

PERCEPTIONS AND COGNITIONS FROM AN INTERPRETIVE TALK: COMPARING VISITOR RESPONSES TO EXPERT REVIEWS

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Abstract.—Interpretation is a communication process which aims to reveal meanings and encourage relationships between visitors and natural or cultural resources rather than simply communicating factual information (Larsen 2003, National Association for Interpretation 2000, Tilden 1957). Effective interpretation offers visitors opportunities to connect with and perceive the resource as personally relevant. The purpose of this study was to determine visitors' responses to interpretive talks, and to compare these responses to opportunities for connection identified by trained National Park Service interpreters. Findings are discussed in terms of the similarities and differences of salient themes across these two groups.

1.0 INTRODUCTION

Interpreters in a variety of settings seek to provide inspiring, enjoyable, and memorable educational experiences while fostering the development of a personal stewardship ethic and encouraging increased appreciation and understanding of natural and/or cultural resources (NPS 2001). For example, a specific goal may be to influence the visitors' perspectives with respect to cultural or natural resources or protected area values. Interpreters do not simply transmit information; they are agents of discovery that aid visitors in developing their own relationships with the environment (Beckmann 1999, Hammitt 1981). Interpretation has been described as informal or free-choice learning, where motivation to attend programs is internal, attendance is voluntary, learners have diverse backgrounds, content is variable, and settings are varied (Falk 2005, Ham & Shew 1979,

Koran et al. 2000). Visitors who attend interpretive talks are not a captive audience, and visitors' responses may or may not be what the interpreter intended (Falk 2005, Ham & Krumpe 1996).

An interpretive talk (hereafter, a "talk") is a planned presentation to an audience that provides opportunities for visitors to become aware of natural and/or cultural resources and the values or meanings they represent. For example, a talk may present the purpose of a place, as well as human relationships to and relationships among the natural, cultural, and/or historical environments (Beck & Cable 1998, NPS 2000). A talk may relate to and build on visitors' past experience and previous knowledge, or may be their first exposure to the subject. In a free-choice learning setting, constructivist learning theory suggests that visitors' responses to a talk will reflect the context of the experience.

Visitors' judgment of what is important or meaningful is related to their prior knowledge and experience as well as the social and cultural context of the experience (Cobb 2005, Falk 2005, Hammitt 1981). For example, responding to the story of an unknown soldier with joy or surprise versus responding with sadness may reflect an individual's previous beliefs or be influenced by a reaction from the social group. However, patterns or themes in what visitors find important and meaningful illustrate aspects of interpretive talks that are more or less effective. Past research suggests that while interpreters desire successful programs, they may not correctly identify visitor responses that result from experiences at an interpretive talk or employ techniques effective in eliciting desired responses (Anderson & Blahna 1996, Knapp & Benton 2004). Therefore, continued research and evaluation assessing the effectiveness of interpretation in stimulating desired visitor responses is necessary (Beckmann 1999, Roggenbuck & Propst 1981, Silverman & Barrie 2000).

Intuition and informal feedback may be the only sources of evaluation received by many interpreters. With limited funds, agencies may prioritize other areas

or focus on developing “new” interpretation instead of evaluating the “old” (Beckmann 1999). The National Park Service (NPS) Interpretive Development Program (IDP) conducts peer reviews of interpretive talks but does not compare the results of these reviews with associated visitors’ responses. This omission suggests a need for research that enhances theoretical and practical understanding of the visitors’ responses to interpretation, interpreters’ expectations for those responses, and the relationship between the two.

1.1 Study Purpose, Objectives, and Research Questions

The purpose of this study was to: 1) identify visitors’ responses to talks; 2) determine potential responses (opportunities for personal connections) identified through the NPS peer reviewer process; and 3) determine the relationship between these two sets of responses. The first objective was to identify how visitors responded to aspects of a talk, and what visitors found memorable and important.

R.Q. 1: What are visitors’ affective and cognitive responses to interpretive talks?

The second objective was to explore the relationship between visitors’ responses and the potential responses identified by NPS peer reviewers.

R.Q. 2: What are the potential responses identified by NPS peer reviewers, and what is the relationship between these expectations and visitors’ reported responses?

2.0 METHODS

2.1 Study Area, Interpretive Talks, and Participants

This research involved the National Cemetery Talk at Gettysburg National Military Park in Pennsylvania. All visitors aged 18 and over were asked to complete a brief survey immediately after attending one of nine systematically identified interpretive talks over the course of one week in July, 2005. Talks were selected to capture morning and afternoon as well as weekday and weekend visitors. Five interpreters (one permanent and two seasonal NPS employees, one volunteer and one intern) presented the 35–45 minute talk.

