Speakers (n=56)		Non-Spanish Speakers (n=232)		-		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Yes	56	98%	209	90%	265	92%	
No	1	2%	23	10%	24	8%	

Statistically significant: yes

2) <u>If visitors noticed the exhibition was in English and Spanish, were they surprised? Why or why not?</u>

The majority of visitors who noticed that the exhibition was presented bilingually were not surprised by this (88%). An additional 3% of visitors were surprised to see a bilingual exhibit, but offered responses that suggested they understood the reason for bilingual presentation (yes, conditional). 9% of visitors who noticed the bilingual labels in the exhibition were surprised to encounter such an exhibition.

There was a statistically significant difference between Spanish speakers and non-Spanish speakers, with 27% of Spanish speakers expressing surprise at the bilingual exhibition, compared to 5% of non-Spanish speakers.

Table 15. Were you surprised the exhibition was in English and Spanish? Surveys

	Spanish Speakers (n=49)		Non-Spanish Speakers (n=196)		-	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
No	35	71%	181	92%	216	88%
Yes	13	27%	9	5%	22	9%
Yes, Conditional	1	2%	5	3%	6	3%
No, Conditional	0	0%	1	1%	1	>1%

Statistically significant difference: yes

When asked to explain why they were or were not surprised by the bilingual exhibition, the most common visitor responses dealt with the location of the event (33%), with comments referencing the fact that the event took place in Chile and the exhibition was developed with the Chilean embassy (13%) as well as the fact that Spanish is the language spoken in Chile (9%).

Additionally, 31% of visitors said that the bilingual exhibit makes sense, with the largest percentage of these visitors giving a generic "makes sense" remark (10%) and another 8% of visitors mentioning the fact that the Smithsonian attracts visitors from many places. 19% of visitors made comments about bilingual exhibitions, with 7% saying that bilingual exhibitions were not common and 4% saying that bilingual exhibitions were common. In total, 15% of visitors said they were not surprised that the exhibition was bilingual, but did not offer further explanation. (Table 16 summarizes these "why or why not" responses, while Appendix 7 includes a more detailed table.).

While there were many similarities between Spanish speakers and non-Spanish speakers, there were two categories in which the differences were most noticeable: comments about bilingual exhibits being uncommon, and positive comments about bilingual exhibits. 16% of Spanish speakers commented that bilingual exhibits were not common today, compared to 4% of non-Spanish speakers. These visitors said things such as, "I've never seen an exhibit in Spanish in a museum in DC [nunca había visto uno exposición en español en un museo en DC]," and "Yes, most are not." 15% of Spanish speakers made positive comments about bilingual exhibits, compared to 4% of non-Spanish speakers. These visitors made comments such as, "It's good that you can make it bilingual not only for Latinos but to include everyone [es bueno que lo pueda pone bilingue pero que lo solo solos latino sino todas lo pueda incluir]," and "I was very impressed to see a bilingual exhibit and would like to see more of these at the museum."

Table 16. Were you surprised the exhibition was bilingual? Why or why not? Surveys

Categories	Spanish S (n=6		Non-Spanish Speakers (n=216)		Tota (n=28	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Location	17	28%	76	35%	93	33%
Event took place in Chile	6	10%	29	13%	35	13%
Language of Chile	4	7%	19	9%	24	9%
Event took place in a Spanish-speaking country	5	8%	12	6%	17	6%
Miners spoke Spanish	2	3%	11	5%	13	5%
Location Misc.	0	0%	5	2%	5	2%
Makes Sense	17	28%	71	32%	88	31%
Makes Sense	5	8%	25	11%	29	10%
Get visitors from many places	6	10%	17	8%	23	8%
Of interest to Spanish speakers/Hispanic visitors	1	2%	16	7%	17	6%
There are a large number of Spanish speakers	5	8%	7	3%	12	4%
It was a large scale event	0	0%	4	2%	4	1%
Makes Sense Misc.	0	0%	2	1%	2	1%
Comments on Bilingual Exhibits	24	39%	30	14%	54	19%
Not common today	10	16%	9	4%	19	7%
Positive comment about Bilingual exhibits	9	15%	8	4%	17	6%
Common today/Common where I live	1	2%	11	5%	12	4%
Bilingual exhibits Misc.	4	7%	2	1%	6	2%
Miscellaneous	3	5%	42	19%	45	16%
No (no explanation)	3	5%	38	17%	41	15%
Miscellaneous Misc.	0	0%	4	2%	4	1%

3) Why do you think the Smithsonian decided to do this exhibit in both English and Spanish?

In addition to asking visitors whether they were surprised to find the exhibition presented in both English and Spanish, they were asked *why* they thought the Smithsonian made the decision to present the exhibition bilingually.

The majority of visitors had responses that focused on inclusivity (39%), including comments about accessibility (18%), having to do with making the exhibit more available to all types of visitors. A third of visitors talked about how the two languages were tied to the location of the event (33%), including those who mentioned that the event happened in Chile (11%), and those who gave more generic references to the location of native language of the people involved (8%). Other comments suggested the belief that the Smithsonian wanted to honor and respect the Chilean people (10%), to make the exhibition seem more authentic (8%), or due to the fact that the event was international in nature (6%) (Table 17 summarizes these responses, while Appendix 8 includes a more detailed table). Overall, Spanish speakers and non-Spanish speakers provided similar reasoning, with no noteworthy differences emerging between the two groups.

Table 17. Why do you think the Smithsonian decided to do this exhibit in both English and Spanish? Surveys

spanisn? surveys									
Categories	Spanish S	peakers	Non-Sp	anish	Tot	al			
	(n=!	57)	Speakers	S (n=259) (n=316		16)			
	Frequenc	Percent	Frequenc	Percent	Frequenc	Percent			
	y		y		y				
Inclusivity	22	39%	102	39%	124	39%			
Accessibility	11	19%	47	18%	58	18%			
Of interest to Spanish	5	9%	19	7%	24	8%			
speakers/Hispanic visitors									
Spanish is a common language	3	5%	17	7%	20	6%			
For tourists	2	4%	11	4%	13	4%			
More exhibits should be bilingual	0	0%	3	1%	3	1%			
Inclusivity Misc.	1	2%	5	2%	6	2%			
Tied to the Location of the event	20	35%	85	33%	105	33%			
The event happened in Chile	6	11%	29	11%	35	11%			
Location of the people involved	7	12%	19	7%	26	8%			
Spanish is the language of Chile	4	7%	19	7%	23	7%			
Happened in a Spanish speaking	3	5%	17	7%	20	6%			
country									
Location Misc.	0	0%	1	>1%	1	>1%			
Honor and Respect for the Miners	5	9%	27	10%	32	10%			
Authenticity and Effect	2	4%	24	9%	26	8%			
International Event	4	7%	16	6%	20	6%			
Miscellaneous	4	7%	5	2%	9	3%			

D. Do visitors perceive the bilingual approach as adding to, detracting from, or not making a difference in their exhibition experience and why?

1) <u>Did the fact that the exhibit was in both English and Spanish add to, detract from, or make no difference in your exhibit experience?</u>

As summarized in Table 18, visitors were divided between feeling the bilingual approach made no difference in their experience (52%), and feeling it added to their experience (48%). Less than one

percent of visitors said the bilingual approach detracted from their exhibit experience. Spanish speakers were more likely to say the bilingual approach added to their exhibit experience (80%, compared to only 39% of non-Spanish speakers). Non-Spanish speakers were more likely to say the bilingual approach made no difference in their exhibit experience (60%, compared to only 20% of non-Spanish speakers). No Spanish speakers said the bilingual approach detracted from their exhibit experience.

Table 18. Add to, detract from, make no difference, Surveys

	Spanish Speakers (n=56)		Non-Spanish Speakers (n=207)		Total (n=263)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Add to	45	80%	81	39%	126	48%
Detract from	0	0%	1	1%	1	<1%
Make no difference	11	20%	125	60%	136	52%

Statistically significant: yes

2) Why do you say that?

Visitors were asked to explain why they felt the bilingual presentation added to, detracted from, or made no difference in their visit experience (see Table 19). Almost a quarter of responses (24%) focused on the personal language preference of the visitor, with 10% of visitors saying they read the English and therefore didn't worry about the Spanish and 2% of visitors saying they read the Spanish and therefore didn't worry about the English. 5% of visitors felt they understood all of the necessary information.

18% of respondents made comments that focused on inclusivity. The majority of these remarks (11%) focused on accessibility, including comments such as, "broadens the number of people who can experience it fully," and "although English should always be our first language - the thoughtfulness for diversity for all who visit our country made me proud." Additionally, 18% of respondents talked about authenticity and effect, including remarks about how the bilingual labels made the exhibit more authentic (8%) and how the labels added to the effect of the exhibit (5%) (Table 19 summarizes these responses, while Appendix 9 includes a more detailed table).

