

“FOR THIS AND FUTURE GENERATIONS”: CULTIVATING MEANINGS AT
CRATER LAKE NATIONAL PARK

by

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THESIS ABSTRACT

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The National Park Service strives to connect the natural and cultural resources located within its national parks to the visitors that experience them. These connections must be on personal, meaningful levels to fulfill the agency mission. Within this thesis, an analytical framework entitled the Mission and Meanings Triad Model (MMTM) is proposed to examine the process of “meaning formulation” in a national park setting. The MMTM takes into account the interdependent nature of three mission-driven factors: the park’s resources, interpretation, and the visitor experience. An audience-centered perspective is emphasized within the model to ensure that the end result *is* the meaningful connection itself, rather than merely an “interpretive opportunity.” To illustrate the MMTM, an analysis is undertaken of Crater Lake National Park and its interpretive offerings during the summer 2013 and winter 2014 seasons. Through this field and document analysis, multiple recommendations regarding the improvement of interpretive components are suggested.

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CHAPTER I

INTRODUCTION

At the forefront of the efforts of the National Park Service (NPS) is their mission statement:¹

The National Park Service preserves unimpaired the *natural and cultural resources* and values of the national park system for the *enjoyment, education, and inspiration of this and future generations*. The park service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world (emphasis added).

This statement is the declaration of what the NPS, under the Department of the Interior, endeavors to accomplish in its governance and management of resources under its stewardship. The mission is the core initiative that *must* be carried out in all of their efforts. It is the stance of the NPS that if a person comes to *value* a resource, then it is more probable that the resource is protected and *preserved*. If this occurs, then consequently it can provide *enjoyment, education, and inspiration* both now and in the future. Thus, in this way, the mission can be fulfilled. This line of thought is all contingent upon “meaning-making.”

Meaning-making is the active involvement on the part of the visitor resulting in memories that spark further interests and actions.² When the resource has meaning, it is valuable on a personal level to the visitor, and it will factor into his or her future endeavors. Meaning is not intrinsically present in an individual; it must be carefully formed and cultivated. A resource, however, can engender multiple meanings for

¹ National Park Service, “NPS Mission Statement,” in *Budget Justifications and Performance Information Fiscal Year 2013*, (Washington Office, Department of the Interior, 2013), Overview-1.

² Ted Ansbacher, “Making Sense of Experience: A Model for Meaning-Making,” *Exhibitionist* (Spring 2013): 16-19. “Meaning-Making” is a term utilized in the lexicon of interpretation and within constructivist approaches to education.

different individuals. Although conceptual frameworks for analysis of interpretative opportunities and personal connections have been discussed, formal in-depth study concerning how a federal agency goes about cultivating meanings in a specific historic resource is virtually unexplored. This thesis seeks to remedy that gap in present scholarship by applying current interpretation, education, and visitor experience theories to the making of meanings at a specific park: Crater Lake National Park (Crater Lake NP). Through such an analysis, it is hoped that a clearer understanding will be established as to how, and in what manner, the current formation of meanings develop in a national park setting and, thus, contributing to the greater nationwide NPS mission. Therefore, this thesis is geared toward those within the NPS striving to interpret unique resources and enable personal connections.

Conceptual Framework: The Mission and Meanings Triad Model

Conceptually, this analysis is undertaken following a similar, but distinct, framework than one put forth by Becky Lacombe, a training specialist and coordinator for the NPS Interpretive Development Program at the Mather Training Center. Her technique is termed the Interpretive Equation. Its focus is on creating an interpretive opportunity (IO) that will eventually connect the resource to the audience.³ Lacombe's framework consists of knowledge of the resource (KR), knowledge of the audience (KA), and appropriate techniques (AT). The equation becomes: $(KR+KA) \times AT = IO$, where the resulting IO in reality is a *vehicle* for the much greater connection to occur, but not the connection itself. The discussion of this equation by Lacombe, thus far, has been

³ Becky Lacombe, "The Interpretive Equation," in *Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects, and Other Resources*, ed. David L. Larsen Washington, PA: Eastern National, 2011), 213-224.

phrased in its potential to be utilized in the planning or evaluating an *individual* interpretive program.

The making of individual meanings at a national park goes beyond a singular interpretive opportunity, and relies primarily on three inter-dependent, mission-driven factors: the park's resources, its interpretation, and the visitor experience. The interaction and manifestation of these factors generate the Mission and Meanings Triad Model (MMTM) (Figure 1.1). This thesis will utilize the MMTM as its framework in the analysis of the creation of meaningful connections at Crater Lake NP.

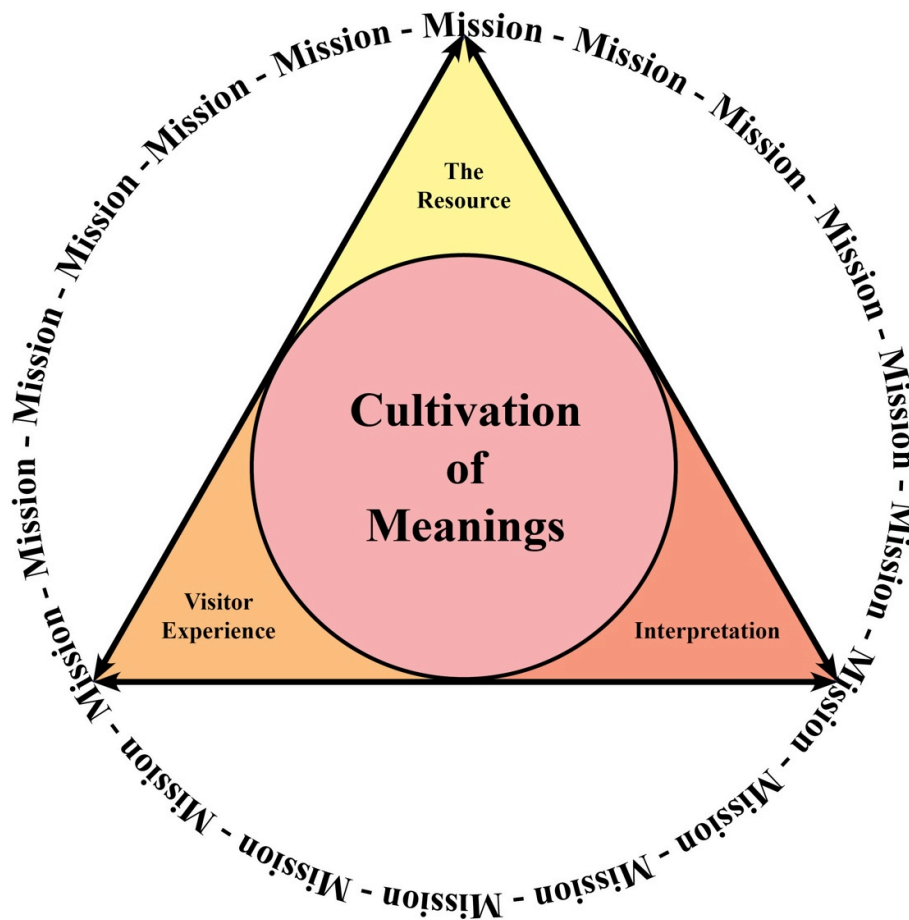


Figure 1.1: The Mission and Meanings Triad Model. S.R. Lester 2014.

The MMTM differs from Lacomé's equation in a few distinct elements. Whereas the end result of the Interpretive Equation is an interpretive opportunity, the desired

outcome of the proposed model *is* the meaningful connection itself. The meaningful connection is the quintessential objective and, thus, it is the focus of this study. The opportunity component is regulated in the MMTM to the interpretation factor that consists of the combination of methods and techniques that generate the opportunity. Knowledge of the visitor alone is not sufficient to cultivate meaning; rather, there must be a firm grasp of the entire visitor experience. This accounts for other considerations that directly affect the public, such as their physical environment, personal agendas, and interaction with others during their visit. Lastly, the model demonstrates how each individual component is placed within the overarching organizational mission. The MMTM encompasses the greater whole and aim of the organization.

Alterations and distinctions in one factor in the MMTM will generate different meanings or various levels of meaning overall. For example, if a person visited the park on a bitterly cold day, his or her physical experience would be different than if the temperature was within his or her comfort zone. A change in experience such as this can affect one's mood, focus, and attention span. This results in different levels of connection to the resource. Due to the singularity of the limitless combinations within the MMTM, the meaning that results will always be different from individual experience to individual experience, and through time itself. Before the infinitely complex interrelation of the mission and factors can be investigated, they must be explored first as separate entities.

Site Specific Mission

An organization's mission should be at the core of its endeavors, whether in governance, management, or operations. As one scholar put it, "mission is the

organization's guide star."⁴ A mission statement is constructed in direct correlation with the agency's resources and aims concerning them. The NPS is a governmental organization that is structured to serve the public. The acreage it controls technically belongs to the people of this nation and is held in trust by the government through the agency. Therefore, its mission is pivotal in guiding how it acts on behalf of the public interest. The NPS governs 401 areas that cover a total of eighty-four million acres.⁵ These areas are refined further by their type of designation. There are a total of fifty-nine national parks, for instance, designated by the NPS.⁶ Each park administration must fulfill the mission of the NPS in and of themselves. However, oftentimes an individual park further refines the mission, tailoring it to their site-specific resources and aspirations. When this is the case, two missions then govern the park: one at the broader service level, and one unique to the site.

Indeed, Crater Lake NP has refined the NPS mission, stated previously, to form a site-specific principal mission:⁷

To forever preserve the beauty of Crater Lake National Park, its unique ecological and cultural heritage; and to foster understanding and appreciation through enjoyment, education and inspiration.

⁴ Howard J. Berman, *Making a Difference: The Management and Governance of Nonprofit Enterprises* (New York: CCE Publications, 2010), 125.

⁵ National Park Service, "Frequently Asked Questions," National Park Service, <http://www.nps.gov/faqs.htm> (accessed November 1, 2013).

⁶ National Park Service, "Units in the National Park System," National Park Service, <http://www.nps.gov/news/upload/CLASSLST-401-updated-06-14-13.pdf> (accessed November 1, 2013).

⁷ Crater Lake National Park, *Strategic Plan – for – Crater Lake National Park: Fiscal Year 2001-2005*, under "Chapter II: Mission," <http://www.craterlakeinstitute.com/online-library/strategic-plan-crater-lake/2mission.htm> (accessed October 26, 2013).

Through this refinement, the park has acknowledged the distinctiveness of the site's resources, the communication of the resource to the audience, and the components of the visitor experience. In this manner, the three factors of the triad interact with, and are guided by, Crater Lake NP's mission.

Resources

The first factor of the MMTM is the resource itself, that which is interpreted to and experienced by the visitor. As David Larsen stated in his first interpretive tenet, "resources possess meaning and have relevance."⁸ The resource is what draws visitors to a specific location, what they want to see and experience. At Crater Lake NP, 75% of the visitors come to the area for the primary reason of visiting the park itself.⁹ The elements that make up the resource generate the unique sense of place that draws people to it, resulting in the whole being greater than the sum of its parts. This is the start of the visitor's meaning formation.

In *Chapter II*, the resources that create Crater Lake NP are described and elaborated upon as they are communicated to the public in the park's interpretation. The intention of this chapter is to familiarize the reader with what contributes to the park's sense of place. First, the chapter delves into the general appeal of experiencing a site in person and how all resources, natural and cultural, must be represented in the messages of the park. Then the specific resources of Crater Lake NP are explored, beginning with the ecological and environmental components that contribute to the visual landscape. The

⁸ David L. Larsen, ed., *Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects, and Other Resources*, 2nd ed. (Washington, PA: Eastern National, 2011), 12.

⁹ Margaret Littlejohn, *Crater Lake National Park Visitor Study: Summer 2001* (Moscow, ID: University of Idaho Cooperative Park Studies Unit, 2002), 19.

landscape features of Crater Lake were the impetus for why this site was set apart as a national park. It is important, therefore, to understand how it came to be in its present form, and its environmental risks. Attention then turns from the natural aspects to the cultural ones. After all, as Teri Brewer among others makes plain, a resource goes beyond the physical manifestations, whether natural or manmade, and delves into the native cultural representations as well.¹⁰ Crater Lake has a long history of American Indian occupation and use that is being incorporated currently into the interpretive offerings of the park.

Interpretation

Through time, many theorists and practitioners in the interpretation field have developed strategies and principles regarding the creation and implementation of interpretive programs. It all begins with what the practitioners consider interpretation to be, and what purpose it might serve. Among the most popular definitions are the following:

- 1) Freeman Tilden's work, *Interpreting Our Heritage*, is a cornerstone manuscript of modern interpretive practice. He states that interpretation is "an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information."¹¹
- 2) For Sam Ham, interpretation is "a communication process in which one person translates a language he/she speaks very well into terms that other people understand."¹²
- 3) The National Association for Interpretation declares that interpretation is "a mission-based communication process that forges emotional and intellectual

¹⁰ Teri F. Brewer, "Redefining 'The Resource': Interpretation and Public Folklore," *Journal of American Folklore* 119, no. 471 (Winter 2006): 80-89.

¹¹ Freeman Tilden, *Interpreting Our Heritage*, 4th ed. (Chapel Hill, NC: University of North Carolina Press, 2007), 33.

¹² Sam H. Ham, *Environmental Interpretation: A Practical Guide for people with Big Ideas and Small Budgets* (Golden, CO: North American Press, 1992), 411.

connections between interests of the audience and meanings inherent in the resource.”¹³

Intrinsic in each of these definitions is the belief that *interpretation ties the resource to the audience through effective communication and experience*. Interpretation is primarily about the technique, method of communication, and the power of the resource to engage the visitor.

Chapter III analyzes certain interpretive techniques and methods suggested by experts in relation to their implementation at Crater Lake NP and toward their facilitation of personal connections with the audience. At the forefront of the techniques is the utilization of a theme, both at the parkwide level and individual program level. From those themes come the program offerings in the form of personal and nonpersonal interpretation. The section on personal interpretation first looks into the components of staff training involving accurate information concerning the resource. Then the need for communicating through a clear hierarchy of information, a strategy that coincides with the cognitive abilities of the human brain, is explored. Nonpersonal interpretation delves into the usage of waysides and self-guided brochures to communicate to the audience. The former demonstrates the change of interpretive philosophy through that time, primarily concerning scientific terminology and cultural totality.¹⁴ The latter is investigated through the techniques employed in each of the self-guided trail offerings at Crater Lake NP with regard to providing effective communication and use. Interpretation

¹³ National Association for Interpretation, “Definitions Project,” National Association for Interpretation, http://www.definitionsproject.com/definitions/media/definitions_list_0107.pdf (accessed March 22, 2014).

¹⁴ Penny Schine Gold and Benjamin C. Sax, eds., *Cultural Visions: Essays in the History of Culture* (Amsterdam-Atlanta, GA: Rodopi, 2000), 15-16. The notion of cultural totality is discussed by Sax in his introduction as a means of taking parts of a culture and relating them to one another and to the greater whole. This totality then must be represented and interpreted to others.

provides the opportunity for communication; the visitor then has to take advantage of that opportunity to formulate his or her own meaning.

Visitor Experience

In keeping with the conceptual framework triad, the visitor experience plays a substantial role in the degree to which meaning is evoked in Crater Lake NP. Professors in the Free-Choice learning field, John Falk and Lynn Dierking, break down the visitor experience to before the visit, during the visit, and after the visit. The two former sections deal with the personal, sociocultural, and physical contexts. The latter delves into the experience as remembered and learning impacts.¹⁵ *Personal context* involves the visitors' expectations, prior knowledge, general frame of mind, interests, and their visit agenda. *Sociocultural context* relates to the social interactions—both within the visitor's own party, and with other visitors and staff. As Falk and Dierking make plain, “for most visitors, the museum experience first and foremost is a social one.”¹⁶ The last context, *physical context*, incorporates the constructed environment and external environmental factors. This includes factors such as temperature, orientation within the park, and accessibility. Each of these directly affects the visitor and his or her ability to learn, enjoy, and be inspired through the park's interpretive offerings.

Chapter IV investigates the relationship between the visitor and interpretation for the creation of a meaningful experience. The first step in this inquiry is an attempt to understand the perspective and characteristics of the visitors. The agency can do this through conducting regular visitor studies. The theories of visitor surveys and general

¹⁵ John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited* (Walnut Creek, CA: Left Coast Press, Inc., 2013), bk.

¹⁶ John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited*, 171.

findings from the museum and national park fields are placed in conjunction with the specific visitor profile found at Crater Lake NP. Placed together in this manner, insight is gleaned from how the visitor experience enables the enjoyment, education, and inspiration that the park strives toward as specified by its mission. As Larsen phrased it, “the visitor is sovereign” and their characteristics must be accounted for in the park’s offerings and coinciding meanings.¹⁷

Obstacles Overcome

While the resource, interpretation, and the visitor experience strive to meld together and enable the cultivation of meanings, there are aspects that can decrease the level of meaning or eliminate it all together. These aspects are ones that persons in the interpretation field should strive to minimize or prevent altogether in the practice of an organization. In the end, however, the visitor becomes the final factor in the creation of a meaningful connection to the resource despite these inherent obstacles.