2.2 Data Collection

All adult visitors arriving at the meeting point for the National Cemetery Talk were met by a researcher and invited to participate in the study. The first objective was addressed with open-ended questions in a survey instrument, for example, “What was memorable about the topic of this talk?” Additional questions explored visitors’ responses to specific aspects of the interpretive talk. An overall response rate of 78 percent (n=117) was achieved. The second objective was addressed by recording each interpreter’s talk on DVD for analysis by NPS peer reviewers.

2.3 Data Analysis

2.3.2 Visitors’ Affective Responses

A thematic conceptual matrix was constructed for the analysis of visitors’ affective responses to the talks through a process of data reduction, display, analysis and conclusion drawing (Miles & Huberman 1994). This process was based on the six primary emotion categories identified by Shaver et al. & (1987). As part of the on-site survey, visitors were asked to fill in the blanks to the question: “I felt ____ when the interpreter told us about ____.” Based on Shaver et al.’s (1987) hierarchical cluster analysis, visitors’ responses to (“I felt ____”) were categorized. The second step in this process was to code visitor responses to (“... when the interpreter told us about ____”) and to identify themes and patterns.

2.3.3 Visitors’ Cognitive Responses

Miles and Huberman (1994) described clustering as the process of grouping items with similar patterns or characteristics and conceptualizing more general categories or themes through aggregation and comparison. Visitors were asked to describe, in their own words: 1) what the talk was about; 2) what was most memorable; and 3) what were the two most important things the interpreter said. These responses were coded and clustered in a series of three iterations.

2.3.4 NPS Peer Review Procedures

Part of the mission of the NPS IDP is to “connect people to parks so that parks are preserved and future generations may make their own meaningful resource connections” (NPS 2003). As part of the IDP program,

Table 1.—Visitors’ affective responses to the interpretive talk

Emotion Category	Visitors’ affective responses
Love	compassion, admiration, empathy, reverent, respect
Joy	amused, good, pleased, glad, grateful, blessed, thankful, uplifted, inspired, captivated, pride, patriotic, relief, moved, awe, impressed, wonderment, honored, warmed, touched, peaceful
Surprise	shocked, surprised, amazed, puzzled, distracted
Anger	disgust, repulsed, sickened, mad, concerned, terrible
Sadness	saddened, ashamed, sad, shame, small, sorrow, sorry, grief, ‘a lump in my throat,’ overcome, overwhelmed, moved, disappointed, sympathy, remorse, touched, humble, humility, solemn,
Fear	horror, disturbed, aghast, horrified, ‘grossed out’

Table 2.—Frequencies (%) of visitors’ affective responses for response categories

	Lincoln/ Gettysburg Address	Unknown/ ID/Soldiers	Casualties/ Sacrifice/ Death	Graves/ Cemetery	States/ Sides	Medical/ Townpeople	Other
Love	3	5	2			1	
Joy	22	10	4	5	3	2	3
Surprise	3	5	8	2	3		1
Anger		1	1	1	1	1	1
Sadness	3	16	30	4	5	3	3
Fear		3	5				
Total*	31%	40%	50%	12%	13%	7%	8%

*Total exceeds 100% due to multiple responses from visitors.

peer reviews are conducted to assess the achievement of professional standards within competencies, including that of the Interpretive Talk. Selected senior interpreters are trained as peer reviewers to evaluate talks using a standard rubric (the IDP Analysis Model). These evaluations focus on the identification of opportunities for visitors to form intellectual or emotional connection with the meanings inherent in the resource (NPS, 2003). Eight experienced NPS peer reviewers identified visitors’ potential responses to the National Cemetery Talks. A descriptive matrix was developed to reduce and display the data corresponding to visitors’ potential affective responses, paralleling the categories created from the visitors’ responses. Visitors’ potential cognitive responses were coded and clustered into groups representing major themes.

2.3.5 Comparing Visitors’ Responses with NPS Peer Reviewers’ Potential Responses

The second objective was to assess the relationship between visitors’ responses and the potential responses identified by the NPS peer reviewers. The similarities and differences between visitors’ reported affective responses

and those identified by the peer reviewers and the thematic conceptual matrices for reported and potential affective responses were assessed. The relationship between visitors’ reported cognitive responses and the potential responses identified by NPS peer reviewers was assessed through a review of the themes that emerged through the two separate processes of analysis. Specific examples referenced by both visitors and peer reviewers were also compared.