Only one visitor said the bilingual approach detracted from their visit, saying it was, "just a bit distracting." All responses from visitors who felt the bilingual approach added to or made no difference in their exhibit experience were looked at as a group.

Non-Spanish speakers were more likely than Spanish speakers to suggest bilingual exhibits were common (10% of non-Spanish speakers, compared to only 2% of Spanish speakers).

Table 19. Why did visitors feel the bilingual exhibit added to, detracted from, or made no difference in their visit? Surveys

Categories	Spanish Speakers (n=51)		Non-Spanish Speakers (n=183)		Total (n=234)	
	Frequenc	Percent	Frequenc	Percent	Frequenc	Percent
	У		У		У	
My Language was included	16	31%	40	22%	56	24%
Read the English	0	0%	24	13%	24	10%
I am bilingual	3	6%	8	4%	11	5%
Understood all the necessary info	5	10%	6	3%	11	5%
Read the Spanish	4	8%	0	0%	4	2%
Language Misc.	4	8%	2	1%	6	3%
Inclusivity	11	22%	30	16%	41	18%

Accessibility	7	14%	18	10%	25	11%
Of interest to Spanish	1	2%	4	2%	4	2%
speakers/Hispanic visitors						
For tourists	1	2%	2	1%	3	1%
Spanish is a common language	0	0%	2	1%	2	1%
Inclusivity Misc.	2	4%	4	2%	6	3%
Authenticity and Effect	12	24%	29	16%	41	18%
More Authentic	5	10%	13	7%	18	8%
Added to the effect of the exhibit	3	6%	9	5%	12	5%
Added cultural value	3	6%	5	3%	8	3%
Authenticity Misc.	1	2%	2	1%	3	1%
Comments on Bilingual Exhibits	5	10%	29	16%	34	15%
Involved Parties	2	4%	30	16%	32	14%
Miscellaneous	5	10%	25	14%	30	13%

E. Do visitors think other exhibitions should be bilingual/multilingual?

1) Do you think the Smithsonian should present exhibits in English as well as other languages?

When asked if the Smithsonian should present exhibits in English as well as other languages, half of the respondents said yes (50%). An additional 39% of visitors said that it depends. These visitors offered reasons for their responses, which are detailed below. The remaining 12% of visitors felt that the Smithsonian should not present exhibits in English as well as other languages (Table 20).

More than three-quarters of Spanish speaking respondents (79%) felt the Smithsonian should present exhibits in English as well as other languages, while only 16% of Spanish speaking respondents felt the decision was dependent on other factors. Non-Spanish speakers were more evenly divided, with 42% saying the Smithsonian should present exhibits bilingually or multilingually, and 44% saying the decision was dependent on other factors. These differences between the responses of Spanish speakers and non-Spanish speakers were statistically significant.

Table 20. Should the Smithsonian present exhibits in English as well as other languages? Surveys

	Spanish Speakers (n=56)		Non-Spanish Speakers (n=224)		Total (n=280)	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Yes	44	79%	95	42%	139	50%
It depends	9	16%	99	44%	108	39%
No	3	5%	30	13%	33	12%

Statistically significant: yes

2) If yes/it depends, which kinds of exhibits should be presented in other languages?

Visitors who answered "yes" or "it depends" were asked which types of exhibits should be presented in other languages. More than half of the respondents said that the decision depended upon the context (51%). Among this group of respondents, 22% said that exhibits pertaining to other countries or cultures should be offered in English as well as other languages. Additionally, 21% of respondents gave the overarching answers All (15%), Most (2%), Unsure (2%) and None (1%) while offering little or no explanation for their response.

12% of respondents alluded to the needs of visitors. This includes comments suggesting that bilingual exhibitions would be good for visitors (6%), such as, "It would bring more tourist and help understand

what is on display," or "So that other people can understand more [porque asi las demas personas podrian entender mas]." Some visitors also suggested that the museum make resources available in other languages (4%). Spanish speakers were more than three times as likely to suggest bilingual/multilingual exhibitions would be good for visitors (13%, compared to 4% for non-Spanish speakers).

Just over one-tenth of visitors (11%) made reference to languages, including visitors who suggested presenting exhibitions in the "common languages" (3%) and those that made slightly negative comments about language (3%, i.e. "It can be too much when museums use many languages"). (Table 21 summarizes these responses, while Appendix 10 includes a more detailed table).

Table 21. Which kinds of exhibitions should be presented in other languages? Surveys

Categories	Spanish Speakers (n=48)		Non-Spanish Speakers (n=168)		Total (n=216)	
	Frequenc v	Percent	Frequenc	Percent	Frequenc	Percent
Context Dependent	21	44%	90	54%	111	51%
Exhibits pertaining to other countries or cultures	10	21%	38	23%	48	22%
Depends on the context of the exhibit	4	8%	15	9%	19	9%
Specific type of exhibit	4	8%	15	9%	19	9%
Exhibits that are of interest to speakers of other languages	0	0%	10	6%	10	5%
Make reference to the Chilean story	1	2%	7	4%	8	4%
Reference to specific exhibits	0	0%	3	2%	3	1%
Context Dependent Misc.	2	4%	2	1%	4	2%
All/Most/Unsure/None	8	17%	37	22%	45	21%
All	6	13%	27	16%	33	15%
Most	1	2%	4	2%	5	2%
Unsure	1	2%	3	2%	4	2%
None	0	0%	3	2%	3	1%
Visitor Need	9	19%	17	10%	26	12%
Reference to Languages	7	15%	17	10%	24	11%
Miscellaneous	3	6%	7	4%	10	5%

3) If ves/it depends, in which other languages?

Visitors who answered "yes" or "it depends" were also asked in which other languages exhibitions should be presented. Almost two-thirds of visitors (62%) listed specific languages, including Spanish (25%), French (13%) and Chinese dialects (8%, for a full list of languages, see Appendix 12). One-quarter of respondents (25%) said that the other languages included depended on different factors, including the topic of the exhibit (22%). (Table 22 summarizes these responses, while Appendix 11 includes a more detailed table).

Non-Spanish speakers were more likely to make general comments about languages. 16% of non-Spanish speaking visitors said exhibits should be done in any, most or all languages (6%), appropriate languages (5%), or common languages (4%). Comparatively, no Spanish speakers mentioned this topic.

Table 22. In which other languages should exhibits be presented? Surveys

Meta and Micro Categories	Spanish Speakers (n=55)		Non-Spanish Speakers (n=135)		Total (n=190)	
	Frequenc	Percent	Frequenc	Percent	Frequency	Percen
	у		У			t
Specific Languages	46	84%	71	53%	117	62%
Spanish	20	35%	27	20%	47	25%
French	11	20%	13	10%	24	13%
Chinese Dialects	6	11%	9	7%	15	8%
German	2	4%	8	6%	10	5%
Other specific languages	7	13%	14	10%	21	11%
Dependent	8	15%	39	29%	47	25%
On the exhibit	8	15%	33	24%	41	22%
In general	0	0%	6	4%	6	3%
About Languages	0	0%	22	16%	22	12%
Miscellaneous	1	2%	3	2%	4	2%

Appendix 1 Interview Instrument, Spanish

National Museum of Natural History Contra Toda Adversidad: Rescate en la Mina Chilena

1.	Hay una gran variedad de exhibiciones en el museo. ¿Por qué decidió pasar por aquí y ver esta exhibición sobre el rescate de los mineros Chilenos?
2.	En base a su visita hoy, por favor califique su experiencia general en la exhibición, <i>Contra Toda Adversidad: Rescate en la Mina Chilena</i> . □ Mala □ Regular □ Buena □ Excelente □ Superior
3.	¿Qué fué lo que más le sorprendió de esta exhibición y por qué?
4.	Antes de venir al museo, ¿sabia Ud. que esta exhibición estaba en Inglés y en español? □ Sí □ No En caso que NO, seguir con la P5
	4a. Si sí, ¿cómo se enteró que era bilingüe?
	4b. Si sí, ¿afectó su decisión de venir al museo? □ Sí □ No
	4c. Si sí, ¿afectó su decisión de ver esta exhibición? □ Sí □ No
5.	¿Piensa que pudo entender el contenido de la exhibición mejor porque estaba en español y en inglés? No
	5a. Si sí, ¿de qué manera le ayudó a entender el contenido de la exhibición?
6.	Estando la exhibición en español y en inglés, ¿piensa que eso cambió como Ud. interactuó con las otras personas en su grupo? Sí No
	5a. Si sí, ¿de qué manera?
7.	Siendo hispanohablante, y el hecho de que el museo está presentando una exhibición en español, ¿cambio su opinión del museo, aunque sea un poquito? Sí No
	7a. Si sí, ¿de qué manera cambio su opinión del museo?