Chapter V examines some conditions that might inhibit the positive formation of meaning for the visitors that span across the whole MMTM. Common obstacles specifically discussed include disorientation, fatigue, the limited evaluation of interpretive elements and programs by park personnel, and inclement weather. The chapter ends with the crucial role the visitor plays in the cultivation of meanings.

Crater Lake Data Collection Procedures

In keeping with the MMTM conceptual framework, two sets of fieldwork are incorporated within this thesis. The first set, personal observation of summer interpretive programs, was conducted as part of an interpretation inventory of summer programs for Crater Lake NP undertaken by the author as the recipient of the Greg Hartell Internship in

¹⁷ Larsen, ed., *Meaningful Interpretation*, 64, 187.

July and August of 2013. The second set of fieldwork was done on March 7-8, 2014 to gather observations regarding winter interpretive offerings. The combination of the two provides a balanced perspective of the park's interpretation, as both seasonal extremes are accounted for within this study.

To ensure consistent recordation, all interpretation inventories were recorded by a single individual, the author, through the utilization of a standard set of inventory forms (Appendix A). The researcher recorded the observed information on the standard field form throughout the course of the program, recording primarily multi-sensory qualitative observations. Photographs documenting the activity (i.e. layout, movement, group clusters) and methodology (i.e. posters, models, *et cetera*) of the interpretive programs were also taken. The researcher primarily employed an observation-oriented strategy; however, the methodology became participant observation when the program required active physical involvement on behalf of the recorder. Participant observation, as James Clifford expresses, is a dual experience as one is simultaneously "inside" and "outside" the given experience.¹⁸ In the case of the interpretive program fieldwork, the recorder was "inside" due to her presence within the organization and physical movement in the tours. However, the recorder remained "outside" as no social interaction occurred during the programs. All the recordation was done in public view at public programs.

The aforementioned forms are divided into four labels: stationary programs, tours, waysides, and exhibits. The type of program distinguishes them. Stationary programs are those that are given in one location such as Rim Talks, evening programs, and the park film. Tours are either self-guided or ranger-led and involve changes in location: boat

¹⁸ James Clifford, *The Predicament of Culture: Twentieth-Century Ethnography, Literature, and Art* (Cambridge, MA: Harvard University Press, 1988), 34.

tours, trolley tours, ranger hikes, brochure guided trail hikes, and snowshoe hikes.

Waysides are physical panels of information located about the park. The Sinnott Memorial Overlook and “Historic Crater Lake Lodge” are the two formal exhibits in Crater Lake NP.

Certain information gathered was consistent among all forms, but the specific type distinguished the remainder of the information gathered. All forms included the following headings: Element, Location, Photos, Index #, Date, Start Time, End Time, Personal Context, Social Context, Physical Context, and Interpretation Presented. The ‘Index #’ was a number assigned after the data was collected relating to the type of interpretation and the order of observation. Falk and Dierking’s three contexts also were incorporated into the field form in order to account for the personal experience of the observer. Within stationary programs and tours, the guide and methods were recorded. In addition, for the tours, the number of stops was specified. The wayside inventory included the material and dimensions of the panel and stand. Inventory of exhibition elements, such as panels, technology, and photographs, was documented for exhibit inventories. There was also a continuation sheet in the event that recordation of any of the above features entailed the use of multiple sheets.

All interpretive programs at Crater Lake NP are open to the public and held within a public park. The inventory for stationary programs and tours lasted the length of the program, while an exhibit’s length was dependent upon the time necessary to record all its interpretive information. Waysides were recorded in fifteen-minute increments. Each interpretive program was only observed for research once each season: summer and winter. The visitors’ and rangers’ participation in the interpretive programs was random.

Therefore, it is a possibility that visitors and rangers were observed more than once, but the exact number of times was random.

In total, twenty-eight stationary programs, forty-two waysides, thirteen tours, and two exhibits were observed and recorded utilizing this methodology. The data collected through the interpretation inventory served as a basis for the understanding of the broad scope of the *current* interpretive efforts of Crater Lake NP. It is inclusive of the types of interpretation, personal and nonpersonal, and of the different program offerings through the park's seasons. From this data, an analysis can be undertaken of personal connections within Crater Lake NP.

CHAPTER II

“ITS UNIQUE ECOLOGICAL AND CULTURAL HERITAGE”:

RESOURCES FOR INTERPRETATION

A core component to the implementation of interpretation in the National Park Service (NPS) is the message. What does the park desire to communicate to the visitors? Crater Lake National Park (Crater Lake NP) seeks to convey information and knowledge regarding the ecological and cultural resources found presently within the park and throughout the course of the park’s history. Those resources are what makes Crater Lake NP unique, what should be protected, preserved, and valued by the visitors. This is what the interpretive staff strives to put forward into the consciousness of the visitors in their endeavors. Before the particular nuances of the resources of Crater Lake NP can be conveyed, a general understanding of the need to experience the resources in person and the theories of representing all aspects of the resource must be established.

The Appeal of the “Real Thing”

People today live in a world that is filled with digital media and they can “see” places they have never been to; however, as Christine Burton and Carol Scott establish, the use of electronic resources absolutely does *not* provide an equal substitute for the experience of the “real thing.”¹⁹ Electronic media provides a constructed reality, which can be beneficial if the area it depicts is in an extremely remote location. This is the case with the Katmai National Park and Aniakchak National Monument in Alaska. More persons climb Mount Everest than visit Aniakchak and the Katmai is the least visited

¹⁹ Christine Burton and Carol Scott, “Museums: Challenges for the 21st Century,” in *Museum Management and Marketing*, ed. Richard Sandell and Robert R. Janes (New York, NY: Routledge, 2007), 49-66.

national park in the United States.²⁰ Therefore, their representation in the film “Katmai: Alaska’s Wild Peninsula” is an appropriate avenue for people to appreciate the beauty of the resources. If, however, the park is located within a reasonable commute and is relatively accessible, as is the case with Crater Lake NP, it is best for a person to see the resources firsthand. When the visitor arrives at the site, he or she not only *sees* the resource in person, but what is more, he or she can *experience* it. Ning Wang advocates for this existential aspect for it can enable stronger intra-personal and inter-personal connections.²¹ These connections form the basis of meanings that will affect a person’s actions and interests in the long-term.

At Crater Lake NP, the primary reason for visiting the greater area, within 100 miles of the park, is to visit Crater Lake.²² This fact establishes that the park itself serves as an attraction for the area, as a primary destination. For the majority, they not only *want* to visit Crater Lake, but it is their *impetus* for their travel. Each visitor chooses to deviate from the primary traffic corridors, such as US-97, and spend his or her time visiting the park. It is a deliberate action on the visitor’s part. All visitors ultimately go to Crater Lake NP to see and experience the “real thing.”

A Holistic Perspective

The resources of a national park can be divided into two primary categories: ecological and environmental resources, and cultural resources. While the former has perhaps been the easier of the two to acknowledge and communicate to the visitor, *both*

²⁰ Harpers Ferry Center, “Two Remote Parks Now Accessible Through Film,” National Park Service, <http://www.nps.gov/hfc/products/av/features/2014/Katmai/> (April 30, 2013).

²¹ Ning Wing, “Rethinking Authenticity in Tourism Experience,” *Annals of Tourism Research* 26, no. 2 (1999): 349-370.

²² Margaret Littlejohn, *Crater Lake National Park Visitor Study: Summer 2001* (Moscow, ID: University of Idaho Cooperative Park Studies Unit, 2002), 19.

categories must be well represented in the message of a park's interpretation. Further, for the cultural resources, a park should convey not just one aspect, such as the NPS history at the site. Rather, a park must strive to represent *all* aspects of its cultural heritage, including the built environment and the perspectives of the minority groups. Many within the current era of the "new social history" hold to this philosophy and offer methods by which this whole perspective can be accomplished.

Representing and interpreting a "new social history" of a park's cultural resources entails the communication of all the contributors within a site, from the dominant agency to the minority groups.²³ Brewer explains that from a folklorist perspective, it goes beyond the manifestation of historical events to the representation of the *current* culture.²⁴ It delves into focusing and encouraging the message of underrepresented cultures, through the input of the culture itself. This coincides with Regina Bendix's explanation of "cultural wholes," for in order to understand a culture, one must look at all its components within the spectrum of time, past and present.²⁵

Naturally, the entirety of a culture is infinitely complex, and, as David Lowenthal states, it is not possible to display and reveal a culture in its entirety.²⁶ Therefore, in the interpretation of multiple cultures, certain aspects and contributions should be highlighted over others, but *all* parties must be represented. Pamela Jerome suggests that the facets

²³ Eric Gable and Richard Handler, "After Authenticity at an American Heritage Site," *American Anthropologist, New Series* 98, no. 3 (September 1996): 569, <http://www.jstor.org/stable/682724> (accessed October 29, 2012).

²⁴ Teri F. Brewer, "Redefining 'The Resource': Interpretation and Public Folklore," *Journal of American Folklore* 119, no. 471 (Winter 2006): 80-89.

²⁵ Regina Bendix, *In Search of Authenticity: The Formation of Folklore Studies* (Madison, WI: University of Wisconsin Press, 1997), 135-139.

²⁶ David Lowenthal, "Age and Artifact: Dilemmas of Appreciation," in *The Interpretation of Ordinary Landscapes: Geographical Essays*, ed. D.W. Meinig (New York, NY: Oxford University Press, 1979), 107.

that are called to attention should be those that are important and enrich the overarching narrative of the site.²⁷ This general approach can be seen in many western national parks including Lassen Volcanic National Park (LAVO) and Yosemite National Park (YOSE), both located in California. LAVO ensures that the Native Americans, pioneers, and the NPS are represented in its educational outreach and YOSE strives to include the role of Chinese immigrant history and culture within its visual interpretive efforts.²⁸ By providing the representation of cultures in addition to the natural resources, the visitors to the site can achieve a balanced *holistic* perspective of the site.

Crater Lake's Ecological and Environmental Resources

Within the boundaries of Crater Lake NP, there is a broad scope of ecological resources. Ecology is the interplay between living organisms and their environment. The primary feature and main attraction of the park is the lake itself, but that is just one component that contributes to the natural beauty of the park. The lake physically only accounts for seven-percent of the park, with the remaining ninety-three percent consisting of old growth forests, pumice deserts, creeks, and waterfalls to name a few features. Added to this environment is the vast array of fauna and ground vegetation. It is a complex system of beauty that provides the physical wonder of the park. Its combination is one-of-a-kind and its protection and preservation—an aim of the NPS mission—is what it allows it to be so. These resources and their preservation can be conveyed as separate entities or in conjunction with one another. The geologic, environmental, and

²⁷ Pamela Jerome, "An Introduction to Authenticity in Preservation," *APT Bulletin* 39, no. 2/3 (2008): 5, <http://www.jstor.org/stable/25433945> (accessed April 9, 2013).

²⁸ Lassen Volcanic National Park, *Activity Guide for Teachers* (Mineral, CA: Lassen Volcanic National Park, 1997) http://www.nps.gov/lavo/forteachers/upload/Lassen_Park_activity_guide_forteachers.pdf (accessed April 24, 2014); Yosemite National Park, "Video: Chinese History," National Park Service, <http://www.nps.gov/media/video/view.htm?id=FBFACA82-9D03-D64F-E3C05B0F781BCD87> (accessed April 24, 2014).

ecological resources explained in this chapter are ones that are popular topics in the interpretation within the park, which, in turn, contribute to the themes of the park. They are by no means the sum of the resources within the park, but are the ones that are provided to the visitor to illustrate the ecological resources within Crater Lake NP.

The Volcanic Landscape and Crater Lake

Oftentimes within the park, how volcanic activity shaped the present landscape is stated succinctly through the sequence of four verbs for interpretation – *grew*, *blew*, *fell*, and *filled*. “Grew” encompasses the volcanic processes that built Mount Mazama over the span of 400,000 years. The verb “blew” is used to describe the climatic moment, the eruption sequence 7,700 years ago when twelve cubic miles of material was ejected during the course of the eruption. “Fell” refers to the moment when the volcano dropped down into itself toward the end of the eruption sequence after the pyroclastic flows emptied the magma chamber. Then, over the course of the next centuries, the caldera “filled” with rain and melted snow, creating Crater Lake itself (Figure 2.1). The volcanic activity did not cease with the large-scale eruption event, but continued to form other landscape features such as Wizard Island and Merriam Cone, the latter being fully submerged under the lake surface.

The whole of this volcanic activity and other forces that have manifested themselves along the Cascade Range have produced several notable elements visible from about the rim of the caldera. These elements serve as entry points to volcanology and geology discussions for interpretation within the park. These visual entry points are comprised of elements that include Lla Rock, Garfield Peak, Mt. Scott, Sun Notch, Kerr Notch, Mt. Thielsen, Wizard Island, Watchman Peak, Cloudcap, Pumice Castle, Devil’s

Backbone, Phantom Ship, Hillman Peak, Pumice Desert, Pinnacles, Palisades, Watchman Peak, and the caldera walls in general.



Figure 2.1: Crater Lake as a result of a sequence of volcanic and natural events. July 2013.

The lake itself is only filled by precipitation for there are no incoming or outgoing outlets. It maintains a consistent volume of five trillion gallons and a depth of 1,943 feet due to the balance of incoming precipitation with evaporation and seepage.²⁹ It is the deepest lake in the United States, and ranks among the top ten deepest lakes in the world. Another remarkable characteristic of this lake is its clarity. On average, when measured utilizing a Secchi disk (Figure 2.2), the visibility of the reflector can be seen deeper than 100 feet. A record reading in 1997 was taken at 143 feet.³⁰ This clarity in combination with its great depth produces the brilliant blue color. Depending on wind, cloud cover, air quality, and the altitude and azimuth of the sun, the color of the lake changes. This change of color along with the various weather factors results in the various moods of

²⁹ National Park Service, *Crater Lake: The Waters of Crater Lake*, (Crater Lake, OR: Crater Lake National Park, 2011): 2, <http://www.nps.gov/Crater-Lake-NP/planyourvisit/upload/2011-Waters-of-Crater-Lake.pdf> (accessed March 31, 2014).

³⁰ National Park Service, *Crater Lake: The Waters of Crater Lake*, 2.

Crater Lake that provides for distinctive visitor experiences dependent upon the day (Figure 2.3).



Figure 2.2: Secchi disk on display in the Sinnott Memorial Overlook exhibit. August 2013.

Climate Affecting Flora and Fauna

Despite the extreme winter season, Crater Lake NP is home to a vast array of vegetation that provides visual demonstrations of the various accommodations for the harsh winter environment, even to the summer visitors. There are fourteen species of conifer trees that flourish within the park boundaries with ponderosa pine, lodgepole pine, mountain hemlocks, and whitebark pines being the dominant tree species in each of the park's four forest zones.³¹ The mountain hemlock, in particular, is pointed out in interpretative programs, as it is well suited for the heavy snowfall during the winter season. It has a flexibility, especially when it is young, that allows it to bend toward the ground without breaking (Figure 2.4). This results in it being covered by snow. With the snowmelt, the tree bounces back to its vertical position. Commonly pointed out on

³¹ National Park Service, *Crater Lake: Trees*, (Crater Lake, OR: Crater Lake National Park, 2001): 1, [http://www.nps.gov/Crater Lake NP/planyourvisit/upload/Trees-2.pdf](http://www.nps.gov/Crater%20Lake%20NP/planyourvisit/upload/Trees-2.pdf) (accessed March 31, 2014).

ranger-led hikes, the staghorn lichen only grows on trees above the average snowline, as it needs air and sun to survive. To the summer visitors, seeing this lichen gives them a scaled sense of the snow accumulation within the park (Figure 2.5). As for the harsh winters, trees at higher elevations are stunted on the windward side of the tree, creating what is known as a flag tree. These climate accommodations and others are brought to the visitors' attentions to visually demonstrate how the local flora is suited to surviving the winter. Not only is the climate discussed in relation to flora in park interpretation, but so too is the climate's affects on local animal species.

Pikas are the key example utilized in Crater Lake NP interpretation to represent how a warmer climate affects native animal species. These small mammals thrive in environments with cool temperatures. Within the park, they can be seen, and more often heard, along the trails at Garfield Peak and Crater Peak (Figure 2.6). As temperature rises over time, the pikas move to higher, cooler elevations. This is due to the fact that a temperature of seventy-eight degrees Fahrenheit could be fatal to an American pika if it was exposed to the sun for a few hours.³² It is known that three pika communities that used to be located southeast of Crater Lake have disappeared in the last few decades.³³ There was also once a pika community on Wizard Island. Overall, the pika is the go-to species for demonstrating the affects of climate change on the animals within the park. The warming climate also has had an adverse affect on specific trees species.

³² National Park Service, *Crater Lake: Climate Change at Crater Lake*, (Crater Lake, OR: National Park Service, 2013): 2, [http://www.nps.gov/Crater Lake NP/planyourvisit/upload/Climate-Change-at-Crater-Lake-2.pdf](http://www.nps.gov/Crater%20Lake%20NP/planyourvisit/upload/Climate-Change-at-Crater-Lake-2.pdf) (accessed March 31, 2014).