3.0 RESULTS

3.1 Visitors’ Affective Responses to the Interpretive Talk

All six of Shaver et al.’s (1987) major emotion categories were represented in visitors’ responses to the National Cemetery Talk (Table 1). The thematic conceptual matrix (Table 2) displays the percentage of affective responses associated with the major categories that emerged from the analysis of themes. All themes/categories elicited both positive and negative responses from visitors. For example, some visitors described feeling “honored” and “grateful” while other visitors felt “sad” and “grief” when the talk addressed the sacrifice of the soldiers.

Table 3.—Selected examples of visitor’s responses. Theme 1: Lincoln and the Gettysburg Address

When asked...	Visitors responded...
What were the most important things the interpreter said?	Interpretation of Gettysburg Address past/present/future...Gettysburg Address- main reason Lincoln gave this address was to honor the dedication of the long sought after burial of the dead soldiers and the new birth of freedom... That the Gettysburg address is still relevant today...How important/poignant the words Lincoln spoke... What Lincoln said about consecrating the ground...Irony of Everett’s speech- 2 hours, 42 pages of notes, Lincoln’s speech- 2 minutes!... That the Gettysburg address may have many meanings
What was memorable about the topic of this talk?	Abe Lincoln’s talk on what our nation is!...Gettysburg Address...In particular the Gettysburg Address breakdown...Lincoln was not the keynote speaker- he spoke for 2 minutes and that speech went down in history...Lincoln’s speech and the 5 copies...Lincoln’s role...President Lincoln’s words at the dedication placing the Gettysburg address...Recitation of Gettysburg Address...The simple, concise elegance of Abraham Lincoln and his success at reuniting the nation... The universality of Lincoln’s words

Table 4.—Selected examples of visitor’s responses. Theme 2: The establishment, formation, and history of the Gettysburg National Cemetery

When asked...	Visitors responded...
What were the most important things the interpreter said?	How the cemetery was designed...Describe the importance of this area...The graves- how they moved them to make the cemetery...Beginnings of cemetery, facts, thoughts behind...1st National Cemetery in US...This was the first soldiers national cemetery...Importance of setting aside and consecrating and maintaining a cemetery...The meaning and history of the place...How the land was set aside immediately after the battle
What was memorable about the topic of this talk?	1st cemetery dedicated to soldiers...The layout of the cemetery...From battleground to hallowed ground...Gave vision of battlefield as it was- gave history of the development and idea of National Cemetery...Layout of cemetery...The founding of the cemetery...The geometry on how they were laid out

Table 5.—Selected examples of visitor’s responses. Theme 3: Casualties, sacrifice and death

When asked...	Visitors responded...
What were the most important things the interpreter said?	The number of dead...What to do with all the bodies...Stressing the number of casualties and dead...It’s important to remember the sacrifice...The quantities/number of soldiers...The suffering that consumed the landscape here 143 years ago...Explanation of the loss of life...Amount of devastation during the battle...The awful aftermath of senseless killing...How government was very unprepared to handle casualties of war
What was memorable about the topic of this talk?	51 thousand men lost their lives, thousand buried in mass graves...Ambulance train 17 miles long, 1st Army field hospital established at camp Letterman... Hearing about the blood, disease, and death. I had never heard about the death of so many horses...Learning about how casualties were cared for... More people die from disease than bullets, infection, the smell of death permeating the fields...Number of lives lost and personal accounts and words of the people who witnessed the war, descriptions of wounded... The suffering

3.2 Visitors’ Cognitive Responses to the Interpretive Talk

Six major clusters or themes emerged from the analysis of visitors’ responses. These themes were similar to those identified in the analysis of visitors’ affective responses. Visitors described the importance of learning about Lincoln and the Gettysburg Address (Table 3). A second theme was the establishment, formation, and history of the National Cemetery at Gettysburg. Visitors recognized

the significance of the cemetery from a variety of points of view (Table 4). A third theme reflected visitors’ awareness, insight, and increased understanding of the casualties and deaths that resulted from the battle (Table 5). Soldiers’ identification was another primary theme. Sub-themes included: 1) the soldiers’ fear of dying and remaining unidentified (plight of the unknown soldier), 2) attempts and efforts to identify soldiers, and 3) recognition of individual soldiers and their stories