8.	El hecho de que la exhibición está en español, ¿le hizo sentir más bienvenido/a al museo? □ Sí □ No
	8a. Si sí, ¿de qué manera?
9.	Cuando Ud. visita un museo, ¿prefiere que las exhibiciones estén: □ solo en español □ más en español que en inglés □ más en inglés que en español □ solo en inglés □ en ambos idiomas igualmente
10	A veces no es posible incluir texto en español, pero existen otras opciones que se pueden ofrecer a los hispanohablantes. Si no es posible incluir texto en español, por favor seleccione dos opciones de la lista a seguir que le serían más útiles como hispanohablante: F. Un folleto que resume la exhibición o área G. Subtítulos en español en los videos H. Alguien que pueda contestar preguntas en español I. Una carretilla con objetos y un voluntario hispanohablante J. Instrucciones interactivas en español
	¿Por qué seleccionó?
	¿Por qué seleccionó?
11.	.¿Qué piensa de la calidad de la traducción al español? Diría que es □ Excelente □ Buena □ Regular □ Mala
	11a. ¿Por qué dijo eso?
Aho	ora quisiéramos saber un poco más acerca de Ud.:
	12. ¿Es Ud. de origen hispano, latino o Español?
	□ No □ Sí, Mexicano/a, Mexicano Americano/a, Chicano/a □ Sí, Puertorriqueño/a □ Sí, Cubano/a □ Sí, Centroamericano/a □ Sí, Español Caribeño/a □ Sí, Sudamericano □ Sí, otro origen hispano, latino o español

13.¿Cómo se describe Ud.? Marque todas las casillas que mejor le aplican.
□ Blanco/a
□ Negro/a, Africano/a Americano/a
□ Amerindio/a o nativo/a de Alaska
□ Nativo/a de Hawaii
□ Guameño/a o Chamorro/a
□ Samoano/a
□ Indio asiático/a
□ Chino/a
□ Filipino/a
□ Japonés/a
□ Coreano/a
□ Vietnamita
□ Otro asiático/a
□ Otro de las islas del Pacífico
14. ¿Cuál es su código postal? (Si vive afuera de E.E.U.U., favor indicar qué país):
15. En casa, suele Ud. hablar: □ solo en español □ más en español que en inglés □ los dos iguales □ más en inglés que en español □ solo en inglés
16. ¿En qué año nació Ud.?
17. ¿Cuáles son las edades de las <u>otras personas que le acompañan hoy en su visita al museo?</u>
ÍGracias por su tiempo!

Appendix 2 Interview Instrument, English

National Museum of Natural History *Against All Odds: Rescue at the Chilean Mine*

1.	There are lots of different exhibits in the museum. Why did you choose to stop and look at this one about the rescue of the Chilean Miners?	
2.	Based on your visit today, please rate your overall experience in the <i>Against All Odds: Rescue at the Chilean Mine</i> exhibit. □ Poor □ Fair □ Good □ Excellent □ Superior	
3.	What surprised you most about the exhibit, and why?	
4.	Before you visited the museum, did you know that this exhibit was in both English and Spanish? \square Yes \square No [If No, skip to Q3]	
	4a. If Yes, How did you find out it was bilingual?	
	4b. If Yes, Did that influence your decision to visit the museum? ☐ Yes ☐ No	
	4c. If Yes, Did that influence your decision to visit this exhibit? ☐ Yes ☐ No	
5.	Do you think you were better able to understand the exhibit content because it was in Spanish and English? \square Yes \square No	
	5a. If Yes, How did it help you understand the exhibit content?	
6.	Do you think the exhibit being in Spanish and English changed how you interacted with the other people in your group? \square Yes \square No	
	6a. If Yes, How?	
7.	As a Spanish speaker, did the museum having the exhibit in Spanish change, even a little bit, how you feel about the museum? \Box Yes \Box No	
	7a. If Yes, How did it change how you feel about the museum?	
8.	Did the exhibits being in Spanish make you feel more welcome at the museum? $\hfill\square$ Yes $\hfill\square$ No	
	8a. If Yes, how?	

9.	When you go to museums, do you prefer that the exhibits are in: ☐ Only Spanish ☐ More Spanish than English ☐ Both equally ☐ More English than Spanish ☐ Only English
10	O. Sometimes it is not possible to include Spanish text, but there are options that could be included for Spanish speakers. If it weren't possible to include Spanish text, which two of the following options would you find most useful as a Spanish speaker, and why? A. A brochure that summarizes the exhibit or area B. Spanish subtitles for the videos C. Someone who could answer questions in Spanish D. A cart with objects and a Spanish-speaking volunteer E. Interactive instructions in Spanish
	Why did you pick?
	Why did you pick?
13	1. What do you think about the quality of the translation into Spanish? Would you say it was □ Excellent □ Good □ Fair □ Poor
	11a. Why did you say that?
No	ow we have just a few questions about you:
12	2. Are you of Hispanic, Latino or Spanish origin? No Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, Central American Yes, Spanish Caribbean Yes, South American Yes, Other Hispanic, Latino, Spanish

3. Which of the following best describes you? <i>Mark as many as apply.</i>
□ White
□ Black, African American
☐ American Indian or Alaska Native
□ Native Hawaiian
☐ Guamanian or Chamorro
□ Samoan
□ Asian Indian
□ Chinese
□ Filipino
□ Japanese
☐ Korean
□ Vietnamese
□ Other Asian
□ Other Pacific Islander
14. What is your zip code (If from outside U.S., please indicate country):
15. At home do you usually speak:
□ Only Spanish
☐ More Spanish than English
☐ Both equally
☐ More English than Spanish
□ Only English
16. What year were you born?
17. What are the ages of the other people in your group visiting the museum today?
Thank you very much for your time!

LA MINA CHILENA ENCUESTA SOBRE LA EXHIBICIÓN

The English version is on the other side.

1.	 En base a su visita hoy, por favor califique su experiencia general en la exhibición, Contra Toda Adversidad: Rescate en la Mina Chilena. □ Mala □ Regular □ Buena □ Excelente □ Superior 		
2. Por favor complete la siguiente oración sobre la exhibición: Nunca me había dado cuenta d			
3.	¿Qué palabras usaría para describir esta exhibición a alguien que nunca la ha visto? (Por favor anote por lo menos tres)		
4.	¿Se dió cuenta que la exhibición estaba en Inglés y en Español? □ Sí □ No En caso que NO, salte a la P6		
	4a. Si sí, ¿se sorprendió que la exhibición era bilingüe? ¿Por qué o por qué no?		
5.	El hecho de que la exhibición estaba en Inglés y en Español ¿aumentó, disminuyó o le dió igual en cuanto a su experiencia en la exhibición? □ aumentó □ disminuyó □ me dió igual		
	5a. ¿Por qué dijo eso?		
			
6.	¿Por qué piensa Ud. que el Smithsonian decidió hacer esta exhibición en Inglés y en Español?		
7.	¿Cree Ud. que el Smithsonian debería presentar exhibiciones en otros idiomas, además de en Inglés? □ Sí □ No □ Depende		
	7a. Si sí o si depende, ¿qué tipo de exhibiciones deberían ser presentadas en otros idiomas?		
	7b. Si sí o si depende, ¿qué otros idiomas?		

OTRA INFORMACIÓN

8.	Género: □ Masculino □ Femenina		
9.	¿En qué año nació Ud.? (ejem. 1970)		
10.	O. ¿Cuál es su código postal? (Si vive afuera de E.E.U.U., favor indicar qué país		
11.	¿Habla Ud. otro idioma regularmente además del Inglés en casa? □ Sí □ №		
12.	Si sí, ¿qué idioma(s)?		
	12a. ¿Cada cuánto habla Ud. este(estos) idioma(s) en casa? odo el tiempo asi todo el tiempo a mitad del tiempo veces asi nunca		
	¿Es Ud. de origen hispano, latino o español? í, Mexicano/a, Mexicano Americano/a, Chicano/a í, Puertorriqueño/a í, Cubano/a í, otro origen hispano, latino o español		
	¿Cómo se describe Ud.? Marque todas las casillas que mejor le aplican. lanco/a legro/a, Africano/a Americano/a merindio/a o nativo/a de Alaska lativo/a de Hawaii uameño/a o Chamorro/a amoano/a ndio asiático/a hino/a ilipino/a aponés/a oreano/a ietnamita utro asiático/a ltro de las islas del Pacífico		

ÍGracias por su tiempo y opinión!