³³ National Park Service, *Crater Lake: Climate Change at Crater Lake*, 2.

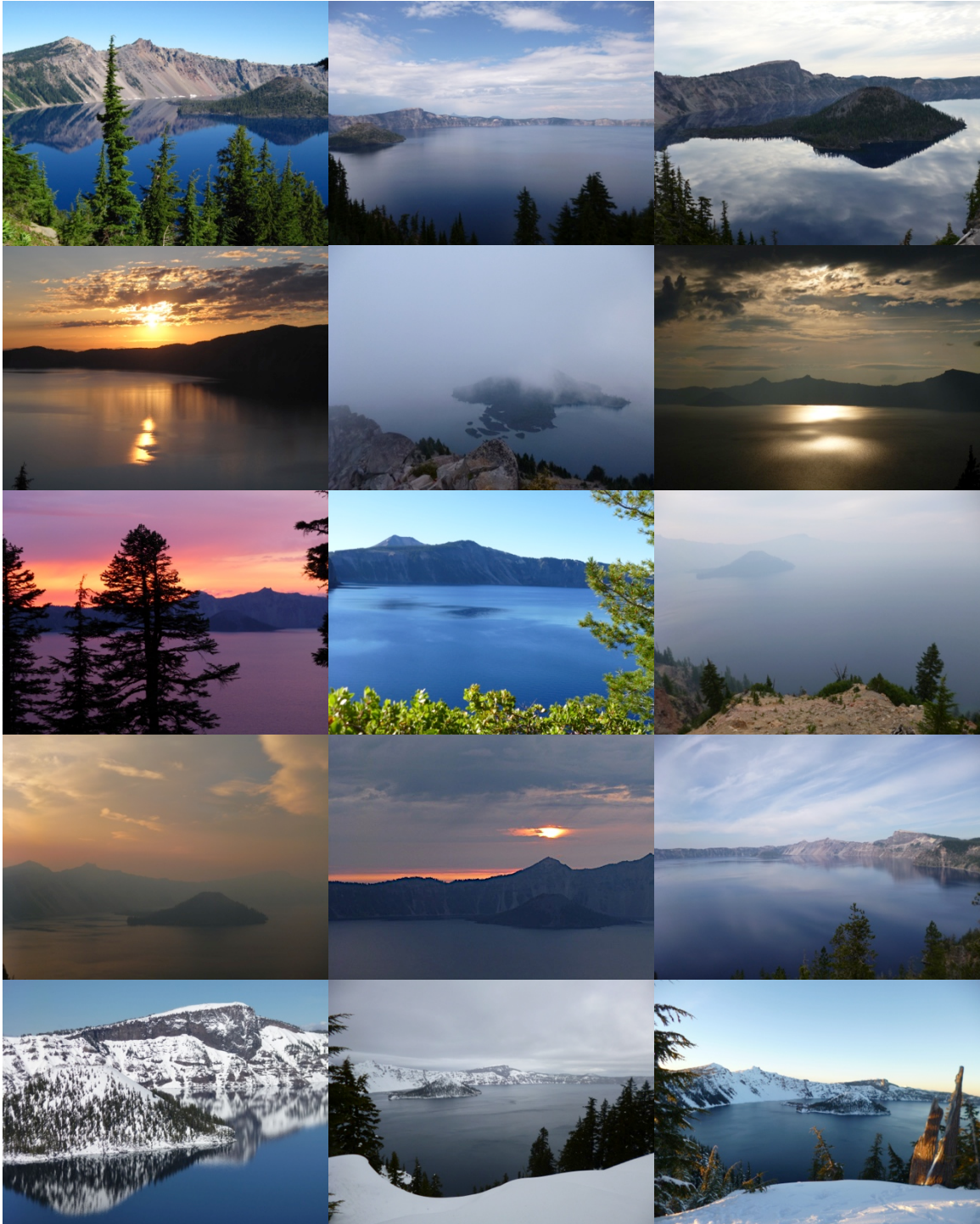


Figure 2.3: Collage of the different moods of Crater Lake. July-August 2013, and March 2014.



Figure 2.4: Park visitor demonstrating the flexibility of a young mountain hemlock during a ranger-led snowshoe hike. March 2014.



Figure 2.5: The level of lichen on the surrounding trees indicates winter snow levels as pointed out by the interpretive ranger. August 2013.



Figure 2.6: An American pika located along the trail to Crater Peak. August 2013.

Over half of Crater Lake NP's whitebark pines are currently dead or dying, which makes the reasons why this is occurring and the repopulation of the trees a topic for interpretation. The whitebark pines themselves have a strong tolerance for high elevations and the accompanying exposure to cold winds. A grove of them can be found at the top of Cloudcap on the east rim (Figure 2.7). Mountain pine beetles have caused immense damage to these trees. These beetles, *Dendroctonus ponderosae*, do not thrive in cold circumstances and, as such, they tend to be found at lower elevations. In more recent years, they have been able to accommodate the temperature conditions of the higher elevations where the whitebark pines call home. The beetles are detrimental to the trees, which they infest. The beetle, along with blister rust and dwarf mistletoe, are considered to be the "most lethal agents" to the whitebark pines in the park.³⁴ The focus of the

³⁴ Michael P. Murray and Mary Rasmussen, *Status of Whitebark Pine in Crater Lake National Park*, (Crater Lake National Park, 2000): 7, <http://www.craterlakeinstitute.com/online-library/wbp-crater-lake/whitebark-pine-crater-lake.pdf> (accessed April 4, 2014).

interpretive story told to the visitors then turns from the existing problem to solutions for the resource's survival.



Figure 2.7: A park visitor standing in front of whitebark pines on Cloudcap. July 2013.

Two methods are currently encouraged to support the survival of the whitebark pine, one natural and one synthetic. Whitebark pine specimens are a “keystone” species for they are pivotal in the survival of other species, both plants and animals.³⁵ One mutual interaction of these trees is with the Clark’s Nutcracker. These birds are able to break through the hard cones of the pine and get to the seeds within; it is a main staple of their food source. The birds then spread the uneaten seeds, aiding in the repopulating the whitebark pines. Scientists are also turning toward synthetic means to help save the existing trees. Packets of Verbonen, a compound that is similar to the pine beetle’s pheromone, are stapled to the trees. Actual pine beetles recognize the Verbonen as their

³⁵ National Park Service, *Crater Lake: Climate Change at Crater Lake*, 2.

own pheromone and leave the tree alone about fifty percent of the time.³⁶ Discussion of the circumstances of the whitebark pine occurred in seven out of thirty-four of the observed ranger-led programs.

Crater Lake's Cultural Resources

The history of human occupancy of the Crater Lake region can be dated to before the eruption of Mount Mazama 7,700 years ago. This results in an immense multilayer cultural history that needs to be conveyed by the NPS interpretive staff. First, in the spectrum of time to be communicated are the pre-contact lifeways of the American Indians, which can be dated from more than 9,000 years ago through the eighteenth century;³⁷ then comes the Euro-American discoveries of the lake in the middle of the nineteenth century and the subsequent post-contact tribal lifeway changes. The area then transitions into the public trust in 189 and becomes a national park in 1902. From there, the park evolved and changed in its offerings and amenities through the past century, alongside the changing federal acknowledgement of and the use by the American Indians. Each of these subjects is a layer, a resource in the cultural heritage of the park. The representation of *all* of these layers is a necessity in Crater Lake NP's interpretation efforts.

³⁶ Amelia Templeton, "Scientists Scramble to Save Crater Lake's Whitebark Pine," *Oregon Public Broadcasting*, July 25, 2011, <http://earthfix.opb.org/flora-and-fauna/article/scientists-scramble-to-save-crater-lakes-white-bar/> (accessed April 4, 2014).

³⁷ Douglas Deur, *In the Footprint of Gmukamps: A Traditional Use Story of Crater Lake National Park and Lava Beds National Monument*, (Pacific West Region: National Park Service, 2008), 59. Sandals found to the northeast of Crater Lake at Fort Rock Cave where discovered in 1937 by Luther Cressman and were dated to approximately 9,000 years ago.

American Indians

Crater Lake traditionally served as the boundary for the convergence of four Indian tribes: the Klamath, the Takelma, the Upper Umpqua, and the Molala.³⁸ Each utilized the specific geographic features and vegetation found in their territories for their lifeways while cycling between low elevation winter camps and higher elevation spring and summer camps.³⁹ Of the four peoples, the Klamath have the strongest preservation of their language and culture to the current day due to their peoples remaining in their traditional territory, while the other three were relocated to reservations in northwestern Oregon in the 1850s.⁴⁰ It is perhaps for this reason, in conjunction with the park's collaboration with the tribal community, that the interpretative elements of the Crater Lake NP focus primarily on the Klamath lifeways and oral traditions. It should be noted, however, that interpretation does not eliminate other tribes entirely. In the 2012 waysides, reference is made to the first views of the lake by the American Indians and to the landmarks of the Klamath Basin. Terminology on these panels includes multiple tribal names including Paiute, Modoc, Klamath, as well as unspecific phrases such as "Native Americans" and "local tribes."⁴¹ Nevertheless, it is the Klamath tribe that is given the greatest depth in the interpretive programs.

³⁸ John Mairs, Kathryn R. Winthrop, and Robert Winthrop, *Archaeological and Ethnological Studies of Southwest Oregon and Crater Lake National Park: An Overview and Assessment* (Ashland, OR: Winthrop Associates Cultural Research, 1994), 29.

³⁹ Robert Winthrop, *Archaeological and Ethnological Studies*, 67.

⁴⁰ Robert Winthrop, *Archaeological and Ethnological Studies*, 67.

⁴¹ This utilization of multiple tribal names in conjunction with the use of the unspecific "tribal" could be a direct result of the findings and suggestions by Douglas Deur in 2008 when he conducted interviews with local various tribal members for their perspective on the interpretation at Crater Lake NP.

The stories of the Klamath Tribe as well as their traditions are the concrete American Indian lifeways conveyed in Crater Lake NP interpretation. The most popular story centers on the creation of Crater Lake as a battle fought between the Chief of the Below World and the Chief of the Above World. This story is found on a wayside at Skell Head observation point, along the eastern portion of Rim Drive. It is also relayed orally on the boat tours and trolley tours. One particular Rim Talk, given in the 2013 summer season, focused entirely on the life and history of the Klamath Tribe. The ranger delved, with visual aids, into the origin story of the tribe, their material resource cyclical year, and their cultural traditions, including spirit quests and the giving of the first harvest back to the earth. When elaborating on messages concerning traditional practices and sacred sites, the tribes have indicated that the public's knowledge should be limited. It is important that the public knows that the cultural practices and use of Crater Lake as a sacred site are still *ongoing* activities, but the specific site locations of their activities must remain undisclosed.⁴² The ranger followed this condition and provided a means by which to promote a higher level of understanding of the tribal culture to the public.

Crater Lake's "Discovery"

The tale of Crater Lake's discovery and rediscoveries by Euro-Americans is fodder for the interpretation topics within the park, especially as they relate to how the lake received its name. In the sequence of the site's "discovery" four specific documented moments are called to attention by the park interpretation. The first is when in the spring of 1853, Isaac Skeeter of Jacksonville, Oregon sought to look for the "Lost Cabin" gold mine with the financial backing of John Wesley Hillman. Ten Oregonians

⁴² Douglas Deur, *In the Footprint of Gmukamps*, 233.

set out on this venture and on June the twelfth, three of them came across the vast blue lake. Skeeter then named it “Deep Blue Lake.”⁴³ This discovery was soon forgotten until October 21, 1862 when another small group was traveling toward the Rogue River Valley and they came across an unforeseen obstacle.⁴⁴

Before us, and at our feet, lay a large lake, encircled on all sides by steep and almost perpendicular bluff banks, fully high as that we were standing upon ... The waters were of a deep blue color, causing us to name it Blue Lake.

Then in August of 1865 two members attached to a crew working on a wagon road that reached Fort Klamath, seven miles southeast of the current park boundaries, found the lake and reported back to the Fort. Many soldiers and civilians then traveled to the lake including Sergeant Orsen Stearns, who was the first known non-native to travel to the water’s edge, and Captain F.B. Sprague, who named it “Lake Majesty.”⁴⁵ The lake’s lasting name, Crater Lake, was given by a newspaper editor Jim Sutton after his adventures with a team exploring the lake and island by boat in July of 1869.⁴⁶ These four instances show the evolution of given names and provide insight into the “discovery” of the lake, although the local tribes already knew of it. There continues to be many more such “discoveries” through time to the present day for every visitor that sees the lake for the first time.

⁴³ National Park Service, *Crater Lake: History*, (Crater Lake, OR: Crater Lake National Park, 2010): 2, [http://www.nps.gov/Crater Lake NP/planyourvisit/upload/2010-history.pdf](http://www.nps.gov/CraterLakeNP/planyourvisit/upload/2010-history.pdf) (accessed March 31, 2014).

⁴⁴ One of the Party, “Head Waters of Rogue River: Blue Lake,” *Oregon Sentinel*, November 8, 1862.

⁴⁵ National Park Service, *Crater Lake: History*, 2.

⁴⁶ National Park Service, *Crater Lake: History*, 2.

Becoming a National Park

The process of turning this region into a national park, and thereby protecting and preserving its resources, took seventeen years of concentrated effort from 1885 to 1902. At the center of this effort, and, therefore, to the discussion of this topic in interpretation, is William Gladstone Steel, a civilian who campaigned for the national recognition of the area. Steel was a Kansas native who moved to Oregon in 1872. Then, when he first visited the lake in 1885 with traveling companions J.M Breck, Captain Clarence E. Dutton, and Joseph LeConte, he returned to his home determined to make the area a national park. The tales of the beginning of the campaign toward a national park include petitions, 1,000 letters to newspapers across the United States, and multiple bills put before Congress but not passed.⁴⁷

The first major preservation legislation for the area that was passed came in the form of the 4,883,588-acre Cascade Range Forest Reserve in September of 1893.⁴⁸ This area, that included Crater Lake, was set aside as a public reservation prohibiting settlement, all for the public good.⁴⁹ While this afforded a measure of protection, concerned parties still intended to make the area of Crater Lake a national park. 1898 was the year Thomas H. Tongue renewed the effort in Congress, putting forth four bills over the next three years that, like their predecessors, failed to come to a favorable vote. At

⁴⁷ Harlan D. Unrau, "Early Efforts to Establish Crater Lake National Park: 1885-1893," in *Administrative History: Crater Lake National Park, Oregon* (Crater Lake, OR: National Park Service, 1987), chap., http://www.nps.gov/history/history/online_books/Crater_Lake_NP/adhi/ (accessed October 1, 2013).

⁴⁸ Warwick Frost and C. Michael Hall, *Tourism and National Parks: International Perspectives on Development, Histories and Change* (New York, NY: Routledge, 2009), 93.

⁴⁹ Grover Cleveland, Proclamation, "Proclamation 362 - Setting Apart Land in the State of Oregon as a Public Reservation," September 28, 1893, online by Gerhard Peters and John T. Woolley, *The American Presidency Project*, <http://www.presidency.ucsb.edu/ws/index.php?pid=70755> (accessed April 1, 2014).

this stage, more petitions were collected and another bill was put forward, one with the support of President Theodore Roosevelt. This bill went up for full consideration in the House of Representatives. After a significant debate and amendments, the bill was passed at the House. Then the Senate passed the bill without any amendments or further debate on May 9, 1902.⁵⁰ Crater Lake was now a national park with the associated protections of its resources and obligations to the people.

The Built Environment

Buildings within the natural landscape that support the accommodation of the national park administration and the visitors are another topic of NPS interpretation. The most common building focused upon is the Crater Lake Lodge (Lodge) at the rim. This stone and wood structure was originally designed by the Portland architect Raymond Hockenberry. Construction for the Lodge began in 1909 under the Crater Lake Company. It opened to the public three years behind schedule on June 28, 1915 with only the first floor available for occupation (Figure 2.8).⁵¹ Over the course of the next decade difficulties arose in management of the Lodge due to short visitor seasons with large crowds, high employee salaries, and poor overall management. This combination led to high visitor dissatisfaction. In the hope of rectifying the discontentment, the management company was changed and eighty-rooms were added to the existing lodge in 1922 (Figure 2.9).⁵² The Lodge was added individually to the National Register of Historic

⁵⁰ Harlan D. Unrau, "Establishment of Crater Lake National Park: 1902," in *Administrative History: Crater Lake National Park, Oregon* (Crater Lake, OR: National Park Service, 1987), chap., [http://www.nps.gov/history/history/online_books/Crater Lake NP/adhi/](http://www.nps.gov/history/history/online_books/Crater_Lake_NP/adhi/) (accessed October 1, 2013).

⁵¹ Ranger Talk, "Shelter on the Rim," August 12, 2013.

⁵² National Park Service, "Concessionaire Development of Visitor Services," in *Historic Resource Study: Crater Lake National Park, Oregon* (Denver, CO: National Park Service, 1984), chap.,

Places in 1981 with the areas of significance of architecture and commerce. Its period of significance is 1900-1924, encompassing the history previously discussed.