Table 6.—Selected examples of visitor’s responses. Theme 4: Soldiers’ identification

When asked...	Visitors responded...
What were the most important things the interpreter said?	How the dead were identified...We should take the time to read the names of those interred... Information about the unknown soldiers...Soldier identification...That so many were never identified... Magnitude of “unknowns” buried in cemetery surprising...The unknown...The struggle to ID the dead...identifying the New Yorker...How soldiers were identified...Identification of dead
What was memorable about the topic of this talk?	The process of ID before internment...Burying and identifying the dead soldiers- could tell North and South by underwear...How the dead were identified...How one soldier was identified by the picture of his kids... The many unknown dead soldiers...The method used to identify the soldier from New York... The unknown soldiers, how difficult identifying soldiers...How much time and care was taking to identify and properly bury every soldier who fell

Table 7.—Selected examples of visitor’s responses. Theme 5: Scenes and surroundings

When asked...	Visitors responded...
What were the most important things the interpreter said?	Description of battle...Baseness of past battle mess...Description of battle and scene...The suffering that consumed the landscape here 143 years ago...Knee high in July...Describing the battle...How townspeople and soldiers helped bury all... Amount of devastation during the battle...Hearing about the smells...How the site figured in the battle...Words and stories of people who returned descriptions of scene
What was memorable about the topic of this talk?	“What would you see”....Aftermath of battle... Excellent “visualization” of the effects of all aspects of the battle: help audience see the real picture...So peaceful a piece of land saw so much violence, yet is returned again to a peaceful resting place...Description of devastation of area...What the sight must have been like in the days after it was over...The description of what the residents would have seen/ smelled, how they reacted...Personal accounts and words of the people who witnessed the war

Table 8.—Selected examples of visitor’s responses. Theme 6: Honor/respect/remember

When asked...	Visitors responded...
What were the most important things the interpreter said?	Never forget to honor soldiers and their commitment...The importance of the cost of freedom...“There are no common men buried here”...About honoring the soldiers even if they could not be identified... Honor, valor, and love of country shed in blood and sweat...That the men should not be forgotten... Ground was dedicated by the men who fought...Honoring, remembering, preserving...Respect the fallen soldiers
What was memorable about the topic of this talk?	Importance of honoring war dead...Importance of honoring sacrifice of soldiers, today...The closing statement of needing to remember and honor all there and those since...The obvious respect for the men who lost their lives in the war as well as this battle...The lives of all the soldiers unknown or otherwise, Union or Confederate are honored for their valor...

(Table 6). Insight into the surroundings prior to the conflict, scenes of battle, and the aftermath for both soldiers and townspeople (Table 7) and the need to honor, respect, and remember the soldiers (Table 8) were also distinct themes for the visitors.

3.3 Relationship between Visitors’ Responses and Peer Reviewers’ Expected Potential Responses

3.3.1 Affective Responses

There were distinct similarities in visitors’ reported affective responses and the potential responses identified

by the peer reviewers. Visitors described feeling uplifted and proud, and having a sense of admiration regarding Lincoln’s role and the Gettysburg Address. Peer reviewers also identified this major theme and suggested that visitors might feel admiration, pride, and a sense that Lincoln’s speech is still relevant today. Across five of the six categories, peer reviewers recognized the potential for a range of both positive and negative responses. Feeling respect for and sadness about the unidentified soldiers was described by both visitors and peer reviewers; grief and pride could be experienced regarding the casualties suffered. However, in the states/sides category, a small

number of visitors reported an affective response (e.g., sorrow about the segregation of the dead, pride in the actions of soldiers from a specific state). Peer reviewers expected potential awareness or insight regarding the actions of states or sides, but did not recognize potential affective/emotional responses to these aspects. Visitors' responses may be a result of the individual visitors' previous knowledge or interests guiding their response, and may be an area for further investigation.