CHILEAN MINE EXHIBIT SURVEY

La versión en español se encuentra al dorso.

1.	Based on your visit today, please rate your overall experience in the <i>Against All Odds:</i> Rescue at the Chilean Mine exhibit. □ Poor □ Fair □ Good □ Excellent □ Superior		
2.	Please complete the following statement about the exhibit: I never realized that		
3.	Which words would you use to describe this exhibit to someone who has never seen it? (Please list at least 3)		
4.	Did you notice that the exhibit was in both English and Spanish? ☐ Yes ☐ No If NO, skip to Q6		
	4a. If yes, were you surprised the exhibit was bilingual? Why or why not?		
5.	Did the fact that the exhibit was in both English and Spanish add to, detract from, or make no difference in your exhibit experience? □ Added to □ Detracted from □ Made no difference		
	5a. Why did you say that?		
6.	Why do you think the Smithsonian decided to do this exhibit in both English and Spanish?		
7.	Do you think the Smithsonian should present exhibits in English as well as other languages? ☐ Yes ☐ No ☐ It depends		
	7a. If Yes/It depends, which kinds of exhibits should be presented in other languages?		
	7b. If Yes/It depends, in which other languages?		
ОТ	THER INFORMATION		
8.	Gender: □ Male □ Female		
9.	What year were you born? (e.g., 1970)		
10	. What is your zip code? (If from outside U.S., please indicate country)		

11. Do you regularly speak a language besides English at home:☐ Yes☐ No
12. If Yes, which language(s):
12a. how often do you speak this/these language(s) at home? ☐ All of the time ☐ Most of the time ☐ Half of the time ☐ Some of the time ☐ Rarely
13. Are you of Hispanic, Latino or Spanish origin? □ No □ Yes, Mexican, Mexican American, Chicano □ Yes, Puerto Rican □ Yes, Cuban □ Yes, Other Hispanic, Latino or Spanish
14. Which of the following best describes you? Mark as many as apply. White Black, African American American Indian or Alaska Native Native Hawaiian Guamanian or Chamorro Samoan Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian Other Pacific Islander

Thank you for your time and feedback!

Appendix 5. In which other languages should exhibits be presented?

ther Languages (English and Spanish translations)	N
Spanish	50
Hebrew	5
French	4
German	4
Italian	3
Korean	3
Portuguese	3
Bengali	2
Hindi	2
Russian	2
Slovak	2
Amharic	1
Chinese	1
Danish	1
Dutch	1
English	1
Filipino	1
Greek	1
Gujrati	1
Japanese	1
Polish	1
Punjabi	1
Swiss-German	1
Tagalog	1
Turkish	1
Yiddish	1

Appendix 6. Coding rubric.

Q2. Please complete the following statement about the exhibit: *I never realized that...*

101. How the miners were rescued

- Reference to multiple plans, or mention of the plan that worked
- 2. Reference to rescue capsule and/or rescue shaft
- 3. General comment about how the miners were rescued
- 4. Miners rescued Misc.

102. Trapped Miners

- 5. How deep the mine was/how deep the miners were trapped
- 6. How many miners were trapped
- 7. How long it took to find the miners
- 8. How long the miners were trapped

103. Life in the Mine

- 9. Miners Survival Ability
- 10. Reference to food and diet
- 11. Reference to how organized the miners were/their routine
- 12. Reference to community/living conditions

Q4a. If yes, were you surprised the exhibit was bilingual? Why or why not?

101. Location

- 1. Spanish is the language of Chile (mentions both language and location)
- 2. Event took place in Chile/Chilean miners & embassy involved (mentions Chile, but not language)
- 4. Took place in a Spanish speaking, or non-English speaking country (reference to language, no specific mention of Chile)
- 5. Miners spoke Spanish, native language of event (no specific mention of Chile)
- 6. Location Misc.

102. Comments on Bilingual Exhibits

- 7. Common today/Common where I live
- 8. Not common today/Not common at Smithsonian
- 9. Bilingual Positive
- 10. Bilingual Generic Misc.

- 13. Reference to supplies sent/contact with surface
- 14. No one died
- 15. Life in the mine Misc.

104. General Comments about mining

- 16. Copper mining in Chile
- 17. Safety concerns, safety standards, dangerous job
- 18. General comment about mining Misc.

105. Exhibit Specific comments

- 19. Smithsonian had this exhibit, this type of exhibit
- 20. Exhibit would be so emotional, well done
- 21. Exhibit specific Misc.

106. Effort of Rescue

- 22. Many nations/Human collaboration/World Attention
- 23. Such as rescue was possible
- 24. Effort of rescue Misc.

107. Knew the Story

108. Miscellaneous

103. Makes sense it is bilingual

- 11. Makes sense/not surprised
- 12. Visitors from many places/reaches broader audience
- $13. \ Large\ scale\ event/multiple\ languages\ involved$
- $14. \ \ Of interest to \ Spanish \ speakers/Hispanics$
- $15. \ Large\ number\ of\ Spanish\ speakers$
- 16. Makes sense Misc.

105. Miscellaneous

- 21. No (no explanation)
- 22. Miscellaneous Misc.

Q5a. Did the fact that the exhibit was in both English and Spanish add to, detract from, or make no difference in your exhibit experience? Why do you say that?

101. My language

- 1. Read English/don't read or speak Spanish
- 2. Read Spanish/don't read or speak English
- 3. I am bilingual
- 4. Understood the necessary info/one language was mine
- 5. Language Misc.

102. Comments on Bilingual Exhibits

- 6. Common today/Common where I live
- 7. Appreciation for Spanish language
- 8. Bilingual common Misc.

103. Inclusivity

- 9. Interest from/to attract Latino/Hispanic visitors
- 10. Accessibility
- 11. For tourists/because of location
- 12. Spanish is common
- 13. Inclusivity Misc.

104. Involved Parties

- 14. Happened in Chile
- 15. Happened in a Spanish speaking country
- 16. Honors Chilean people
- 17. Multiple countries involved
- 18. Involved parties Misc.

105. Authenticity and Effect

- 19. More authentic
- 20. Added to the effect
- 21. Add cultural value
- 22. Authenticity Misc.

106. Miscellaneous

- 23. Both necessary
- 24. Doesn't matter/doesn't detract
- 25. Slightly negative comment
- 26. Miscellaneous Misc.

Q6. Why do you think the Smithsonian decided to do this exhibit in both English and Spanish?

101. Tied to location

- 1. Language of Chile
- 2. Happened in Chile
- 3. Happened in a Spanish speaking Country
- 5. Location or native language of event/people involved (no specific mention of Chile)
- 7. Location Misc.

102. Honor and Respect

- 8. Generic reference to honor
- 9. Reference to Chile/Chileans
- 10. Reference miners
- 11. Honor and Respect Misc.

103. Authenticity and Effect

- 12. More authentic
- 13. Makes sense
- 14. Add to the effect

15. Authenticity Misc.

104. Inclusivity

- 16. Interest from/to attract Latino/Hispanic visitors
- 17. Accessibility/Inclusivity
- 18. For tourists/because of location of museum/diverse groups visit
- 19. Spanish is common
- 20. More exhibits should be
- 21. Inclusivity Misc.

105. International Event

- 22. International Event
- 23. Exhibit developed with Chile
- 24. International Event Misc.

106. Miscellaneous

- 25. Slightly negative comment
- 26. Miscellaneous Misc.

Q7a. If yes/it depends, which kinds of exhibits should be presented in other languages?

101. Context dependent

- 1. Pertaining to other cultures, countries or languages
- 2. Reference to Chile story
- 3. Reference to specific exhibits
- 4. Of interest to speakers of other languages
- 5. Depends on context of exhibit
- 6. Specific types of exhibits
- 7. Context dependent Misc.

102. All, most, unsure, none

- 8. All
- 9. Most
- 10. Unsure
- 11. None
- 12. All, most, unsure, none Misc.

Q7b. If yes/if depends, in which other languages?

101. Dependent

- 1. On exhibit
- 2. In general
- 3. Dependent Misc.

102. About languages

- 4. Common ones
- 5. Appropriate languages, based on visitorship
- 6. Any/Most/All
- 7. Languages Misc.

103. Reference to languages

- 13. Common languages
- 14. Specific languages
- 15. Many/any languages
- 16. Languages can distract/English only is fine
- 17. Languages Misc.

104. Visitor Need

- 18. Good for visitors
- 19. Demand for it
- 20. Make resources available
- 21. Visitor need Misc.