By 1989 significant rehabilitations were needed for the structure, to the tune of more than fifteen million dollars.⁵³ These changes, undertaken by the park and FFA Architecture and Interiors, Inc included reducing the number of rooms to accommodate bathrooms, the installation of elevators and telephone jacks, and reconstruction of the Great Hall. Despite these changes being done, it was determined that the Lodge still retains its historic integrity and that its character defining features are intact (Figure 2.10).⁵⁴

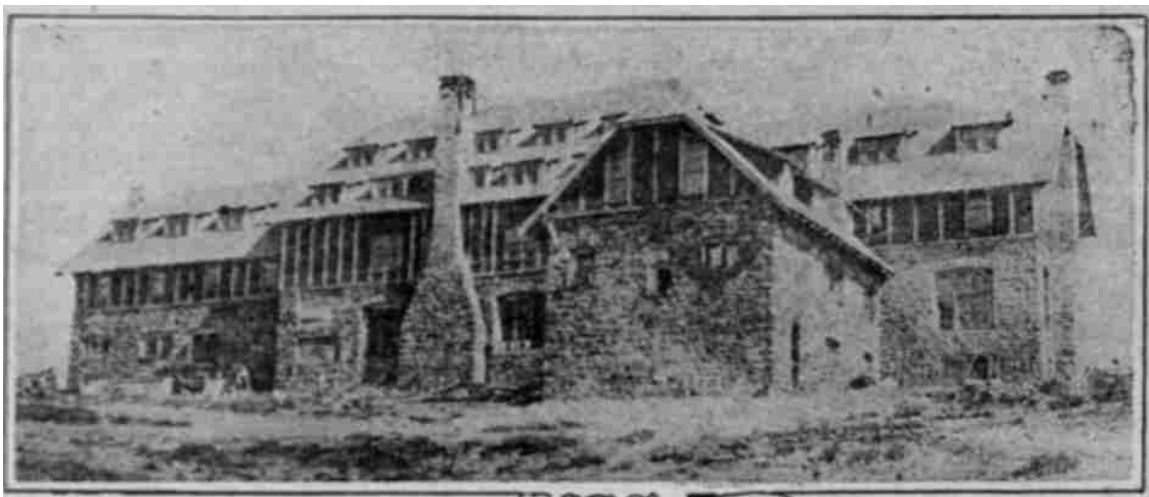


Figure 2.8: Photograph of Crater Lake Lodge as seen in the *Sunday Oregonian* on December 19, 1915.

http://www.nps.gov/history/history/online_books/Crater_Lake_NP/hrs/hrs.htm (accessed April 12, 2014).

⁵³ National Park Service, *Crater Lake: The Crater Lake Lodge* (Crater Lake, OR: Crater Lake National Park, 2009): 1-2, http://www.nps.gov/Crater_Lake_NP/planyourvisit/upload/2010-Crater-Lake-Lodge-sb.pdf (accessed March 31, 2014).

⁵⁴ National Park Service, "Crater Lake Lodge," *Cultural Landscapes Inventory, Rim Village Historic District, Crater Lake National Park* (Seattle, WA: National Park Service, 2004), sec. <http://www.craterlakeinstitute.com/online-library/rim-village-cli/complete.htm> (accessed April 12, 2014).



Figure 2.9: Crater Lake Lodge in 1926 showing the 1922 additions to the right.
Photograph by Ralph Eddy.



Figure 2.10: Contemporary view of Crater Lake Lodge. July 2013.

The details in the building’s evolution are highlighted in the park’s interpretation along with visitors’ accounts of their stay. The visitor experience of the Lodge has, indeed, changed through time. The first visitors had no locks on their doors, no individual bathrooms, and had to deal with sparse furniture and thin walls.⁵⁵ Today, visitors enjoy modern standards including private rooms with on suite bathrooms, safety systems, and comfortable furniture. Yet, visitors from yesteryear and today share something in common—they are able to enjoy staying overnight within Crater Lake NP at a sheltered location that rests on the edge of the caldera wall, and perhaps too, understand the experience of a warm fireplace after a day’s adventures (Figure 2.11). These aspects of the Lodge are conveyed in Crater Lake NP through its own exhibit “Historic Crater Lake Lodge” located within the Lodge itself (Figure 2.12) and Rim Talk such as “Shelter on the Rim.”



Figure 2.11: Exhibit detail of guests in the Great Hall in 1916 as seen in “Historic Crater Lake Lodge.”

⁵⁵ Ranger Talk, “Shelter on the Rim,” August 12, 2013.



Figure 2.12: “Historic Crater Lake Lodge” exhibit highlighting the chronology of the building. August 2013.

The Crater Lake Lodge contributes to the cultural landscape at the rim, but it is not the only location where rustic architecture can be found in the park. Rustic architecture is one that is designed with nature in mind, as is the case at Park Headquarters in Crater Lake NP. This architectural style is known for its intention to be visually cohesive with its surrounding elements. Moreover, the focus of the area should remain on the natural environment, rather than the manmade features.⁵⁶ Within Park Headquarters are several structures and walkways that illustrate this design concept. Stones, logs, and vegetation all work to form a cohesive bond between the administrative, maintenance, and residential buildings, and the natural surroundings. Prime examples of

⁵⁶ National Park Service, “The Rustic Architecture Program of the National Park Service,” in *Historic Resource Study: Crater Lake National Park, Oregon*. (Denver, CO: National Park Service, 1984), sec., http://www.nps.gov/history/history/online_books/Crater_Lake_NP/hrs/hrs.htm (accessed April 12, 2014).

this rustic architecture at Park Headquarters are the Superintendent's Residence (1933), the Ranger's Dormitory (1932), the Administrative Building (1937), and the Naturalist's Residence (1932) (Figures 2.13-2.16). The sole current interpretive offering on rustic architecture comes in the form of a brochure that takes the visitor on a tour of the buildings, as they are visible from the environmental setting of the Lady of the Woods Loop.



Figure 2.13: Original Superintendent's Residence (1933), now a National Historic Landmark and Science and Learning Center. August 2013.



Figure 2.14: Original Ranger's Dormitory (1932), now the Steel Visitor Center. August 2013.



Figure 2.15: Administrative Building (1937). August 2013.



Figure 2.16: Naturalist's Residence (1932) blending in with surrounding environment. August 2013.

CHAPTER III

“TO FOSTER”: TECHNIQUES AND METHODS

Crater Lake National Park (Crater Lake NP) has a vast heritage that must make a connection to its visitors. How it chooses to do so is its interpretative technique or approach. The choice of the technique and its implementation will aid or hinder the understanding on the part of the visitor. Sam Ham defined an interpretive approach as “a way of communicating that strives to make information enjoyable, relevant, organized, and thematic.”⁵⁷ *Enjoyable* entails that the presentation is of interest to the individual, and at times entertaining. The second component, an interpretation’s *relevance*, is dependent on two factors—it must be simultaneously meaningful and personal. To have meaning is to put the message in context, both within what one already knows and within newfound information. The personal aspect connects to the visitor, where they are in that moment in time. *Organization*, the third portion of the approach, allows for the concepts and facts to be sequenced in a logical and beneficial manner. It focuses on the clear conveyance of the message through structure, which as other scholars including Stephen Bitgood attest, stimulates learning.⁵⁸ The last component, *thematic*, is the overarching message, the takeaway. Themes take the components of the resource, previously discussed, and presents them to the audience. This overall interpretive approach is part of what is commonly known as the interpretation loop.

⁵⁷ Sam H. Ham, *Environmental Interpretation: A Practical Guide for people with Big Ideas and Small Budgets* (Golden, CO: North American Press, 1992), 8-28.

⁵⁸ Stephen Bitgood, *Social Design in Museums: The Psychology of Visitor Studies: Collected Essays Volume One* (Edinburgh: MuseumsEtc, 2011), 183.

The interpretation loop consists of five components: the sender, the message, the channel, the receiver, and the receiver response.⁵⁹ At Crater Lake NP, the *sender* is the park itself with its agency agenda and mission. The *message*, at the parkwide level, is the primary interpretive themes, and at the individual program level, it is the various flexible sub-themes and topics. The *channel* is the conduit of information, whether it is orally communicated by the personnel or offered through the text found in an exhibit. A visitor to the site who is exposed to the interpretation is the *receiver*. The last component, the *receiver response*, is the visitor feedback and evaluation of interpretive elements. All the portions of Ham's interpretive approach are manifested in the channel of the interpretation loop, whether it is classified as personal interpretation or nonpersonal interpretation. However, before particular types of interpretation can be explored, the thematic messages of the park must be established.

Utilization of Themes

The overarching communicative messages of Crater Lake NP's ecological and cultural resources are organized into parkwide interpretive themes. For the purposes of planning, Crater Lake NP has two sets of documents that portray their interpretive "themes." The first is in the *General Management Plan* and the second is in a handout utilized by the interpretive staff. The first document outlines five themes with the categorical distinctions of "Cultural, Research and Education, Geology, Plant / Animal

⁵⁹ David Dean, *Museum Exhibition: Theory and Practice* (New York, NY: Routledge, 1996), 104-105.

Diversity, and Recreation and Visitor Experience.”⁶⁰ The second document outlines four primary interpretive themes:⁶¹

1. Scientists and the National Park Service are studying Crater Lake to gain a better understanding of the lake’s natural systems and aid in future management of the lake and surrounding resources.
2. Geologic forces, primarily volcanism, created Crater Lake caldera and Cascade Mountains, of which Mt. Mazama is a part.
3. Crater Lake National Park is home to a diversity of plants and animals including several endangered species.
4. Humans have played a significant role in the discovery, preservation, and management of Crater Lake.

For the purposes of this analysis, the second document will be utilized to explore Crater Lake NP's themes as it is the list that is most utilized by the interpretive staff of the two documents.

The major strength found in the current Crater Lake NP interpretive themes is that they cover the broad scope of the subjects that the park conveys, including its resources as discussed in Chapter II. In Theme 1, all aspects involving the subject of the lake are explored, whether that involves its clarity, its chemistry, or scientific study. All volcanic subjects of the park are in Theme 2. The ecosystem encompasses Theme 3 and human impact and interaction is found within Theme 4. Knowing the components of the site, what it consists of and what makes it significant, is the basis from which the themes can be strengthened.

⁶⁰ National Park Service, *Final General Management Plan / Environmental Impact Statement: Crater Lake National Park*, (Washington, D.C., Government Printing Office May 2005), <http://www.craterlakeinstitute.com/online-library/gmp-2005/complete.htm> (accessed March 8, 2014).

⁶¹ Crater Lake National Park, 2013, *Crater Lake National Park: Primary Interpretive Themes*, Crater Lake National Park Interpretation Office, Oregon. The origin of the "themes" in this handout is from a variety of Annual Statements for Interpretation and documents such as the National Park Service, *Interpretation Prospectus: Crater Lake National Park*, by Division of Interpretive Planning (Washington, D.C.: Harpers Ferry Center, December 1991). They have been revised and edited to generate this current list utilized by the park interpretive staff.

Themes are like mission statements in that they need to be phrased in such a manner that implies action and encompasses the whole of the message succinctly in order to be a strong basis for communication. They need to be linked to the information presented by the rangers and they need to have that takeaway factor added to them.

Of the current Crater Lake NP primary themes, Theme 3 is the weakest with regard to portraying these idealistic characteristics of a theme. It communicates that the life within Crater Lake NP is diverse, but the fact that some animal species are endangered seems an afterthought and there is no causality as to why that might occur. Furthermore, there is no takeaway factor for the visitor within its statement. A takeaway factor is one in which the visitor understands the contributing elements to the statement, and comes away with how their actions, or inactions, may impact the resource. In consideration of how this theme might be altered, it is important that the theme still provides the umbrella for its range of topics: biodiversity, role of fire, old growth forest, and weather, *et cetera*. It is therefore suggested that Theme 3 be reworded as: The beauty of Crater Lake National Park relies on a fragile balance in its ecosystem that when altered has repercussions for its plant and animal life. In this rewording, there is cause and effect, and the insinuation that the balance can be altered by numerous factors. This rephrasing can encompass the spectrum of topics, such as fire, weather, and, in part, humans' consequences. A complete rewording, however, is not always necessary to strengthen a theme.

In Theme 4, a single change can result in a keener message that relates to the park's mission. By taking the verb and changing it from its past tense conjugation to the present tense, the ramifications of the meaning changes. It now reads: Humans play an

integral role in the discovery, preservation, and management of Crater Lake. That change of the verb puts the actions of the present generation into the theme. Some might argue that by phrasing it in the present, one eliminates the past. However, it is important to keep in mind that those persons of the past acted in the present of their given era. They *were* acting, *we are* acting, and the next generation *will* act.

Another item to consider with regard to this particular theme is the messages that the American Indians desire to convey. At present, Theme 4 includes both Euro-American and American Indian topics. However, it would be prudent to add a fifth park theme that delves specifically into the interpretation of the tribal peoples. Other parks have done this in recent years including Yosemite National Park when they incorporated the theme “while living in or traveling through the region now called Yosemite National Park, numerous American Indian groups traded resources, exchanged knowledge, and sometimes intermarried—traditions that continue today” into their interpretive planning efforts.⁶² In the creation of a theme of this nature at Crater Lake NP, open dialogue with the tribal communities would ensure that the cultural message is sensitive, accurate, and appropriate.

Under that fifth theme, other sub-themes would be utilized to ensure that the key messages of the native peoples are being included in the park interpretation. As part of a collaborative effort with the tribes, Dr. Douglas Deur compiled five interpretive themes that can be included within interpretive elements and could provide the basis for the

⁶² Tom Medema, *Long-Range Interpretive Plan* (Yosemite, CA: Yosemite National Park, 2012): 41, <http://www.nps.gov/yose/upload/LRIP.pdf> (accessed April 24, 2014).

future Theme 5.⁶³ To ensure that the message of this potential theme and the other parkwide themes are communicated to the public in an effective way, they need to be presented clearly within the individual interpretive elements.

One specific interpretive method to communicate a message succinctly to a visitor at the offset of a program or element is to utilize a theme-title. The concept is this: if a visitor were to solely read the title of the interpretation, whether at a ranger talk or in a wayside, would they gain understanding? This understanding is not of a topic, the subject, but it is of the basic larger picture.⁶⁴ It is a broader concept that they could use to make smaller connections, whether it is exploring further in the text, viewing diagrams, listening to the talk that follows, or seeking greater depth later on. The theme-title is a self-sufficient entity. For example, from the Crater Lake NP ranger talk with the theme-title “Bear-anoia!” one can get a broader sense of the concept from that title alone. From the first portion, a visitor can discern that the general subject centers on bears. It is the post hyphen that brings the title into a theme. The Greek word *anoia* means a lack of understanding. Visitors might associate it with words such as paranoia, where it suggests that something is perceived, but is unfounded in reality. The use of an exclamation mark brings passion to the title, a strong vehement statement. Visitors will takeaway from this title that there is a strong misunderstanding concerning bears at Crater Lake NP. That is a theme-title; the ranger can take it from there and the visitor knows at the start what will be discussed.

⁶³ Doulas Deur, *American Indians and Crater Lake: An Interpretive Overview and Plan*, (Crater Lake, OR: Crater Lake National Park, OR, 2005), 28, Collection 1001, “Crater Lake NP Administrative and Resource Management Records,” box 15 of 23, Crater Lake National Park Archives.

⁶⁴ Sam H. Ham, *Environmental Interpretation: A Practical Guide for people with Big Ideas and Small Budgets* (Golden, CO: North American Press, 1992), 204.

As for interpretive text, a visitor may not read all of what is presented to them.⁶⁵ Chances are, however, if they glance at a wayside panel they will read the title. If the title sparks interest, they will explore further. Some panels, such as “Plaikni Falls Trail” (Figure 3.1) and “Be Prepared!” serve the purpose of communicating information that will influence the decisions and experiences of the visitor. They are not intended to enable greater meaning, that is to connect the content to the visitor’s life on a personal level, but they are intended to prepare the visitor for what is to come. It is in the waysides that broach deeper meanings about park subject matter that a theme-title could be implemented.



Figure 3.1: Plaikni Falls Trail panel serves to prepare the visitor for the trail. August 2013.

At Crater Lake NP, however, a theme-title is not the chosen technique for the waysides. The titles at the park give a glimpse into the *subject* explored within, whether

⁶⁵ Beverly Serrell, *Exhibit Labels: An Interpretive Approach* (Walnut Creek, CA: AltaMira Press, 1996), bk.

that is “The Pinnacles” or the “Pumice Desert.” Some even do so with a poetic quality: “Windy Existence,” “Naming a Natural Wonder,” and “Clear Deep Blue.” From each phrase one gets the subject, but unless the visitor has prior knowledge, his or her link to the larger themes is disconnected, and it is the responsibility of the rest of the content to bring the subject back to the park themes. In future element considerations, whether it is the large-scale permanent components or in seasonal brochures, a theme-title is an excellent method to convey the thematic message to the visitor at the start of their adventures.