3.3.2 Cognitive Responses

Peer reviewers' expected potential responses were classified into six major themes. First, peer reviewers expected visitors to learn about the role of Abraham Lincoln and the Gettysburg Address. For example, peer reviewers believed that interpreters' descriptions, quotes, storytelling, and "comparing and contrasting" different events offered visitors opportunities for insight into why Lincoln's speech is still relevant, understanding of the political background, and awareness of the brevity of his words. These potential responses were reflected in visitors' own words (Table 3). Second, opportunities to understand more about the history and formation of the national cemetery were described. Peer reviewers suggested that visitors might gain insight into the planning, design, and completion of the cemetery. Explanation of the intended purpose of the cemetery and quotes describing the consecration of the ground may have promoted visitor learning and a sense of discovery (Table 4). Third, the presentation of statistics (such as the number of soldiers killed and wounded), definitions of 'casualty,' and sensory descriptions of the battlefield and its aftermath were all expected to provoke awareness, comprehension, revelation, and discovery. Peer reviewers expected visitors to gain insight and understanding into the number of casualties—not just the sheer number of human bodies but also the incredible number of wounded and the resources needed to care for them. In addition, visitors could potentially be expected to learn about non-human casualties (horses on the battlefield), the difficulty of burying so many dead, the types of wounds suffered by the soldiers, and the lack of medical care. These potential responses reflect the visitors' responses in Table 5.

The fourth theme, identification, was prominent for peer reviewers. Two primary sub-themes were: 1) that many soldiers were afraid of dying and remaining unidentified, and that they would take steps to prevent this from happening, and 2) the process and techniques of identifying dead soldiers was difficult and could be overwhelming. Through stories of individual soldiers, examples, and explanations, interpreters offered opportunities for visitors to learn about the need for and process of identification. Peer reviewers suggested that the comparison and contrast in identification techniques then and now may have provoked insight, or that the practice of brainstorming identification techniques with the audience may have promoted visitor learning and discovery (Table 6).

Peer reviewers also expected visitors to gain insight into what the conditions of the time might have been for both soldiers and townspeople. For this fifth theme, interpreters told stories and described scenes to help visitors understand what it may have been like to have the fear of war all around them; visitors could learn about the mud, the heat and the cold, the stench of death and overall destruction, gaining awareness of the physical and social impact of such a battle (Table 7). The sixth theme, honor/respect/remembrance, was related to the history and formation of the national cemetery, but also reflected an expectation for visitors to understand and appreciate the need to acknowledge the soldiers' sacrifice. For example, while a description of the layout of the cemetery may have promoted understanding of the purpose of the cemetery, stories of individual soldiers and being present in the field of unknowns may have deepened this insight for visitors (Table 8).

4.0 DISCUSSION AND IMPLICATIONS

A variety of responses can be associated with similar concepts (i.e., stories of the identification of unknown soldiers can provoke both joy and sadness). In addition, the same concept may provoke affective, cognitive, or a combination of responses among different visitors. Although visitors construct their own meaning from the experience of an interpretive talk, patterns and similarities in the reported results suggest interpretive techniques

that vary in their effectiveness. For example, affective and cognitive responses to specific examples, such as stories of individual soldiers and surprising statistics, were regularly cited by both visitors and peer reviewers. This finding suggests that while visitors appreciate specific information, sharing stories of individuals that visitors can relate to across a variety of contexts is also an effective technique for eliciting responses.

4.1 Practical and Theoretical Application

As a method for analysis of the effectiveness of NPS interpretive talks in providing opportunities for visitors to experience and connect with park resources, this study suggests a format for identifying and understanding visitors' responses. It has been shown that interpretive programs have specific, measurable results. Understanding these results may prove useful in training as well as in ongoing program evaluation. This research may further understanding of how interpretation, as a form of informal/free-choice learning, results in affective, cognitive, and conative responses. Thus, understanding of the results of interpretation is extended beyond measures of satisfaction or tests of retained knowledge. Recognizing the relationship between visitors' reported responses and the responses predicted by peer reviewers may enable managers and interpreters to effectively communicate specific information and to achieve the goals of interpretation. For example, knowing that visitors respond positively to "stories" of individual soldiers, interpreters may integrate messages of resource stewardship to further site-specific goals.

4.2 Limitations and Future Research

The results of this research suggest additional questions. First, why do some visitors respond differently to similar objects, ideas, or resources? Why were some saddened and horrified, while others were intrigued? In addition, the NPS peer evaluators who assessed the programs used in this research were senior employees. Would the same expectations and results be achieved with peer reviewers who were less experienced (including seasonal staff, volunteers, and interns, who make up a large number of the interpretive workforce), or with a larger number of reviewers? Finally, this research addressed the visitors' immediate response to an interpretive talk. As Whatley (1995) suggests, the success or failure of

an interpretive program is determined not only by the visitors' immediate perceptions of personal relevance, but also by their understanding and recognition of program content over time. Thus, future research could focus on the affective loading of different cognitive aspects of interpretive talks and other forms of interpretation, the expectations of a range of NPS interpreters, and the results of interpretive talks over time.

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