105. Miscellaneous

- 22. Slightly negative comment
- 23. Miscellaneous Misc.

103. Specific languages

- 8. Spanish
- 9. French
- 10. Chinese dialects (Chinese, Mandarin, etc)
- 11. German
- 12. Other languages

104. Miscellaneous

13. Miscellaneous Misc.

Q2. Please complete the following statement about the exhibit: I never realized that		
Code	Example	
101: How the miners were rescued		
1: Reference to Multiple plans, or mention	There were 3 plans to get the miners out	
of the plan that worked	Plan B of the drilling was the one that worked	
	There were multiple rescue plans	
2: Reference to rescue capsule and/or	How deep the mine went and how small the capsule was	
rescue shaft	The capsule was so narrow! At first it looked like a rocket	
	The size of the rescue tube that was used	
	There were three capsules	
	The enormity of the rescue and that the rescue capsule was custom made	
	There was an escape hatch in the capsule, and the restricted diet	
	The small diameter size of the rescue shaft	
3: General comment about how the	Never knew how they rescued them - very cool	
miners were rescued (does not reference specific details)	That was how they got the miners out	
	that was how they got out	
	Details involved in rescue mission	
4: Miners rescued Misc.	The actual evacuation of the miners (bringing them to the surface) too as long	
102: Trapped Miners		
5: How deep the mine was/how deep the	The miners were so deep inside the earth	
miners were trapped	They were in the mine for so long, and how far below the surface they were buried	
	The mine was so deep	
6: How many miners were trapped	How many people were there	
	There were that many miners trapped	
7: How long it took to find the miners	It took so long to find them (17 days) and they were so well	
	organized	
	Two and a half weeks before discovered	
8: How long the miners were trapped	They were trapped for 69 days	
	It took 65 days to complete the rescue tunnel. It was many days to be trapped.	
	They were down for two months	
103: Life in the Mine		

9: Miners Survival Ability	The miners survived because of their own will & determination
	People can be so resilient
	I never realized that the ordeal was so stressful for the miners
	Role of patriotism/nationalism; The idea which helped them survive "We are Chilean Miners"
10: Reference to food and diet	The miners had 2500 calorie diet to maintain weight to fit in the capsule
	There was an escape hatch in the capsule, and the restricted diet
	I never realized how small they had to be
	They had a lot of space. They had food and water. 69 days
11: Reference to how organized the miners were/their routine	How the miners organized themselves - they built a community below for survival. Ex: mail room
	How organized the miners were while trapped in order to maintain a routine
12: Reference to community/living conditions	How the miners organized themselves - they built a community below for survival. Ex: mail room
	They used a watch to distinguish night from day
	Miners were confined to such small areas
	That there was a little Bible down there
13: Reference to supplies sent/contact with surface	It took 65 days. That Israel sent them antifungal socks
with surface	The tube that sent supplies up/down was so small
	I didn't know the letters were sent. It was very moving.
14: No one died	It was 69 days and that no one died before they were all found alive
	All 33 miners were rescued - and that thankfully there were no deaths
15: Life in the Mine Misc.	What the miners did to survive
	The tunnels/mine shafts were so complex
104: General Comment about Mining	
16: Copper mining in Chile	They were trapped for so long (69 days). That Chile had so much of the world's copper reserves
	Geology of Chile provides copper
17: Safety concerns, safety standards,	Chile's mining standards were as high as indicated
danger of job	I was surprised that the exhibit didn't have info about prior safety issues at the mine, or the fact that it had previously been closed

	down for safety reasons
10.0	Mining was dangerous - this brought it to reality
18: General comment about mining Misc.	It was so deep. The shape of the mine
	It was a deep ramp mine
105: Exhibit Specific comments	
19: Smithsonian had this exhibit, this type	They could bring this Phoenix device to the museum
of exhibit	
	I would get to see this at the Smithsonian
	natural history was also about rescue operations
	natural mistory was also about rescae operations
	It was here
20: Exhibit would be so emotional, well	It would be so interesting
done	It was so intense emotional
	It was so intense, emotional
	It was so moving. Lots of information
21: Exhibit Specific Misc.	
106: Effort of Rescue	
22: Many Nations/Human	It took some many days and so much world manpower
Collaboration/world Attention	
	That the world watched this happen live!
	It takes something great to happen to people come together
23: Such a rescue was possible	It was possible to accomplish such a rescue
•	
	How big of a deal it was
	The enormity of the rescue and that the rescue capsule was
	custom made
24: Effort of rescue Misc.	
107: Knew the Story	
25: Knew the story	I knew the story
	Thad fallowed it internally leaves to the 11 details
108: Miscellaneous Comment	I had followed it intensely, knew about all details
	Has already been over 1 year ago. Also this mine layout and
26: Miscellaneous	collapsed area
	it could be so fast
	I was happy to see that one of the miners was a Christian. That meant a lot to me

Q4a. If yes, were you surprised the exhibit was bilingual? Why or why not?	
Code	Example
101: Location	
1: Spanish is the language of Chile (needs	Chile is a Spanish speaking country
to mention both location and language)	Not surprised: the Chileans speak Spanish

	Because Spanish is the formal language of Chile
	An excellent way to honor the Chilean people and it is always best to express deep feelings in the native tongue
2: Event took place in Chile/Chilean	Because it's about Chilean miners
miners & embassy involved (mention of Chile, but no mention of language)	Because since the event occurred in Chile it was expected the exhibit was bilingual
	It's a Chilean story, it should be in Spanish
	Chile, of course
	Since I guess many Chileans are interested in seeing it
	Chile is in Latin America
4: Took place in a Spanish speaking, or	Because it happened in a Spanish speaking country
non-English speaking country (reference to language, no specific mention of Chile)	Event took place in Spanish area
	No, It takes place in a non-English speaking country Not surprised, it seems fitting given that the incident involved Spanish speaking people
5: Miners spoke Spanish, native language	The miners spoke Spanish so their story should be told in their
of event or country of origin (no specific	words
mention of Chile)	Because of the language that it happened in
	Nope because of the language of the people involved
	It makes sense with regard to the country of origin
6: Location Misc.	
102: Comments on Bilingual Exhibits	
7: Common Today	I live in Miami where mostly things are bilingual
	From Canada where we expect English and French
	I'm used to seeing many languages on public signs/exhibits
	Everything is bi-lingual now
8: Not common today/Not common at the	None of the others are, but it's nice
Smithsonian	I haven't seen it before in the Smithsonian
	Except it was different than all other exhibits.
	Because most American museum exhibits are not bilingual
	Slightly, because it is rather rare in the US
9: Bilingual Positive (includes comments	We should have more bilingual exhibits, to reflect the Latino
about the desire to see more bilingual	demographic in the United States
exhibits)	Museums all over the world have multi-lingual displays. I was

	surprised there aren't more exhibits in other languages
	I think it's a good idea to have bilingual exhibits
	Very happy to see it was bilingual
10: Bilingual generic Misc. (includes	I'm a student of Spanish and enjoyed reading the translation
comments about the fact that the exhibit	Because I am bilingual and can speak five languages
is in a US museum)	
is in a os museum)	Yes - Although the mine was in a Spanish speaking country, the
	display is in a US museum
103: Makes sense it is bilingual	
11: Makes sense/not surprised	Why not
	I was not surprised - it seemed appropriate
	Yes surprised, but it makes sense
12: Visitors from many places/reaches	Not surprised as visitors from around world
broader audience	
	I was not surprised due to the diverse population that travel
	through DC
	Because it will reach a larger audience
13: Large scale event/multiple languages	Not at all, it was a huge event worldwide
involved	,
mvorveu	The experience at this exhibit of course occurred in a Spanish
	speaking foreign country. It's only right that it was done in Spanish
	and English
	It is fitting as the people involved are not all English speaking
	Although the mine was in a Spanish speaking country, the display
	is in a US museum
14: Of interest to Spanish	I can imagine there may be people from Chile who may want to see
speakers/Hispanics	this and it will make it easier for them to read if it's in Spanish
	Something like this would be of interest to Spanish speakers
	maybe visiting from elsewhere
	,
	This exhibit could have a bigger impact on Spanish-speaking
	visitors - there visitors may not know English, too
15: Large number of Spanish speakers	Why not? 30% speak Spanish in USA
	Both the fact that Spanish is a widespread language and it is about
	Chile
	There are many Spanish speaking people in this country
16: Makes sense Misc.	Good.
	No. Thousing a language harrier
105. Missallanasus	No, There is no language barrier
105: Miscellaneous	
21: No (no explanation)	December the weited different land - for
22: Miscellaneous	Because it excited different kind of people
	We're from Miami