Personal Interpretation

Personal interpretation at Crater Lake NP consists of programs that are ranger-led. These include in the summer season: Rim Talks, guided afternoon hikes, guided sunset hikes, evening programs, boat tours, trolley tours, and roving interpretation. In the winter season, it is primarily the snowshoe hikes (Figure 3.2). At Crater Lake NP, 54,283 visitors attended a ranger-led program in 2013 fiscal year with 39,705 of that total attending in July and August.⁶⁶ Each program type that the visitor experiences incorporates specific techniques and skills. A ranger talk, for example, is sequential and the speaker is in control of the order of information.⁶⁷ That control is in contrast with roving interpretation, where what is spoken of is dependent upon the visitor, their needs and desires, rather than a prescribed spiel by the professional.⁶⁸ Hikes, with the exposure to elements and the potentially strenuous physical activities have different issues and

⁶⁶ Marsha McCabe, e-mail message to author, April 28, 2014. These numbers do not include individuals who watched the park film, participated in a formal education programs, went into the visitor centers, or were contacted via roving interpretation.

⁶⁷ Ham, *Environmental Interpretation*, 40.

⁶⁸ William J. Lewis, *Interpreting for Park Visitors* (Philadelphia, PA: Eastern Acorn Press, 1981), 64.

strategies associated with them than the tours that allow the visitor to remain seated while a vehicle transports them to the various viewing points. All these nuances and the strategies to accommodate them in practice begin with the staff-training program and lead to clear communication of the message.



Figure 3.2: Weekend ranger-led snowshoe hike. March 2014.

Staff Training

Preparation for these programs begins when all interpretive rangers participate in a two-and-a-half week training session in June, prior to the start of the summer season at Crater Lake NP. This training regiment has been expressed by the Chief of Interpretation at Crater Lake NP as a “strong program,” one that is seen as a clear asset in the interpretative efforts at the park.⁶⁹ It is, in fact, considered by the National Association for Interpretation (NAI) a “best practice” to have specific training for the staff and

⁶⁹ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

volunteers in which specific outcomes and/or impacts of training are identified.⁷⁰ The training at Crater Lake NP has an aim toward ranger preparedness in safety considerations, knowledge of the resource, and communicative techniques. All of which will be incorporated into and used daily in the park's public programs and interactions.

The first order of business in the training sessions is to equip the interpretive rangers, the majority of which are seasonals, with the knowledge concerning the history and management of Crater Lake NP. Rangers are given hard copies of authoritative books concerning the resources, history, and general information about the park.⁷¹ There are also presentations from the experts in the areas of limnology, geology, park management, and history. The scholarly sources in conjunction with the staff presentations enable the interpretative rangers to convey accurate information. As William Lewis phrased it, “**no** information is better than **inaccurate** information.”⁷² For the NAI, having accurate information from credible sources is a best practice as an ethical consideration.⁷³ The public trusts the professionals in the ranger uniform and the park has a duty to ensure its

⁷⁰ National Association for Interpretation, “Standards and Practices for Interpretive Planning,” NAI, <http://www.interpnet.com/docs/BP-Planning-Jan09.pdf> (accessed October 9, 2013), 14.

⁷¹ K.R. Cranson, *Crater Lake, Gem of the Cascades: The Geological Story of Crater Lake National Park* (Lansing, MI: K.R. Cranson Press, 1980); Robert W. Decker, Barbara Decker, and Richard W. Hazlett, *Road Guide to Crater Lake National Park* (Mariposa, CA: Double Decker Press, 1988); Rick Harmon, *Crater Lake National Park: A History* (Corvallis, OR: Oregon State University Press, 2002); Stephen L. Harris, *Fire Mountains of the West: The Cascades and Mono Lake Volcanoes* (Missoula, MT: Mountain Press Pub. Co., 1988); Stephan R. Mark, *Rhapsody in Blue: Historic Rim Drive, one of the nation's best scenic roads!* (Crater Lake, OR: Crater Lake Natural History Association, 2004); Daniel Matthews, *Cascade-Olympic Natural History: A Trailside Reference* (Portland, OR: Raven Editions, 1999); National Geographic, *Crater Lake National Park, Oregon: Trails Illustrated Topo Maps* (Evergreen, CO: Trails Illustrated, 1998); Oregon Historical Society, ed. “Crater Lake at 100,” special issue, *Oregon Historical Quarterly* 103, no. 1 (Spring 2002); Shaw Historical Library, *The Mountain with a Hole In the Top-Reflections on Crater Lake* (Klamath Falls, OR: Shaw Historical Library, 2001).

⁷² Lewis, *Interpreting for Park Visitors*, 60.

⁷³ National Association for Interpretation, “Standards and Practices for Interpretive Methods,” NAI, <http://www.interpnet.com/docs/BP-Methods-Jan09.pdf> (accessed October 9, 2013), 7.

staff is well informed. It is, however, ultimately up to the individual ranger to accumulate this given knowledge, seek a more in-depth understanding through further research, and be accountable for the facts they give to the public. Once the staff has credible knowledge of the resources of Crater Lake NP, their focus can turn to organizational techniques of communication.

Hierarchy of Information

A communicative strategy of incorporating themes into personal interpretation is highlighted in the training sessions at Crater Lake NP and yet not all interpreters incorporate the practice into their programs. Themes are a crucial component that aid in the understanding and retention of interpretive programs; however, the visitor must be made aware of them. In a scientific study by Perry Thorndyke, persons were presented with four versions of the same story, where the location of the explicit statement of the theme was shifted to different locations in the presentation. It was placed either at the start of the story, in the middle, at the end, or it was not stated at all. It is not surprising that the instance when the theme was stated at the beginning led to the highest results of comprehension and retention. What, however, illustrates the need for an obvious theme is that when as a follow up to the first experiment, Thorndyke took the story and randomly rearranged order of the sentences. He found that people had the same low comprehension level for that random version as they did for the story that was told in sequential order, but lacked the theme.⁷⁴ Crater Lake NP seeks to encourage and promote understanding of its resources and, as such, each personal interpretation program should have a theme.

⁷⁴ Perry W. Thorndyke, "Cognitive Structures in Comprehension and Memory of Narrative Discourse," *Cognitive Psychology* 9, no. 1 (1977): 77-110.

Moreover, that theme needs to be made known to the visitor at the *start* of each interpretive program.

The theme, on the program level, is the first consideration, while the main points that construct that theme are a secondary consideration. Specific details are the third. The combination of these three provides one method of the organization of data as it relates to the visitor. At each of these levels, it is vital that the visitor not be overwhelmed with a sizeable amount of information, especially if it is terminology heavy. Rather, it is preferable to adhere to the cognitive abilities of the human brain. People can generally remember between five and nine separate new ideas at a given moment.⁷⁵ In the interpretive program, utilizing five key points, or less, to support the theme will afford the chance for the majority of visitors to retain the message. From these main points, more specific supporting details can be conveyed. Those details, however, may not remain in the memory of the visitors, unless they are a captive audience, or are particularly engaged or interested in the subject matter, or are placed within a context that the visitor can personally relate to. These three levels provide a hierarchy of information in the personal interpretation at Crater Lake NP that can be more readily understood, or at the very least acknowledged by the visitors more than those programs lacking a clear structure. The practice of this technique was apparent in some of the programs during the 2013 summer season at Crater Lake NP.

“Wings of Wisdom,” a Rim Talk, utilized this strategy of the *theme, main points,* and *details* successfully. The ranger put forward the theme first: life lessons that can be learned from the birds at Crater Lake NP. The remainder of the thirty-minute talk was

⁷⁵ George A. Miller, “The Magical Number Seven, Plus or Minus Two: Some Limits On Our Capacity for Processing Information,” *Psychological Review* 63, no. 2 (1956): 81-97.

then arranged in three lessons, which were the main points. The attentive visitors walked away from the program understanding that perseverance pays off; that one should not judge a bird by its plumage; and one should form meaningful lasting relationships. Each of these lessons had birds associated with them: Rufous Hummingbird, Water Ouzel, and Clark's Nutcracker respectively. In each of those lessons, details of the bird's way of life and abilities were made apparent and related to human behavioral practices. The use of precise statistics and details reinforced the theme, and added to the credibility and perception of the ranger as a local expert. The presentation was well organized and provided a clear message to the visitors. "Wings of Wisdom" was not the only talk to utilize this technique in the summer of 2013. "The Good, The Bad, and The Ugly" also had the clear presentation of information levels where the clarity of the lake, the endangerment of the pika, and the mountain pine beetle demonstrated climate concerns with regard to Crater Lake. These programs conveyed a clear hierarchy of information with the strong utilization of a theme, making them robust in the "foster" component of the park's mission.

Nonpersonal Interpretation

When there is no ranger to personally guide the visitor and interpretation relies on audio, visual, or textual elements, then the interpretation is classified as *nonpersonal*. According to the Visitor Use and Evaluation of Interpretive Media, conducted in 2003, only 22% of visitors overall in the national parks will encounter personal interpretation, while 62% will receive nonpersonal interpretation exposure.⁷⁶ At Crater Lake NP,

⁷⁶ National Park Service and Eppley Institute for Parks and Public Lands, ed. *Foundations of Interpretation Competency Narrative* (Bloomington, IN: Trustees of Indiana University, 2007), 10, http://idp.eppley.org/IDP/sites/default/files/Foundations%20Competency%20Narrative%20Final%206_09.pdf (accessed October 30, 2013).

nonpersonal interpretation is comprised of waysides, the park newspapers, brochure-guided hikes, exhibits, the park film, handouts, and purchasable guidebooks. They are all alike in that the visitor will be in control of the flow of information. They can choose what to read, what button to press, what activity to do, and in what order they desire to accomplish it. The park provides the material, but the visitor governs his or her own selection of information, actions, and experience. As with personal interpretation, however, each of these educational options encompasses techniques and best practices that are specific to the individual method. The more permanent or long-term features, in particular the waysides, park film, and Sinnott Memorial exhibit, are handled differently in park planning and maintenance than the park newspaper, handouts, and self-guided brochures. The former are meant to exist in one form for upwards of three decades, while the latter can be altered more readily season by season. Nevertheless, each embodies theories of thought in communication techniques that can affect the visitor's experience as the following discussion of the waysides and self-guided trail brochures suggests.

Waysides

Located along the thirty-three mile Rim Drive at Crater Lake NP and along the primary vehicular transportation arteries are a series of waysides that inform the visitor of the wonder that is Crater Lake now and of Mount Mazama that once was (Figures 3.3) Waysides are permanent installations that require intense planning considerations and a budget to match. In the climate of Crater Lake, their physical form must be durable against the harsh elements all the while their visual message should coincide with the park themes and allow for succinct, effective communication. The 2012 waysides currently in place were installed throughout the 2013 summer season, replacing a series

of waysides that had been in place since the 1980s. As manifestations of interpretive approaches, the two series demonstrate an evolution of philosophy and advancements in material science, where the current waysides have become more culturally aware, contain repetition of key content, and acknowledge accessibility.



Figure 3.3: Google Map showing the planned location of waysides as of June 2011.

To grasp the changes of interpretive techniques in the implementation of the 2012 series, it is important to have first an understanding of what they replaced. The old series had its final wayside exhibit plan signed by the Division of Wayside Exhibits Chief in

November of 1984; it was manufactured and installed shortly thereafter.⁷⁷ The messages primarily focused on the geologic forces that created Crater Lake, limnology, and in one instance, safety concerns. This focus leaves out the human factor, a strong relatable concept to the park visitor. There was, in fact, only one wayside in which Euro-American discovery was explained, and nothing delving into the local tribes. In expression, the scientific terminology was highlighted in a bold font and its presence was a common occurrence. Granted, following the term, a definition or explanation was offered for the visitor's reading clarification. Visual diagrams or photographs of features not visible at the wayside location then accompanied the written text. Overall, the 1980s waysides had a strong scientific formal educational impression that focused primarily on the first parkwide theme (Figure 3.4). This was perhaps *de rigueur* for that time in National Park Service (NPS) interpretation, but with time the focus has turned toward other methods and subjects in presentation, tying the waysides directly to their physical location, and including more native cultural components.

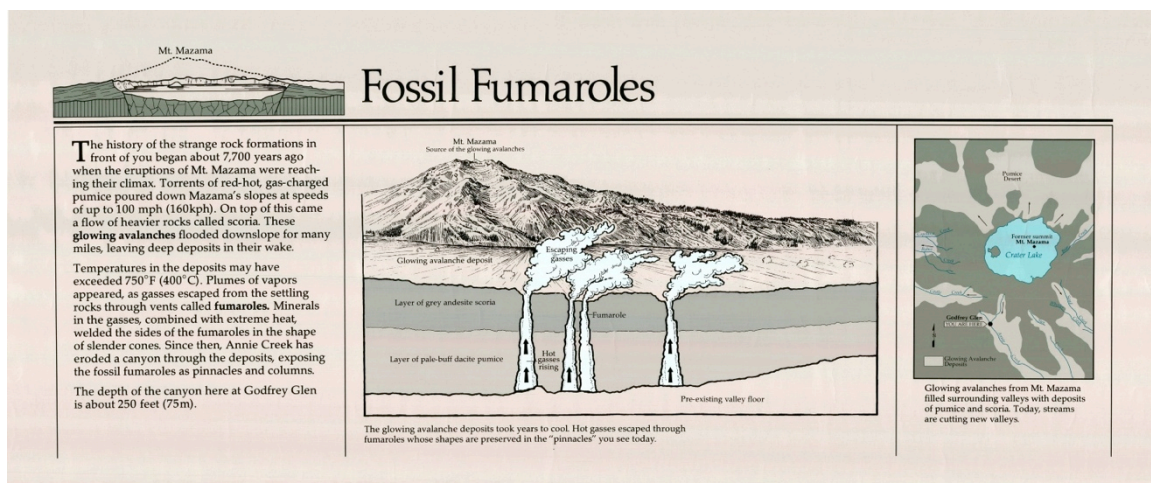


Figure 3.4: 1980s wayside panel showing scientific terminology in bold and overall design. Image by Crater Lake National Park.

⁷⁷ David J. Guiney, *Crater Lake National Park: Parkwide Wayside Exhibit Plan* (Harpers Ferry, WV: National Park Service, 1984).

Upon undertaking the planning of the 2012 waysides' material construction, design, and content, it was understood that they would need to be *in situ* for the next couple of decades. This makes the choices of their subject matter and physical design important in standing the test of time both physically and in relation to the visitor. The new waysides are constructed of a fused polycarbonate, a high-pressure laminate, with aluminum frames painted in the "NPS Brown."⁷⁸ This material was chosen for its ability to withstand high solar and wind exposure in the summer months combined with the freezing conditions and moisture levels in the long winters. To the visitor, the bright colors and sharpness of the text give the waysides an appealing aesthetic. It is hoped that with this choice of material the aesthetic can remain after a score of years has passed.

While the 1980s waysides had diagrams and pictures taken out of context, the 2012 waysides utilize design choices that tied them to the land. Part of the planning process, in which Crater Lake NP partnered with Harpers Ferry and an outside contractor, involved traveling around the rim of the caldera on Rim Drive and discussing the panels in what would be their installed individual locations. What is more, pictures were taken at each site to be used in the design. This means that the views that the visitor sees from Discovery Point, Cloudcap or specific points along Rim Drive are found in the corresponding photographs, both period and contemporary, in the design of the waysides (Figures 3.5). This technique connects the concept of the panel *directly* to their physical experience. It is a powerful design tool.

When the circumstance is such that a wayside is duplicated for American Disabilities Act (ADA) accommodations, the picture is duplicated from the higher

⁷⁸ Marsha McCabe, e-mail message to author, August 28, 2013.

viewpoint. This was done in the case of the “Naming a Natural Wonder” panel. Prominent in the background of that wayside panel is a picture of with a vantage point that is only visible from the top of Watchman Peak. Persons with physical disabilities that prohibit them from hiking that trail are still able to see what the lake appears like from that higher elevation while being in an accessible location nearby, the Watchman Overlook. This type of consideration and duplication was not utilized in the older waysides as Congress had not passed the ADA at the time of their creation. Not only do these new panels attempt to tie their visual content to the surroundings and accommodate ADA considerations, but they also strive to take into account more cultural perspectives and NPS sensibilities.



Figure 3.5: The view of Crater Lake from along West Rim Drive and corresponding image on “Valleys of Ice” wayside. August 2013.

A significant addition in wayside content is that of American Indian cultures. From the inclusion of the term *Giiwaas* in “Naming a Natural Wonder,” to their inclusion in “First Views,” and the explanation of “Ancient Spirits,” Native perceptions are now at least represented to the public. As with any inclusion of the various cultural perspectives, these should be sensitive to the wishes of the tribes and accurate in their conveyance of traditions for it is their culture being presented to the public. In “Ancient Spirits” there are, however, some incongruities with what was utilized in the final design versus what was offered as an interpretation by the tribal members collaboration with Douglas Deur in 2005. Take, as a case in point, the image caption for the NPS graphic of the crayfish (Figure 3.6) that reads:

Llao controlled lesser spirits appearing in animal form. One was a giant crayfish that would pluck unwary visitors from the rim and drag them into the chilling depths. Such stories were a lesson to be respectful when visiting the caldera.



Figure 3.6: Crayfish image and corresponding caption on “Ancient Sprits” wayside. August 2013.

The 2005 caption choice reads:⁷⁹

An artist's depiction of a spirit guardian of Crater Lake snatching an unprepared person from the caldera rim, as described in Klamath oral tradition. Such beings were sometimes said to be the minions or 'children' of Llaol, the principal spirit guardian of Crater Lake.