Q5a. Did the fact that the exhibit was in both English and Spanish add to, detract from, or make no difference in your exhibit experience? Why do you say that?	
Code	Example
101: My Language	
1: Read English/don't read or speak	Because I read the English part
Spanish	As it was in English, I wasn't distracted by the Spanish
	I do not read Spanish
2: Read Spanish/don't read or speak English	I speak Spanish. I understood that lots of visitors to this exhibit would be South American, especially Chileans
	I only speak Spanish.
	Because I do not speak English.
3: I am bilingual	I can read and understand both
	Because I can somewhat speak Spanish and read it
	I am bilingual
4: I can understand all necessary info/one	I just read the language I am fluent in
language was mine	Was able to read all info I needed/wanted
	I still understood everything and felt the significance of the event portrayed
5: Language Misc.	I was a Spanish major in college. I liked seeing the translation
	Didn't notice after a while
102: Comments on Bilingual Exhibits	
6: Common today/common where I live	I am from California, and most things are bilingual there.
	I live in Chile and I am used to seeing bilingual museums.
	I'm from Canada. Most places have signs in different languages
	I'm used to seeing translation along with English.
	Normal anymore
	I'm used to seeing English/Spanish
7: Appreciation for Spanish Language	Was with Spanish speaking people
	For people who speak Spanish
	Helped kids learn Spanish
8: Bilingual common Misc.	
103: Inclusivity	
9: Interest from/to attract Latino/Hispanic visitors (to attract new	Spanish speakers especially Chilean visitors to this exhibit would appreciate being presented in Spanish
groups, marketing, appeal of exhibit)	This touched the lives of many South American people. It seems

	appropriate to have it in Spanish
	I understand Latinos would want to read about it
10: Accessibility (make content more available to all types of visitors)	Because the incident took place in Chile and this makes it more accessible
	Broadens the number of people who can experience it fully
	Larger population could learn from it
11: For tourists/because of location	Mixed visitors
	I would expect it to be in Spanish considering the location (DC)
	Multi-cultures visit the Smithsonian
12: Spanish is common	As it happened in Chile, a Spanish-speaking country and so many people around here speak Spanish, it only seems appropriate
	Since the rescue was in Chile and there are so many nationalities that speak Spanish it made total sense
	Appreciate that Spanish is 1st language for many, not distracting for an English speaker
13: Inclusivity Misc.	
104: Involved Parties	
14: Happened in Chile	Because the incident took place in Chile and this makes it more accessible
	Since the rescue was in Chile and there are so many nationalities that speak Spanish it made total sense
	The topic of the exhibit took place in Chile, a Spanish speaking country
15: Happened in a Spanish Speaking country	Given the accident occurred in a Spanish speaking country, it is only proper it should be shown in Spanish. English is needed since it is exhibited in the US
	Because it happened in a Spanish speaking country
16: Honors Chilean people	It was an event that happened in a Spanish speaking country Shows importance to Chile and respect
	Shows respect for Chile. I think we take for granted that poor people around the globe supply our needs. The use of Spanish reminds us of this fact.
17: Multiple countries involved	I believe it honored where they were from. Could not be different Multi-lingual people were involved in the rescue attempts
•	International flavor
	See 4 [Both communities had an interest in this rescue]
18: Involved parties Misc.	
105: Authenticity and Effect	

19: More Authentic (relating to HOW it	The people involved in this event speak Spanish, it's authentic
happened)	More authentic but not necessary here in the USA
	It added to its realities and authenticities. It helped to portray its human [illegible]
20: Added to the effect (relating to the	It helped to put you in the proper place
personal, emotional experience)	Showed their raw emotions without a translator
	It's a nice reminder that it happened elsewhere and makes it relate to its origin
21: Added cultural value	Because it made this exhibit seem more personal to the Chilean culture
	Gave cultural value
	It enhanced the Chilean cultural aspect
22: Authenticity Misc.	
106: Miscellaneous	
23: Both Necessary	We aren't Spanish speakers, but it seems appropriate to me
	Necessary
	It was clear that both languages are necessary
24: Doesn't matter/doesn't detract	Why would it detract?
	Because it didn't matter. You just don't pay attention to it
	Because it doesn't matter to me the language
25: Slightly negative comment	This is America
26: Misc.	The film states it all
	Because I'm not a technician
	All persons need to be aware of the dangers these men live in everyday to bring us coal

Q6. Why do you think the Smithsonian decided to do this exhibit in both English and Spanish?	
Code	Example
101: Tied to Location	
1: Language of Chile	Because it is the native language of Chile and to honor that.
	Because Spanish is a popular language spoken in the US and Chile
	Chile is a Spanish speaking nation. Many interested members of the public would probably Spanish speaking
2: Happened in Chile	Because it occurred in Chile
	Because miners were Chilean

3: Happened in a Spanish Speaking country The event took place in a Spanish speaking country. Because the rescue took place in a Spanish speaking country. I guess because it happened in Latin America. Because the situation was in a Latin country. It's happened in South America Impacted individuals Remain truthful to time and relativity of the place where it happened The country of this historic rescue speaks Spanish Miners and some rescuers spoke Spanish and some rescuers spoke English To show the exhibit's native language Cause the miners natural language is Spanish 7: Location Misc. 7: Location Misc. 7: Location Misc. To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident As a tribute to Chile Out of respect for the Chilean people	
The event took place in a Spanish speaking country. Because the rescue took place in a Spanish speaking country I guess because it happened in Latin America. Because the situation was in a Latin country. It's happened in South America Impacted individuals Remain truthful to time and relativity of the place where it happened The country of this historic rescue speaks Spanish Miners and some rescuers spoke Spanish and some rescuers spoke English To show the exhibit's native language Cause the miners natural language is Spanish 7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident As a tribute to Chile	
4: Happened in Latin/South America Because the situation was in a Latin country. It's happened in South America Impacted individuals Remain truthful to time and relativity of the place where it happened The country of this historic rescue speaks Spanish Miners and some rescuers spoke Spanish and some rescuers spoke English To show the exhibit's native language Cause the miners natural language is Spanish 7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident 9: Reference Chile/Chileans	
Because the situation was in a Latin country. It's happened in South America Impacted individuals Remain truthful to time and relativity of the place where it happened The country of this historic rescue speaks Spanish Miners and some rescuers spoke Spanish and some rescuers spoke English To show the exhibit's native language Cause the miners natural language is Spanish 7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident 9: Reference Chile/Chileans As a tribute to Chile	
5: Location or native language of event/people involved (no specific mention of Chile) Remain truthful to time and relativity of the place where it happened The country of this historic rescue speaks Spanish Miners and some rescuers spoke Spanish and some rescuers spoke English To show the exhibit's native language Cause the miners natural language is Spanish 7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident 9: Reference Chile/Chileans As a tribute to Chile	
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Cause the miners natural language is Spanish 7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident 9: Reference Chile/Chileans As a tribute to Chile	
7: Location Misc. 102: Honor and Respect 8: Generic reference To pay tribute to the fact this took place in a Spanish speaking country and for visitors from there To honor and place in context the event. To honor those involved or close to the incident 9: Reference Chile/Chileans As a tribute to Chile	
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To honor those involved or close to the incident 9: Reference Chile/Chileans As a tribute to Chile	
9: Reference Chile/Chileans As a tribute to Chile	
Therefore dime, dimedia	
Out of respect for the Chilean people	
Appeal to a larger audience and respectful to the Chilean cultu	ıre
10: Reference Miners Out of respect for the miners and their families	
to respect the miners	
To pay homage to the miners and to perhaps attract a Latino population	
11: Honor and Respect Misc. For people it may have affected who were closer to the incident - maybe more likely that they don't speak English	
Most miners are of Mexican/Latin origin	
So Chilean nationals visiting would understand our support	
103: Authenticity and Effect	
12: More Authentic (relating to HOW it To show the emotion they felt	
happened) See 5A [It added to its realities and authenticities. It helped to portray its human [illegible]]	