There are potentially many different reasons behind this alteration including image context, writing styles, and even different individual tribal consultants. The result, however, is that the nuances of word choice and sequence affect the takeaway message and tone on behalf of the nontribal visitor.

In the case of "The Klamath World," a wayside scheduled to be installed in the summer of 2014 along the east rim, the edits were due to the length of text. Incorporated into this panel are graphics and explanations of places of note by the tribes themselves, ones that the tribes want to communicate to the general public.⁸⁰ The text in the final version is not the exact wording of the tribes, for it has been edited significantly in the amount of text, but similar phrases are still utilized and each place in the basin has been called to the visitor's attention (Figure 3.7). The text has been reduced from an interpretation standpoint. An acknowledged standard is that the whole of the text on a panel should range from seventy-five to 200 words in length and no more.⁸¹ Regardless of what final form it takes, the wayside and other interpretive material should always include tribal input that is consciously and sensitively incorporated into the final product. This panel's edits and the ones already installed demonstrate an effort to incorporate the

⁷⁹ Douglas Deur, *American Indians and Crater Lake: An Interpretive Overview and Plan*, (Crater Lake, OR: Crater Lake National Park, OR, 2005), 36, Collection 1001, "CRLA Administrative and Resource Management Records," box 15 of 23, Crater Lake National Park Archives.

⁸⁰ Douglas Deur, *American Indians and Crater Lake: An Interpretive Overview and Plan*, 51-58.

⁸¹ David Dean, *Museum Exhibition*, 113-114.

views from within the American Indian cultures themselves on what should be interpreted and in what manner.



Figure 3.7: “The Klamath World” wayside panel design.
Image by Crater Lake National Park.

Self-Guided Trail Brochures

At Crater Lake NP there are four options available for visitors seeking self-guided trail options: Godfrey Glen, Castle Crest Wildflower Trail, Annie Creek, and Lady of the Woods Loop.⁸² A brochure that serves to direct the user to the aspects of the trail that would not be known or perhaps noticed otherwise accompanies each trail. When preparing and planning such an interpretive option, experts have recommended specific techniques like the use of curves in the path to add dynamism to the experience or the need to focus, explain, and connect the resource to the visual aspects at every stop.⁸³ Within the options at Crater Lake NP, the NPS and the Crater Lake Natural History

⁸² Crater Lake Natural History Association, *A Trail Guide to Godfrey Glen* (Crater Lake, OR: Crater Lake History Association, n.d.); Crater Lake Natural History Association, *Trail Guide to the Castle Crest Wildflower Garden* (Crater Lake, OR: Crater Lake Natural History Association, n.d.); Crater Lake Natural History Association, *A Trail Guide to Annie Creek* (Crater Lake, OR: Crater Lake Natural History Association, n.d.); Steve Mark, *Lake of the Woods Loop Trail Guide* (Crater Lake, OR: Crater Lake Natural History Association, 2007).

⁸³ Sam Ham, *Environmental Interpretation*, 320-325.

Association have utilized several guiding techniques.⁸⁴ These techniques include: a numerical sequence of stops, map orientation, visual aids, and the use of poetics.

Lady of the Woods and Annie Creek trail guides both utilize a designated sequence of stops in their printed booklet, but their effectiveness in providing smooth instructive guidance is vastly different in reality. This is first seen when the visitor begins their walk. At Lady of the Woods, there is a singular starting point where the booklet stand and money collection box are located. From there the hikers cross a bridge and immediately begin using their guidebook at Stop #1 (Figure 3.8). They are further enabled in their route with directional wayfinding signs. In contrast, at Annie Creek the hiker encounters a similar starting point with the booklets, but then comes to the loop and is not instructed in which direction he or she should travel to follow the designated stops in order; the hiker has to make an instinctive guess (Figure 3.9). An average person's natural inclination in this circumstance is to turn to the right, which would take the loop circuit in a counter-clockwise direction.⁸⁵ This is, in fact, how the numerical stops in the Annie Creek trail run. An additional issue for this trail was the lack of maintenance for the interpretation. The trail was created to have seventeen stops. The condition of the trail in August 2013 was such that only eight stops were visible along the trail as marked by wooden posts with the painted and engraved numbers. A visitor could still read about the missing stops in the booklet, but the potential for understanding is decreased when the connection to the real-life environment is not apparent. Not only is that the case, but also it could prove frustrating and affect the visitor's overall experience in a negative manner.

⁸⁴ The Crater Lake Natural History Association is a nonprofit cooperating association for the National Park Service.

⁸⁵ David Dean, *Museum Exhibition*, 51.



Figure 3.8: The start of the Lady of the Woods Loop indicating a clear starting point. August 2013.



Figure 3.9: Visitors must guess as to which direction of travel will correspond with the numerical sequence of the trail brochure. August 2013.

Another method in self-guided trails is the utilization of a map of the route and surrounding landmarks. This is a common technique practiced by the NPS for it serves to orient the visitor and provide an initial means of comprehending the area at hand. Three of the four Crater Lake NP options contain a map, with Godfrey Glen being the exception. Each of these uses the map technique for a different purpose. In the Annie Creek booklet, the map is used to show the trail in relation to the Mazama Campground. Its sole purpose is to enable the visitor to find the entrance to the loop, which is tucked behind the amphitheater. In the Lady of the Woods map, the route of the loop is highlighted along with the location of the stops (Figure 3.10). This is placed in reference to the Park Headquarters and key features.⁸⁶ These two maps serve a physical orientation function that allows people to either know where to begin, or where they roughly are at all times during the loop. For the guide to the Castle Crest Wildflower Trail, the map serves a different purpose; it supports the thematic content of the booklet. Here, it delineates the three garden zones along the loop (Figure 3.11). These garden zones and the factors that create them are responsible for the diverse types of native vegetation in a small area. It supports what is seen, aids in the illustration of a concept, and results in a greater comprehension of the trail's theme.

Diagrams and photographs are the primary visual aids that are included within the printed booklets. They serve to support the interest of what is visually seen by the visitor in the physical environment along the lines of a specific theme. They provide a means to

⁸⁶ Yosemite National Park utilizes this type of map for the Mariposa Grove of Giant Sequoia brochure, but text is added to point out the names of the features along the way. The brochure is also available with text, including map text, in French, German, Japanese and Spanish. Jon Kinney, *Mariposa Gove of Giant Sequoias* (Yosemite, CA: Yosemite National Park, 2006).

both explain the causes of landscape formation and connect it to the physical features visible today. Erosion shaping Annie Creek Canyon since 7,700 years ago, the date of Mount Mazama's eruption, is the theme of the Godfrey Glen trail. Within the interpretive booklet, is one visual placed in conjunction with the text (Figure 3.12). The visual is a series of diagrams that sequence the events and forces that have shaped, and resulted in, the canyon spires seen along the trail. It serves as the precursor to the present day viewshed, and places the landscape features in perspective. With the Castle Crest guide, visitors are able to match visual photographs of blooming flowers with their counterparts growing in the meadow (Figure 3.13). This provides an active connection between the guide and the walk as is seen and experienced by the visitor.⁸⁷ In the case of the Annie Creek trail guide, the majority of the visuals are artistic renderings of animals and scenery, placed without citations of the artist or reference to their specific location. This creates a general disconnect for the visitor between what they are seeing on the page versus their physical surroundings. It would be better to have photographs of the examples of animals, tracks, mossy banks, and dead trees, to name a few, that depict what the visitor can experience along this specific trail. Visual aids are used to help the visitor understand, and the closer they reflect on the resource, the easier that understanding becomes.

⁸⁷ Rather than a physical guide for wildflowers, Mount Rainier National Park provides a digital guide available through the park's website. It first divides the flowers into their region of growth, whether forest or subalpine, and then by color. The visitor can then try to visually match what they see to a given name. To explore this online guide see Mount Rainier National Park, "Wildflowers of Mount Rainier," National Park Service, <http://www.nps.gov/mora/naturescience/wildflowers.htm> (accessed April 24, 2014).

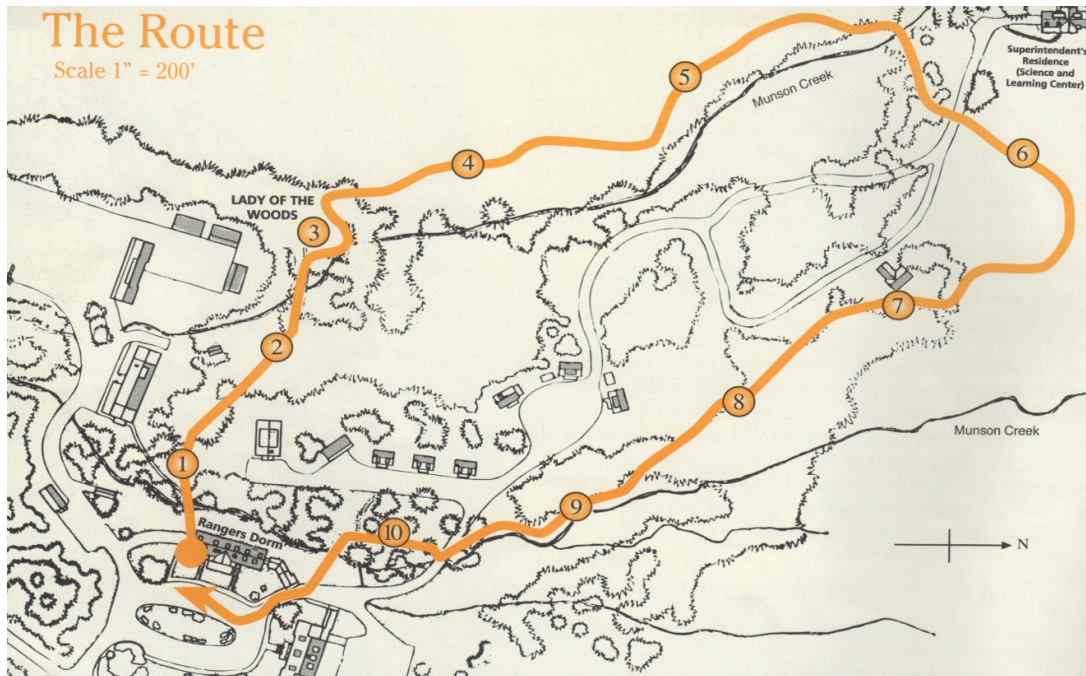


Figure 3.10: Lady of the Woods Loop map showing interpretive stops and landscape features. Map by Crater Lake Natural History Association.

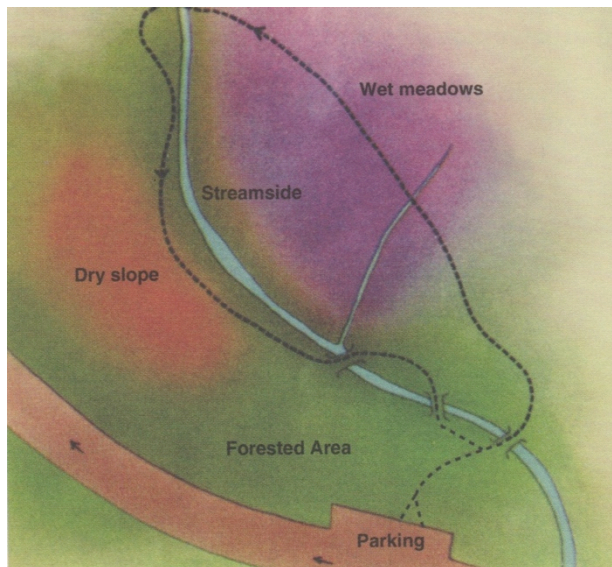


Figure 3.11: Three garden zones along Castle Crest Wildflower Trail. Map by Crater Lake Natural History Association.

When words are employed in nonpersonal interpretations that have a natural grace and beauty to them, they generate an emotional, more personal connection that resonates with the visitors. Words of the past have the ability to set the mood of the interpretation

and allow for contemplation beyond the present moment with universal ideas or common ground between generations.⁸⁸

John Keats' words are used to illustrate the lasting beauty of wildflowers and how specifically the flowers along the Castle Crest trail have been enjoyed since the Boy Scouts built the trail in 1929. This underlines the hope and mission of the park to continue to preserve the environment for generations to come. Natural beauty itself is the universal concept focused on in this brochure, an entry point into the active takeaway: *preserving it.*

Poetry can also add an additional level of thought to the interpretation. Take the 1999 version of the Lady of the Woods trail guide. Each stop includes a piece of poetry. The poetry is not the primary focus of the work, for it appears in the smallest font and in a warm yellow color, but it supports the theme of the booklet building based on nature. Stop #6 includes poetry from *An Essay on Criticism*, dated to 1711: "Nature affords at least a glimm'ring light; The lines, tho' touched but faintly, are drawn right."⁸⁹ It alludes to building with the lines and forms of nature, something the rustic architecture of the park strives toward. It is intellectual and appealing to the inquiring visitor, but the direct correlation is not always as clear or even wanted by the average visitor. Nonetheless, poetics in interpretation lead to opportunities that transcend the physical plane into the intellectual and universal.

⁸⁸ Larry Beck and Ted Cable, *Interpretation for the 21st Century: Fifteen Guiding Principles for Interpreting Nature and Culture*, 2nd ed. (Champaign, IL: Sagamore Publishing, 2002), 123.

⁸⁹ Steve Mark, *Lady of the Woods Loop Trail Guide* (Crater Lake, OR: Crater Lake Natural History Association, 1999).



Figure 3.12: Sole visual in Godfrey Glen trail guide with accompanying text. Diagram by Crater Lake Natural History Association.



Figure 3.13: Flowers along Castle Crest Wildflower Trail match the interpretive booklet. August 2013.

CHAPTER IV

“THROUGH ENJOYMENT, EDUCATION, AND INSPIRATION”:

A VISITOR-CENTERED EXPERIENCE

National parks are public lands that stimulate enjoyment, education, and inspiration for the people of the United States and its international guests. It is not enough to presume the characteristics of these people and to make general assumptions concerning them. The immediate context and culture of a site is even more important; for if the desired product of interpretation is not effective for the *actual* audience, then there is little point in the agency taking the time, money, and effort to create non-meaning-making opportunities.⁹⁰ Printed materials benefit no one if they are not used, and ranger-led programs do not provide beneficial engagement if there is no interest in the subject. It is, therefore, a necessity to first know the audience, their characteristics, their motivations, their expectations, their habits, and other factors concerning them. Many scholars advocate for knowing the visitor, and then enabling an experience to meet their needs and expectations.⁹¹ After all, the visitors are the audience of the Crater Lake National Park (Crater Lake NP) and subsequently the receiver of its interpretive efforts

⁹⁰ Judy Diamond, Jessica J. Luke, and David H. Uttal, *Practical Evaluation Guide: Tool for Museums and Other Informal Education Settings* (Lanham, MD: AltaMira Press, 2009), 8.

⁹¹ Larry Beck and Ted Cable, *Interpretation for the 21st Century: Fifteen Guiding Principles for Interpreting Nature and Culture*, 2nd ed. (Champaign, IL: Sagamore Publishing, 2002); Graham Black, *The Engaging Museum: Developing Museums for Visitor Involvement* (New York, NY: Routledge, 2005); John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited* (Walnut Creek, CA: Left Coast Press, Inc., 2013); Doug Knapp, *Applied Interpretation: Putting Research into Practice* (Fort Collins, CO: National Association for Interpretation, 2007); William J. Lewis, *Interpreting for Park Visitors* (Philadelphia, PA: Eastern Acorn Press, 1981); Kathleen McLean, *Planning for People in Museum Exhibitions* (Washington D.C.: Association of Science-Technology Centers, 2009); Andrew J. Pekarik, “From Knowing to Not Knowing: Moving Beyond ‘Outcomes’,” in *Reinventing the Museum: The Evolving Conversation on the Paradigm Shift*, ed. Gail Anderson (Lanham, MD: AltaMira Press, 2012), 401-411; Andrew Pierssené, *Explaining our world: An approach to the art of Environmental Interpretation* (New York, NY: Routledge, 1999), 56-70.

(Figure 4.1). By being sympathetically aware and conscious of the audience, effective and efficient interpretive programs that cultivate meaning can follow.



Figure 4.1: Crater Lake National Park visitors experiencing an evening program. August 2013.

Visitor Surveys

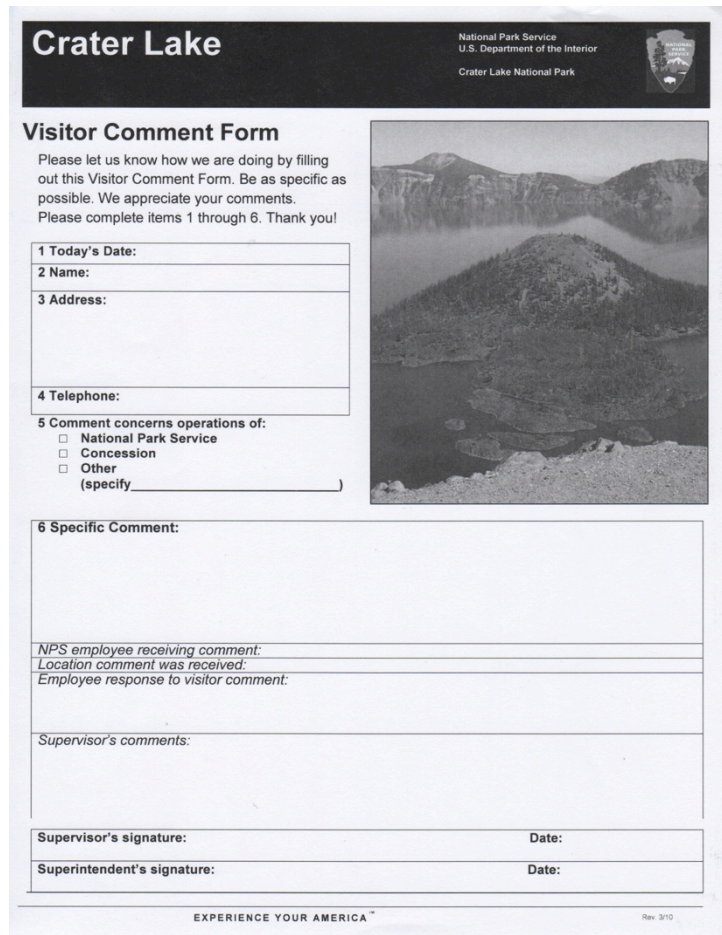
A crucial component in knowing more about the audience and accounting for their experience is the implementation of visitor surveys. Malcolm Tenneson gives an overview of the four general content areas that generally make-up this type of survey.⁹² First, it establishes the ‘*who?*’ ascertaining the visitors’ general demographics including gender, age, education level, *et cetera*. Secondly, the survey gathers information regarding the visitors’ *countries of origin*, states, and zip codes, if applicable. The third component delves into the visitors’ *motivations* as to why they are visiting and what they are expecting from their visit. Lastly, the visitor survey concerns the *delivered*

⁹² Malcolm Tenneson, “Designing and Implementing Visitor Research,” *Association of Independent Museums Focus Papers* (2011), www.museums.org/uk/aim (accessed April 18, 2014).

outcomes—their engagement, use of interpretation, and suggestions for improvement. Each of these components combines to form a visitor survey that can be beneficial in knowing more information about the present audience and planning for them within the site.⁹³

The National Park Service (NPS) gains insight concerning the visitor through three primary means at Crater Lake NP. The first method is available to every visitor year round; it is the Visitor Comment Form found throughout the park (Figure 4.2). Although park rangers inform the visitors of their availability, the visitor must be proactive in obtaining the form and submitting it to the park staff. Hence, the form may address concerns at the extremes of the spectrum of approval or disapproval. Nonetheless, this method serves to give immediate feedback to the park with regard to certain elements, such as maintenance issues or praise of a particular program. Received forms are distributed to the department for immediate consideration, for comment, and, if needed, for remedial action. At present, these forms are not compiled in one location and analyzed together to show trends in visitor comments. Other parks, for instance Denali National Park and Preserve, however, utilize this strategy. Perhaps in the future the comments gathered from the public in this form can first be categorized based on their content, and then placed into an electronic database at Crater Lake NP. This would allow the park to understand long-term trends in the visitor comments. Also, it could enable the park to be proactive in improving visitation, by knowing weaknesses, and addressing them *prior* to the experience of future visitors.

⁹³ Visitor surveys are, however, limited in that they are not fully comprehensive given issues of language barriers, literacy, and a visitor's choice whether to participate in taking them or not.



Crater Lake

National Park Service
U.S. Department of the Interior
Crater Lake National Park

Visitor Comment Form

Please let us know how we are doing by filling out this Visitor Comment Form. Be as specific as possible. We appreciate your comments. Please complete items 1 through 6. Thank you!

1 Today's Date: _____

2 Name: _____

3 Address: _____

4 Telephone: _____

5 Comment concerns operations of:

- National Park Service
- Concession
- Other (specify _____)

6 Specific Comment: _____

NPS employee receiving comment: _____

Location comment was received: _____

Employee response to visitor comment: _____

Supervisor's comments: _____

Supervisor's signature: _____ Date: _____

Superintendent's signature: _____ Date: _____

EXPERIENCE YOUR AMERICA™ Rev. 3/10

Figure 4.2: Visitor Comment Form utilized during the 2013 summer season.

A component of the comment form asks for the name and contact information of the visitor. While some visitors might require a response and would be comfortable filling out that portion, others might be hesitant due to issues of privacy. Regardless of whether they give their personal information, the comments the visitor provides still are taken into consideration.⁹⁴ As a practice, stating that the personal information is optional might allow for more visitors to contribute freely their comments, both complimentary and critical. Anonymous responses are a common survey technique utilized by

⁹⁴ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

professionals in the interpretation and museum fields including the National Association for Interpretation and the Smithsonian Institute.

Annual surveys provide the second means of learning about and from the audience at Crater Lake NP. Each year in August, the park's busiest visitation month, written surveys are conducted during an eight-day stretch of time at three or four locations in the park. This allows for the questionnaires to be collected half during the weekend, half during the week, in both the morning and the afternoon. This distribution of days and times provides a more accurate sample of the summer visitor. All these surveys, that are carried out by the interpretive staff, are then mailed to the Cooperative Park Studies Unit and the park receives the resulting data a month later. It would be beneficial if a survey similar to this in scale were to take place in the winter months as well, for the experience of the summer visitor is vastly different than that of a winter visitor.

A third technique to understand the visitor comes through the utilization of an intensive Visitor Services Project. A project of this magnitude delves not only into the demographics and basic statistics of the audience, but their motivations, interests, learning outcomes, and future requests as well. The most recent park visitor study conducted at Crater Lake was done through the University of Idaho Cooperative Park Studies Unit in August 2001. Over the course of seven days, 600 questionnaires were distributed to visitor groups with an end response rate of 80.7%.⁹⁵ While it is understood that the results are generated from a specific sample of visitors, they provide insight into the general characteristics and habits of the Crater Lake NP visitor. This particular

⁹⁵ Margaret Littlejohn, *Crater Lake National Park Visitor Study: Summer 2001* (Moscow, ID: University of Idaho Cooperative Park Studies Unit, 2002), 5.

approach results in quantitative data that is beneficial to the park management and, for interpretation purposes, it provides an awareness of the audience that otherwise would be unknown.

It has been thirteen years since the last study of this kind was undertaken, and an effort should be made toward conducting another similar survey. The advancements of technology and availability of information have significantly increased in the intervening years and, with it, new audience expectations and motivations. More persons have digital devices at their disposal, including smart phones and tablets; the use of which can be seen especially in the taking of photographs of the natural wonders and of the signage (Figure 4.3).⁹⁶ In addition to these potential changes from the visitor side, many interpretive offerings have been added or altered within the park: new waysides, the implementation of the trolley tour, a new park orientation film, a redesign of the Sinnott Memorial Overlook exhibit, the addition of Plaikni Trail, and ADA accommodations. Too much has changed within the park without the corresponding in-depth visitor feedback that can be accumulated through a Visitor Services Project. As Crater Lake NP serves to provide a current beneficial experience to all of its visiting audience, it needs to strive to update its

⁹⁶ According to Pew Research Center 56% of all Americans in May 2013 owned a smart phone, a 10% increase from February 2012. Aaron Smith, *Smartphone Ownership-2013 Update* (Washington, D.C.: Pew Research Center, 2013), http://www.pewinternet.org/files/oldmedia/Files/Reports/2013/PIP_Smartphone_adoption_2013_PDF.pdf (accessed February 12, 2013). This percentage is projected to increase significantly in the upcoming years. A site should acknowledge this trend and plan to provide appropriate accommodations for it within its interactive interpretive offerings. This can be done in a variety of ways that will highlight the uniqueness of the specific site. An example of this technique is the free downloadable “Storywalks at Eldridge Street” smartphone application for the Eldridge Museum in New York City’s Lower East Side that combines stories of the past with site triggering “hotspots” in the present. It was developed in 2012 by the creative team of designers, software technologists, and audio composers. For more information regarding this application see Anna Pinkas, “Storywalks,” iTunes, <https://itunes.apple.com/us/app/storywalks/id582823341?mt=8> (accessed May 8 2014).

real knowledge of the visitors, including their high use of personal technology, for if it does not, it will not be a visitor-centered experience.⁹⁷



Figure 4.3: Visitor takes a photograph of Crater Lake using a tablet. March 2014.

Making the Most of Time Onsite

Time spent at a national park or in a museum is precious, and the visitor’s utilization of that time is a personal choice that must be understood and accounted for in park management. When visitors enter a national park, they become separated from their everyday life—suspended in a “betwixt-and-between state” as Victor Turner would

⁹⁷ Graham Black, *The Engaging Museum*, 3.

phrase it.⁹⁸ Their normal routine is broken and they experience nature and culture beyond their day-to-day *milieu*. It is their time to explore something new, or delve deeper into something familiar. A site needs first to comprehend this suspended state of a visitor during the time they stay within the site's boundaries, and then the park needs to come to an understanding of the general and specific behavioral trends of the visitors during that time.

Studies have revealed that behavior within a setting differs among those who are visiting for the first time, repeat visitors, and guided tour groups due to their varying previous exposure to the site and their current context. Falk and Dierking have found that inexperienced visitors, those who have never before visited or who have not visited in some time, orient themselves in the environment; look intensely at the content; cruise about the park; and then leave. Orientation for them is a critical step. Experienced visitors do not need the same orientation as the first group, and, thus, look more intently for longer, then leave. Organized groups, whether the individuals are visiting for the first time or not, experience the park in a structured pre-determined manner.⁹⁹ Each grouping type needs to be accommodated within the site in order that they use their time to the highest benefit possible.

The 2001 study of Crater Lake NP found that 93% of park visitors visited for the first time within the last year, and 65% had not visited the park within the last two to five

⁹⁸ Victor Turner in Suzannah Lipscomb, "Historical Authenticity and Interpretative Strategy at Hampton Court Palace," *The Public Historian* 32, no. 3 (Summer 2010): 108, <http://www.jstor.org/stable/10.1525/tph.2010.32.3.98> (accessed May 3, 2013).

⁹⁹ John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited*, 134-141.

years, save for the visit in question.¹⁰⁰ This would place the majority of the park's visitors within the first grouping of behaviors with them more likely to "cruise" through the site, not seeking a depth of information, but rather an overview of the place. This coincides with the finding that 81% of park visitors are within the park for less than a day with the majority of those, 56%, only staying from between two to four hours. 8% spent less than two hours.¹⁰¹ Nonpersonal interpretation, specifically the park newspaper and the waysides, accommodate this limited timeframe by providing a flexible opportunity to engage with park content. Provided within nonpersonal interpretation media are the key points of the park, from information regarding the resources to where the facilities are located. Hardly any time is demanded of the visitor to use or read nonpersonal interpretation, and its utilization is completely the visitor's choice. By having the newspaper, waysides, and the orientation park film, the first-time visitors can get the most out of their potentially time-limited visitation. From an understanding of the brevity of the usual visit to Crater Lake NP comes the need to know what activities the visitor participates in to ensure that interpretation is available to the broad range of visitors.

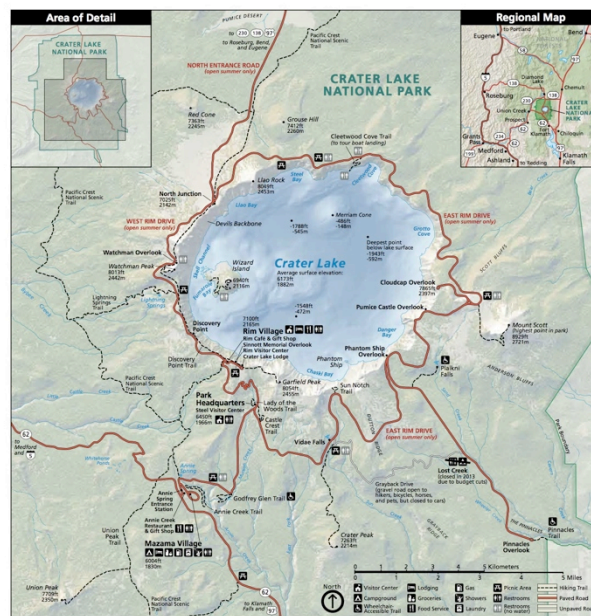
Overall, during their time at Crater Lake NP the majority of visitors utilized their time for sightseeing/scenic driving (94% of all visitors), viewing Crater Lake (71%), photography (63%), and shopping (39%).¹⁰² This breakdown of time-use demonstrates the priorities of the visitor during their leisure activities. The audience wants to see what makes the place unique, and they want to bring that home with them in the form of photographs and souvenirs as a physical reminder of that experience. This means that the

¹⁰⁰ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 11.

¹⁰¹ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 14-15.

¹⁰² Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 22.

visitors are most likely to encounter interpretation, whether personal or nonpersonal, that is available along the primary sightseeing/scenic driving route, Rim Drive. Interpretation offerings along that route should, therefore, be made readily available and at Crater Lake NP they are. The park offers waysides, trolley tours, and “Highlights of Rim Drive” in the park newspaper (Figure 4.4). If a visitor desires more in-depth information, road guides are also available for purchase in both textual and auditory form. This strategy benefits the majority of visitors during their time in the park. However, simply because an interpretive offering is not utilized by the majority of the audience does not mean that it should not be accounted for in the interpretation of the park.



Highlights of the Rim Drive

Rim Drive is a 33-mile (53 km) road that encircles Crater Lake. It is one of America's most scenic byways, with spectacular views in all directions. The loop is typically open from early July to late October. It can be driven, without stopping, in about an hour, but at least 2 to 3 hours are necessary to enjoy the varied sights. The road is narrow, so buses and motorhomes should use caution. There are more than 30 scenic pullouts along the route, many of which have roadside exhibits. Be sure not to miss these 7 "must-see" stops. For more information, pick up the excellent *Road Guide to Crater Lake National Park* (48 pages, \$5.95) at either visitor center.



Discovery Point
Imagine seeing Crater Lake by accident. It was near this spot, on the back of a mule in 1853, that gold prospector John Williamson became the first European-American to stumble across what he called "Deep Blue Lake."

Watchman Overlook
This pullout offers an unobstructed view of Wizard Island, a cinder cone that erupted out of Crater Lake approximately 7,000 years ago. To find this unmarked pullout, drive 3.8 miles (6.1 km) west of Rim Village and look for a viewpoint lined with wooden fences.

Cloudcap Overlook
This overlook sits at the end of a 1-mile (1.6 km) spur road, the highest paved road in Oregon. Watchhuk planes cling to the survival here, dwarfed and contorted by the harsh winds.

Pumice Castle Overlook
Stop here to see one of the park's most colorful features: a layer of orange pumice rock that has been eroded into the shape of a medieval castle. Watch carefully for this unmarked viewpoint, located 1.1 miles

(1.8 km) west of the Cloudcap Overlook junction and 2.4 miles (3.9 km) west of the Phantom Ship Overlook.

Phantom Ship Overlook
Nested against the shore, Crater Lake's "veteran island" escapes detection by many quick visitors. Though it resembles a small sailboat, the island is in fact a 16-story building. It's made of erosion-resistant lava, 400,000 years old—the oldest exposed rock within the caldera.

Pinnacles Overlook
This overlook is well worth the 7-mile (11 km) detour from Rim Drive. Cathedral spires, 100 feet (30 meters) tall, are being eroded from the canyon wall. The Pinnacles are "fossil fatheads" where volcanic gases rose up through a layer of volcanic ash, concentrating the ash into solid rock.

Videe Falls
Look for this cascading waterfall between Phantom Ship Overlook and Park Headquarters. A spring-fed creek tumbles over a granite-carved cliff and drops 100 feet (30 meters) over a series of ledges. In summer, wildflowers flourish in the cascade's spray.



Figure 4.4: “Highlights of Rim Drive” as noted in the *Crater Lake Reflections Visitor Guide Summer/Fall 2013*.

34% of the visitors surveyed went hiking during their stay at Crater Lake NP, and while the distribution of trail usage does not correlate to the current self-guided trail offerings, hiking presents an opportunity for a visitor's connection to the site. Of the visitor groups that went hiking, the five most popular trails were Cleetwood Cove Trail (49% of visitors who hiked), Watchman Peak (25%), Castle Crest Wildflower Trail (20%), Sun Notch Viewpoint (15%), and Garfield Peak (15%).¹⁰³ All of these trails are located along the primary scenic route. Recall that the self-guided brochures at Crater Lake NP are offered only at Castle Crest Wildflower Trail, Annie Creek Trail, Lady of the Woods Loop, and Godfrey Glen Trail. The latter three were not found to be popular trails for the majority of visitors who hiked. Considering that the aim of interpretation is to reach a broad spectrum of visitors, it might better serve for a brochure option to be available at the Garfield Peak or Watchman Peak trails. Both of these trails have a high potential for implementing interpretive techniques due to their clear starting locations, natural talking points along the way, and parking availability.