	Cultural sensitivity - quite appropriate
13: Makes sense	The most logical thing to do
	Makes sense to me
14 Add to the effect (veletion to reverse)	It was the right thing to do I hope to help enhance its meaning and relevance
14: Add to the effect (relating to personal, emotional experience)	Thope to help elinance its meaning and relevance
emotional experience)	It helps tie visitors in, especially when the video card letters are in Spanish
	Because it adds realism to it
15: Authenticity Misc.	Because it is a new forum to illustrate to people
	To show the world cares
	Because so many letters and the dialogue was in Spanish
104: Inclusivity	
16: Interest from/to attract	So that monolingual Hispanics can learn about the event.
Latino/Hispanic (to attract new groups, marketing, appeal of the exhibit)	To reach more of the Hispanic community
	The Chilean Miners spoke Spanish and other Chileans may be especially interested in this exhibit.
17: Accessibility/Inclusivity (to make	To give more exposure to what happened
content more available to all types of visitors)	To make the exhibit more welcoming for non-English speakers.
	Include more people to learn about this wonderful international effort
	To be more inclusiveI hope!
18: For tourists/because of	For the tourists.
location/diverse groups visit	Many individuals from numerous countries visit the Smithsonian
	See #5 [I would expect it to be in Spanish considering the location (DC)]
	Visitors are diverse. Symbolize language of miners
19: Language is common	Because there are a good number of Spanish visitors.
	Because of the growing Spanish speaking population in the US.
	Because Spanish is a popular language spoken in the US and Chile
20: More Should be	Because we are a global world and it took place in Chile. Shouldn't the whole museum be in English and Spanish?
	Finally getting up to speed
	I think we should offer all languages
21: Inclusivity Misc.	For both Spanish and English speaking to realize what it took

	America is not just an English speaking country
105: International Event	
22: International Event	To show unity in effort and to show/respect combined efforts of multiple countries involved in the rescue
	Because it was an international event
	See 4 [Both communities had an interest in this rescue]
23: Developed with Chile	The original language of this triumph was Spanish, made with Chilean embassy
	It was developed with Chile
	Because it was a collaboration between us and Chile
24: International event Misc.	
106: Miscellaneous	
25: Slightly Negative comment	Because they are promoting that crap. We are America and English is our language
26: Miscellaneous	See 4 [I read the English texts]
	Good mix
	It was an extraordinary event.

Q7a. If yes/It depends, which kinds of exhibits should be presented in other languages?	
Code	Example
101: Context dependent	
1: pertaining to other cultures, countries	As pertinent to the subject matter, in this case, Spanish was correct
or languages	Anything with a specific tie to a certain country/language
	Ones from/representing other nations where language is not English
2: Reference to Chile story	Origin of the exhibit - such as in this one
	Exhibits like this
	Not unless it has a specific reason like this exhibit
3: Reference specific exhibits	Human Origins
	Hall of human origins, dinosaur exhibit
4: Of interest to speakers of other	If the context is relevant to other language speaking audience
languages	Based on exhibit's significance and who it would appeal to
	Those of particular interest to foreign visitors
5: Depends on context	Exhibit specific, where it makes sense depending on the context
	If applicable to scenario
	Depends on origin of exhibit

6: Specific type of exhibit	Ones about human events
	Cultural significance
	Culture, history
7: Context Dependent Misc.	dureure, mistory
102: All, Most, Unsure, None	
8: All	All of them
	No, all - for all
9: Most	As many as are practical
	Almost all if possible. we're a melting pot
	The most popular exhibits
10: Unsure	Not sure
11. None	Unsure Not really
11: None	Not really
	No, if using bilingual takes up too much exhibition space
12. All, most, unsure, none Misc.	
103: Reference to Languages	
13: Common Languages	Most spoken 2nd languages (Spanish, French, etc.)
0 0	
	Major languages
	Most common used language
14: Specific Languages	Japanese
1 8 8	
	Any, Ancient Egyptian would be interesting to hear as well as say African dialects and Native American
	Afficali dialects and Native Affierican
	Most spoken 2nd languages (Spanish, French, etc.)
15: Many/Any Languages	As many world languages as possible. More the merrier!
- -	I haliana it abauld ha musantal in annual 1966
	I believe it should be presented in several different languages to assist your guests that may not speak English or Spanish
16: Languages can distract/English only	English is still the world's most common 2nd language
is fine	
	Not everything requires both languages
	It can be too much when museums use many languages (esp.
	French, German, Spanish and English together)
17: Languages Misc.	, , , , , , , , , , , , , , , , , , , ,
104: Visitor Need	
18: Good for visitors	Maybe for tourists different languages
	I believe it should be presented in several different languages to assist your guests that may not speak English or Spanish
	assist your guests that may not speak english of spanish
	It would bring more tourist and help understand what is on
	display

19: Demand for it	Depends on how many non-English speaking people visit and the language they speak If there is a demand, or the exhibit is from another country
20: Make Resources available	Depends on the exhibit - would be hard to choose what ones should be bilingual - could offer audio in other languages
21 Waiten Nagal Mica	Maybe offer literature at info desks in various languages
21: Visitor Need Misc.	
105: Miscellaneous	
22: Slightly negative comment	
23: Miscellaneous	Well, I believe all students would gain from exhibits we share with our son
	Unfortunately in today's world, what is the expense of bilingual?
	Most museums in the world cater to U.S. and have English included at their exhibits

Q7b. If Yes/It depends, in which other languages?						
Code	Example					
101: Dependent						
1: On exhibit	Depending on the country of the relevant culture.					
	If culture specific, then in that language. Spanish primary language					
	Related to the topic of exhibits					
2: In general	It depends					
	Appropriate ones					
3: Dependent Misc.						
102: About Languages						
4: Common Ones	The most common ones					
	French is the 2nd major language spoken worldwide					
	Majority Rules					
5: Appropriate Languages, based on	Whatever is appropriate					
visitor ship	Spanish & check with government statistics to see who's coming the most.					
	Survey attendee nationality					
6: Any/Most/All	Almost all if possible. we're a melting pot					
,	A					
7: Languages Misc.	Any					
103: Specific Languages						
8: Spanish						
9: French						
10: Chinese Dialects (Chinese, Mandarin)						

11: German	
12: Other Languages	
104: Miscellaneous	
13: Miscellaneous	home languages of my students
	etc.
	Whatever is represented
	The state of the s
	I don't know.

Appendix X: Please complete the following statement about the exhibit: *I never realized that...*

Categories	Spanish	Speakers	Non-Spanish Speakers		Tot	al
	Frequency	Percent	Frequency	Percent	Frequency	Percent
How the Miners were rescued	14	28%	78	29%	92	29%
Multiple rescue plans	3	6%	15	6%	18	6%
Rescue Capsule/Rescue Shaft	9	18%	49	18%	58	18%
General comments about the rescue	1	2%	7	3%	8	3%
Miners rescued Misc.	1	2%	7	3%	8	3%
Trapped Miners	11	22%	66	25%	77	24%
Depth of the Mine	7	14%	30	11%	37	12%
How many were trapped	1	2%	3	1%	4	1%
How long it took to find them	0	0%	8	3%	8	3%
How long they were trapped	3	6%	25	9%	28	9%
Life in the Mine	5	10%	50	19%	55	17%
Miners survival ability	1	2%	5	2%	6	2%
Food and Diet	1	2%	11	4%	12	4%
Organization and Routine	0	0%	4	2%	4	1%
Community living conditions	2	4%	12	5%	14	4%
Supplies sent, and contact with surface	0	0%	12	5%	12	4%
No one died	0	0%	3	1%	3	1%
Life in Mine Misc.	1	2%	3	1%	4	1%
General Comments about Mining	3	6%	17	6%	20	6%
Copper Mining	0	0%	6	2%	6	2%
Safety concerns, safety issues, danger of the job	3	6%	4	2%	7	2%
Comments about Mining Misc.	0	0%	7	3%	7	2%
Exhibit Specific comments	9	18%	27	10%	36	11%
Didn't know the Smithsonian had this	8	16%	14	5%	22	7%
The exhibit was emotional	1	2%	8	3%	9	3%
Exhibit specific comments Misc.	0	0%	5	2%	5	2%
Effort of the Rescue	7	14%	17	6%	24	8%
Many nations were involved	3	6%	5	2%	8	3%
Such a rescue was possible	2	4%	3	1%	5	2%
Effort of rescue Misc.	2	4%	9	3%	11	3%
Knew the Story	1	2%	5	2%	6	2%
Miscellaneous	1	2%	8	3%	9	3%

Appendix 7. Did you notice that the exhibit was in both English and Spanish? If yes, were you surprised the exhibit was bilingual? Why or why not?

Categories		Speakers	Non-Spanish		Total	
			Spea	akers		
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Location	17	28%	76	35%	93	33%
Language of Chile	4	7%	19	9%	24	9%
Event took place in Chile	6	10%	29	13%	35	13%
Event took place in a Spanish-speaking country	5	8%	12	6%	17	6%
Miners spoke Spanish	2	3%	11	5%	13	5%
Location Misc.	0	0%	5	2%	5	2%
Comments on Bilingual	24	39%	30	14%	54	19%
Exhibits						
Common today/Common where I live	1	2%	11	5%	12	4%
Not common today	10	16%	9	4%	19	7%
Positive comment about Bilingual exhibits	9	15%	8	4%	17	6%
Bilingual exhibits Misc.	4	7%	2	1%	6	2%
Makes Sense	17	28%	71	32%	88	31%
Makes Sense	5	8%	25	11%	29	10%
Get visitors from many places	6	10%	17	8%	23	8%
It was a large scale event	0	0%	4	2%	4	1%
Of interest to Spanish speakers/Hispanic visitors	1	2%	16	7%	17	6%
There are a large number of Spanish speakers	5	8%	7	3%	12	4%
Makes Sense Misc.	0	0%	2	1%	2	1%
Miscellaneous	3	5%	42	19%	45	16%
No (no explanation)	3	5%	38	17%	41	15%
Miscellaneous Misc.	0	0%	4	2%	4	1%

Appendix 8. Why do you think the Smithsonian decided to do this exhibit in both English and Spanish?

Categories	Spanish Speakers		Non-Spanish Speakers		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Tied to the Location of the event	20	35%	85	33%	105	33%
Spanish is the language of Chile	4	7%	19	7%	23	7%
The event happened in Chile	6	11%	29	11%	35	11%
Happened in a Spanish speaking country	3	5%	17	7%	20	6%
Location of the people involved	7	12%	19	7%	26	8%
Location Misc.	0	0%	1	>1%	1	>1%
Honor and Respect for the	5	9%	27	10%	32	10%
Miners						
Generic reference to honor and respect	4	7%	9	4%	13	4%
Reference to Chile	0	0%	10	4%	10	3%
Reference to the Miners	0	05	6	2%	7	2%
Honor and Respect Misc.	1	2%	2	1%	3	1%
Authenticity and Effect	2	4%	24	9%	26	8%
More Authentic	0	0%	8	3%	7	2%
Makes sense	1	2%	7	3%	8	3%
Added to the effect	1	2%	5	2%	6	2%
Authenticity Misc.	0	0%	4	2%	4	1%
Inclusivity	22	39%	102	39%	124	39%
Of interest to Spanish speakers/Hispanic visitors	5	9%	19	7%	24	8%
Accessibility	11	19%	47	18%	58	18%
For tourists	2	4%	11	4%	13	4%
Spanish is a common language	3	5%	17	7%	20	6%
More exhibits should be bilingual	0	0%	3	1%	3	1%
Inclusivity Misc.	1	2%	5	2%	6	2%
International Event	4	7%	16	6%	20	6%
International event (many nations involved)	4	7%	8	3%	12	4%
Developed with Chilean embassy	0	0%	5	2%	5	2%
International Event Misc.	0	0%	3	1%	3	1%
Miscellaneous	4	7%	5	2%	9	3%
No (No explanation)	1	2%	2	1%	3	1%
Slightly negative comment	0	0%	1	>1%	1	>1%
Miscellaneous Misc.	3	5%	2	1%	5	2%

Appendix 9. Did the fact that the exhibit was in both English and Spanish add to, detract from, or make no difference in your exhibit experience? Why do you say that?

Categories		Speakers		panish	Total		
			Spea	ikers			
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
My Language was included	16	31%	40	22%	56	24%	
Read the English	0	0%	24	13%	24	10%	
Read the Spanish	4	8%	0	0%	4	2%	
I am bilingual	3	6%	8	4%	11	5%	
Understood all the	5	10%	6	3%	11	5%	
necessary info							
Language Misc.	4	8%	2	1%	6	3%	
Comments on Bilingual Exhibits	5	10%	29	16%	34	15%	
Common today/where I live	1	2%	19	10%	20	9%	
Appreciation of Spanish language inclusion	4	8%	5	3%	9	4%	
Comments on bilingual exhibits Misc.	0	0%	5	3%	5	2%	
Inclusivity	11	22%	30	16%	41	18%	
Of interest to Spanish speakers/Hispanic visitors	1	2%	4	2%	4	2%	
Accessibility	7	14%	18	10%	25	11%	
For tourists	1	2%	2	1%	3	1%	
Spanish is a common language	0	0%	2	1%	2	1%	
Inclusivity Misc.	2	4%	4	2%	6	3%	
Involved Parties	2	4%	30	16%	32	14%	
Happened in Chile	0	0%	10	6%	10	4%	
Happened in a Spanish Speaking country	0	0%	5	3%	5	2%	
Honors the Chilean people	1	2%	5	3%	6	3%	
Multiple countries were involved	0	0%	7	4%	7	3%	
Involved parties Misc.	1	2%	3	2%	4	2%	
Authenticity and Effect	12	24%	29	16%	41	18%	
More Authentic	5	10%	13	7%	18	8%	
Added to the effect of the exhibit	3	6%	9	5%	12	5%	
Added cultural value	3	6%	5	3%	8	3%	
Authenticity Misc.	1	2%	2	1%	3	1%	
Miscellaneous	5	10%	25	14%	30	13%	
Both languages necessary	0	0%	4	2%	4	2%	
Doesn't matter to me	0	0%	10	6%	10	4%	
Slightly negative comment about bilingual exhibit	0	0%	3	2%	3	1%	
Miscellaneous Misc.	5	10%	8	4%	13	6%	

Appendix 10 Do you think the Smithsonian should present exhibits in English as well as other languages? If yes/it depends, which kinds of exhibits should be presented in other languages?

languages? If yes/it depe				•	Total		
Categories	Spanish Speakers Non-Spanish Speakers		10	lai			
			_	_			
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Context Dependent	21	44%	90	54%	111	51%	
Exhibits pertaining to	10	21%	38	23%	48	22%	
other countries or cultures							
Make reference to the	1	2%	7	4%	8	4%	
Chilean story							
Reference to specific	0	0%	3	2%	3	1%	
exhibits							
Exhibits that are of interest	0	0%	10	6%	10	5%	
to speakers of other							
languages							
Depends on the context of	4	8%	15	9%	19	9%	
the exhibit							
Specific type of exhibit	4	8%	15	9%	19	9%	
Context Dependent Misc.	2	4%	2	1%	4	2%	
All/Most/Unsure/None	8	17%	37	22%	45	21%	
All	6	13%	27	16%	33	15%	
Most	1	2%	4	2%	5	2%	
Unsure	1	2%	3	2%	4	2%	
None	0	0%	3	2%	3	1%	
Reference to Languages	7	15%	17	10%	24	11%	
Common languages	2	4%	5	3%	7	3%	
Specific languages	2	4%	3	2%	5	2%	
Many or any languages	2	4%	2	1%	4	2%	
Language Slightly negative	1	2%	6	4%	7	3%	
comment							
Languages Misc.	0	0%	1	1%	1	1%	
Visitor Need	9	19%	17	10%	26	12%	
Good for visitors	6	13%	7	4%	13	6%	
Demand for it	0	0%	4	2%	4	2%	
Make resources available	3	6%	5	3%	8	4%	
in other languages		3.0		- 70		7,0	
Visitor Need Misc.	0	0%	1	1%	1	1%	
Miscellaneous	3	6%	7	4%	10	5%	
Slightly Negative	1	2%	1	1%	2	1%	
Miscellaneous Misc.	2	4%	6	4%	8	4%	

Do you think the Smithsonian should present exhibits in English as well as other languages? If yes/it depends, in which other languages? Appendix 11

Categories	Spanish	Speakers	Non-Spanish		Total	
J	-	Speakers				
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Dependent	8	15%	39	29%	47	25%
On the exhibit	8	15%	33	24%	41	22%
In general	0	0%	6	4%	6	3%
About Languages	0	0%	22	16%	22	12%
Common languages	0	0%	6	4%	6	3%
Appropriate languages	0	0%	7	5%	7	4%
Any Most All languages	0	0%	8	6%	8	4%
About Languages Misc.	0	0%	1	1%	1	1%
Specific Languages	46	84%	71 53%		117	62%
Spanish	20	35%	27	20%	47	25%
French	11	20%	13	10%	24	13%
Chinese Dialects	6	11%	9	7%	15	8%
German	2	4%	8	6%	10	5%
Other specific languages	7	13%	14	10%	21	11%
Miscellaneous	1	2%	3	2%	4	2%
Slightly Negative comment	1	2%	0	0%	1	1%
Miscellaneous Misc.	0	0%	3	2%	3	2%

Appendix 12 In which other languages should exhibits be presented?

ther Languages (English and Spanish translations)	N
Spanish	50
French	26
Chinese Dialects	16
Chinese	11
Mandarin	5
German	11
Japanese	5
Arabic	4
English	3
Italian	3
Portuguese	3
Hindi	2
Korean	2
Dutch	1
Farsi	1
Russian	1
Tagalong	1
Turkish	1