A trail guide was created in 2003 for Garfield Peak, breaking down the trail into four sections that enable the visitor to experience the path at their leisure and provide for thematic stopping points (Figure 4.5).¹⁰⁴ Although work has been put into the creation of the document, the brochure is not available for the visitors at the start of the Garfield Peak Trail as it is for the other self-guided brochure offerings at their respective trailheads. The time has come that it is offered to the public in some manner, perhaps even in the form of a downloadable application for the mobile devices frequently seen in

¹⁰³ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 22, 26.

¹⁰⁴ F. Owen Hoffman et al., *Crater Lake National Park: Garfield Peak Trail Guide* (Crater Lake, OR: Crater Lake Institute, 2003).

the park. If Crater Lake NP considered the frequency of trail usage in their interpretative planning and adjusted their brochure offerings accordingly, self-guided brochures would provide the opportunity to cultivate meaning for the visitors who hike, on the trails they tend to explore the most.

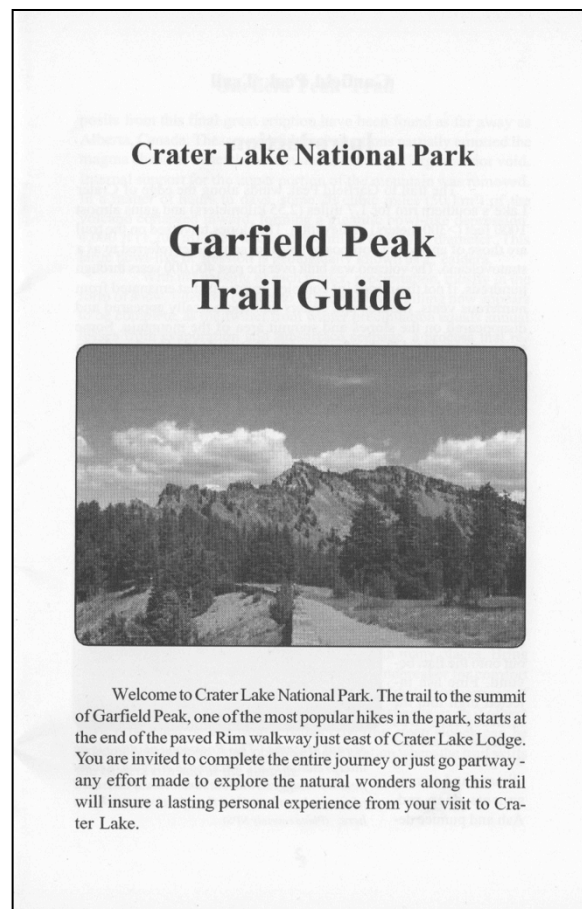


Figure 4.5: Garfield Peak Trail Guide.

While sightseeing and hiking provide opportunities for visitors to use their time in conjunction with nonpersonal interpretation offerings, personal interpretation opportunities are only available through the public's interaction with an interpretive ranger. 65% of visitors interacted with a ranger beyond the entrance gate, with 13% taking a boat tour, and 7% attending a ranger-led activity.¹⁰⁵ Those visitors are the ones

¹⁰⁵ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 22.

who have the opportunity to experience personal interpretation strategies (discussed in Chapter III).¹⁰⁶ It also is quite certain that these individuals tend to spend more time in the park due to the time demand for ranger-led activities being high, especially for the boat tours and trolley tours. Attending the latter two ranger-led activities also requires forethought and planning for tickets and scheduling. Visitors desire to make the most out of their time on site and will plan accordingly. It is also significant to note that what a visitor does *now* is not what they *plan* to do in the future.

Visitors indicated different intentions for their activities in future visits to the national park. While sightseeing/scenic driving still ranked the highest with 63% of the visitors intending to do so if they came back to the park, it was closely followed by hiking (61%) and the boat tour (52%). As for ranger-led activities, 30% of respondents indicated that they might attend them on future visits.¹⁰⁷ If visitors hold true and act on these plans, then the opportunities for personal and nonpersonal interpretation to facilitate meanings for the visitors significantly increases.

Time is a limited commodity to the visitors of Crater Lake NP and interpretation should respect that fact and align itself with the natural tendencies and behaviors of the audience as revealed by visitor surveys. Crater Lake NP is already sensitive to the primary sightseeing route, Rim Drive, and has striven to ensure that multiple interpretive

¹⁰⁶ While these numbers serve as a basis, with regard to interpretation, they are potentially misleading. The visitor in the study questionnaire was told to check all activities that applied to their personal visitor experience. Error could be generated if the participant selected “taking boat tour,” a specific interpretive offering and not “attending a ranger-led activity” for boat tours are led by interpretive rangers. In addition, the interaction with a ranger could constitute multiple things. It could mean that an opportunity arose for the ranger to conduct roving interpretation, or it could simply mean that the visitor inquired after the location of facilities and amenities. In the planning of a future visitor study, it might prove more beneficial to separate and evaluate ranger-led interpretation and other nonpersonal interpretation apart from other activities in the park.

¹⁰⁷ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 23.

offerings are available for this popular avenue. More should be considered with regard to self-guided trail brochures to ensure that those visitors who hike are exposed to interpretation along the trails that see the highest usage. The more exposure the visitors to Crater Lake NP have to the unique resources and interpretive opportunities, the more this specific audience can cultivate their own meanings from the park.

Accommodating Different Ages and Nationalities

An important factor in providing an audience-centered experience is knowing the general characteristics of the individuals that the organization serves. Among these statistics, found through visitor surveys, are the visitor's age and country of origin. When the former aspect is known, the park is able to create specific interpretive experiences for each age group as needed. When the latter is established, modifications can be made for the use of multiple standards of measurement and multiple language translations. With these accommodations, Crater Lake NP's specific audience can be provided for and represented within the interpretive offerings.

Visitors to Crater Lake NP span across multiple age groups, and each group must be accounted for in the park's interpretation. The top five age groups for visitors to Crater Lake NP are: 51-55 (11% of all visitors), 46-50 (11%), 41-45 (10%), 11-15 (11%), and 10 or younger (9%).¹⁰⁸ Interpretation should acknowledge and elucidate the different interests and abilities of these age groups by providing clear distinct interpretive programs.

¹⁰⁸ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 8.

For the children, ages six to twelve, there are a few separate activities provided for them by the park, as Tilden once suggested.¹⁰⁹ First, there is the Junior Ranger Activity Book (Figure 4.6). This is meant to be a family activity in which the adults help and guide the children so that they can earn their Junior Ranger badge (Figure 4.7). The activities appeal to the imagination and sense of adventure of the children; however, there is only one activity book available for children despite the six-year age range. With this age range, comes a corresponding range in cognitive and communicative abilities. If Crater Lake NP were to provide multiple booklets, each focusing on a different age group, as was done at North Cascades National Park in Washington, the children would have activities more closely tailored to their ability level (Figure 4.8). The children would also be able to learn to enjoy new items as they grow older and return for future visits. Beyond the Junior Ranger program, there are also specific rim activities available throughout the day for the children to participate in. The children can create postcards with their own drawn images, and explore the vegetation at the rim, among other activities. Lastly, there are also Rim Talks such as “Volcanoes, Rocks, and...the Grocery Store?” that appeal to this age group (Figure 4.9). Overall, activities for children are well represented in the present interpretive offerings within the park.

Adult visitors are able to partake in a variety of offerings at Crater Lake NP. As Knowles’ theory of *Andragogy* explores, adults have distinct characteristics that should be considered in interpretation. Adults have the tendency to prefer self-directed opportunities; they are goal-oriented, relevancy-oriented, and practical. It is also vital to know that adults bring a vast array of experiences and knowledge with them when they

¹⁰⁹ Freeman Tilden, *Interpreting Our Heritage*, 4th ed. (Chapel Hill, NC: University of North Carolina Press, 2007), 76.

visit a site.¹¹⁰ At Crater Lake NP, the adults will determine what they want to do and enjoy based upon what appeals to their interest. They have the most options to choose from including hiking, attending ranger talks, exploring exhibits, and reading the waysides. All of these options can meet their distinct characteristics.



Figure 4.6: Front cover of the Junior Ranger Activity Book and an example of an activity.



Figure 4.7: Junior Ranger badge (left) and Junior Park Ranger sticker (right) given to a visitor upon completion of the Junior Ranger Activity Book. April 2014.

¹¹⁰ Malcolm S. Knowles, "New Perspectives on Andragogy," in *The Adult Learner: A Neglected Species* (Houston, TX: Gulf Pub. Co., 1984), chap.



Figure 4.8: Junior Ranger activity booklets at North Cascades National Park account for a range of ages and subjects.



Figure 4.9: Children gathered for “Volcanoes, Rocks, and...the Grocery Store?” Rim Talk. August 2013.

It is the teen group, however, that currently has no clear day-to-day program offering at Crater Lake NP, beyond those available to the adults. Larry Beck and Ted Cable, professionals in the interpretation field, express concern that there should be programs geared directly to the teen audience group that accounts for approximately 14% of the overall visitorship to Crater Lake NP. Beck and Cable suggest appealing to more job centered programs and volunteer opportunities as teens consider their future more often than history.¹¹¹ Olympic National Park (OLYM) practices the accommodation of the teenage audience group by providing multiple options for their involvement. These include recreational activities teens might be interested in, course options through the North Olympic Peninsula Skills Center, a climate challenge, and ways to volunteer.¹¹² Crater Lake NP can apply strategies to similar to those at OLYM and encourage the connection of this neglected teenage audience group. In this way, Crater Lake NP can account for the whole spectrum of their audience ages through intentional programming, but a need also exists to incorporate multinational considerations.

Crater Lake as a destination attracts persons from across the United States and from around the world. About 65% of all visitors to the park permanently reside in Oregon, California, and Washington, with 27% visiting from the other states. That means that 8% of the total visiting persons are international tourists with Canada, England, and Japan being the most represented countries.¹¹³ To the American visitor, utilization of the English System of measurements is the norm for understanding and relating physical

¹¹¹ Larry Beck and Ted Cable, *Interpretation for the 21st Century*, 64.

¹¹² Olympic National Park, "Teens," National Park Service, <http://www.nps.gov/olym/forkids/teens.htm> (accessed May 5 2014).

¹¹³ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 6, 12-13.

distances and volumes. The United States is unique in this regard as the majority of the world, including the scientific community, solely utilizes the Metric System. Crater Lake NP not only acknowledges this fact, but in their interpretation the park provides the Metric System measurements alongside the English System (Figure 4.10). By doing so, all visitors will be able to comprehend the true depth of the lake, and other key numbers that make the place extraordinary to experience.

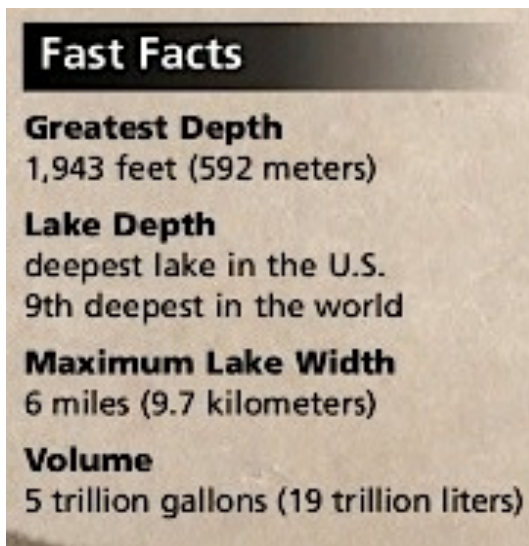


Figure 4.10: Detail of “Measuring the Depths” wayside showing measurements both in the English System and Metric System. Image by Crater Lake National Park.

In addition to the use of multiple systems of measurement, providing park information and interpretation in multiple languages is an excellent way to provide for the multilingual and multinational audience that Crater Lake NP attracts. At present, general park information is available on the park website and at the visitor centers in French, German, and Spanish. Given the known audience, it should be considered to add other language options, such as Japanese, to the current selections. Additionally, Crater Lake NP might ponder the use of multilingual translations of the interpretive elements that can be made available onsite, online, or through downloadable applications. In this

way the park can include this international and multilingual audience in the opportunities for meaningful enrichment.

Encouraging Enjoyment Through Participation

People venture to national parks to experience the natural and cultural wonders that await them. It does not necessarily follow that they will *enjoy* said experience. Beck and Cable point out that while the park can manage and create opportunities for enjoyment in the form of participatory interpretation, it is reliant upon the visitors themselves to generate that enjoyment.¹¹⁴ Park interpreters and interpretive elements, therefore, must become strong *facilitators* for this enjoyment. In the facilitator role, interpretation has the opportunity to expose the audience to the resources of the park in a manner that involves the visitors' participation and interaction, both by themselves and within a social group.

Participation is a strategy that actively involves the visitor, engaging them both physically and mentally with the interpretive and real landscapes. Supporters of this method in the interpretation and education fields are numerous and include Freeman Tilden, Larry Beck, Ted Cable, Kathleen McLean, Howard Garner, Doug Knapp, and Nina Simon. It is thought that through participatory offerings, the audience will be able to place intangible concepts into their physical reality in an enjoyable and memorable way.¹¹⁵ The memorable component is due to the fact that more people remember what they do, rather than what they hear or what they see alone. Crater Lake NP has a few

¹¹⁴ Graham Black, *The Engaging Museum*, 88.

¹¹⁵ Susan Sternberg, "The Art of Participation," in *Museum Education: History, Theory, and Practice* (Reston, VA: National Art Education Association, 1989), 163.

participatory offerings, but it can benefit from the inclusion of more options and opportunities for visitor participation in its nonpersonal interpretation.

Hikes are the most obvious form of participation in the park, where the audience travels along a predetermined path within the environmental setting. If it is ranger-led, the opportunity to interact with the environment is done in a way that will protect the resources at all times, but encourages the visitor to have fun simultaneously. One particular instance of this is during the winter snowshoe hikes. Visitors have the opportunity to body sled (Figure 4.11) and make ‘snow-devils’ (Figure 4.12), all the while learning how winter affects various resources in the park.¹¹⁶ The audience is able to experience the wonder of the pristine winter landscape for themselves, through their physical interaction with the weather conditions. Also, by national parks such as Crater Lake and Mount Rainer hosting snowshoe hikes and encouraging snowplay, visitors have an inducement to visit the protected lands in the less popular winter season.

Rim Talks also have a few participation components for the audience. One example of this is found in the talk “Extreme Weather of Crater Lake.” Every visitor took a multiple-choice quiz, and by doing so recorded their perceptions of the weather in the park. Their answers were then contrasted to the actual realities (Figure 4.13).¹¹⁷ The resulting score served as a basis for friendly competition, an asset according to William Lewis, with the highest score receiving a prize. Other participatory tactics in these talks included visitor interaction with environmental specimens, guessing games, and assistance with props. While participation in the ranger-led interpretation is a well-

¹¹⁶ Park Ranger, Snowshoe Hike, March 8, 2014.

¹¹⁷ Park Ranger, “Extreme Weather of Crater Lake,” August 2, 2013.

utilized strategy at the park, nonpersonal interpretation is somewhat lacking in its facilitation of participation and interaction.



Figure 4.11: Park visitors using their bodies to slide down a snow-covered hill. March 2014.



Figure 4.12: A visitor demonstrates a 'snow-devil' in the ground. March 2014.

Extreme Weather of Crater Lake					7/10
	O = VISITOR GUESS				
	* = CORRECT ANSWER				
X 1.	A. -21°F * 1962	B. -32°F	C. -35°F	D. -41°F	
2.	A. 21 FT. *	B. 32 FT	C. 35FT	D. 41FT	
3.	A. 1898	B. 1924 *	C. 1949 *	D. 2007	
4.	A. 3.97	B. 5.75 * 1931	C. 7.47	D. 57"	
5.	A. 1000FT * IN PREHISTORIC TIMES	B. 50FT *	C. 21FT	D. 27FT	
X 6.	A. SPRING *	B. SUMMER	C. FALL	D. WINTER *	
7.	A. 90°F *	B. 94°F	C. 96°F	D. 100° F	
8.	A. 243" LEAD AMOUNT 1992	B. 522" AVERAGE	C. 879" 1	D. 834" * 1932-33	
9.	A. MAY. 1945 1.32"	B. JUNE 1975 21"	C. JULY 1966 7"	D. AUGUST 1976 5"	E. SEPT. 1986 56" *
X 10.	A. 3 FT. *	B. 17FT	C. 21FT	D. 33 FT	

Figure 4.13: Score sheet for “Extreme Weather of Crater Lake.”

The primary interactive components at Crater Lake NP for nonpersonal interpretation are found in the exhibit spaces: Sinnott Memorial Overlook and “Historic Crater Lake Lodge.” The technologies utilized for these interactives are relatively simple, as the visitors will push buttons or slide a panel to reveal interpretive information. At “Historic Crater Lake Lodge,” the visitor opens a panel and the strains of the song “Crater Lake Waltz” begins to play (Figure 4.14), or a button can be pressed that illuminates the structural changes to the Lodge before and after the 1990s rehabilitation. At the Sinnott Memorial Overlook, one can slide levers to reveal the impact zones of various volcanic eruptions, select different videos exploring the waters of Crater Lake, and push to see volcanic and earthquake activity within the Ring of Fire (Figure 4.15). All of these elements encourage participation, but only when they are operable.

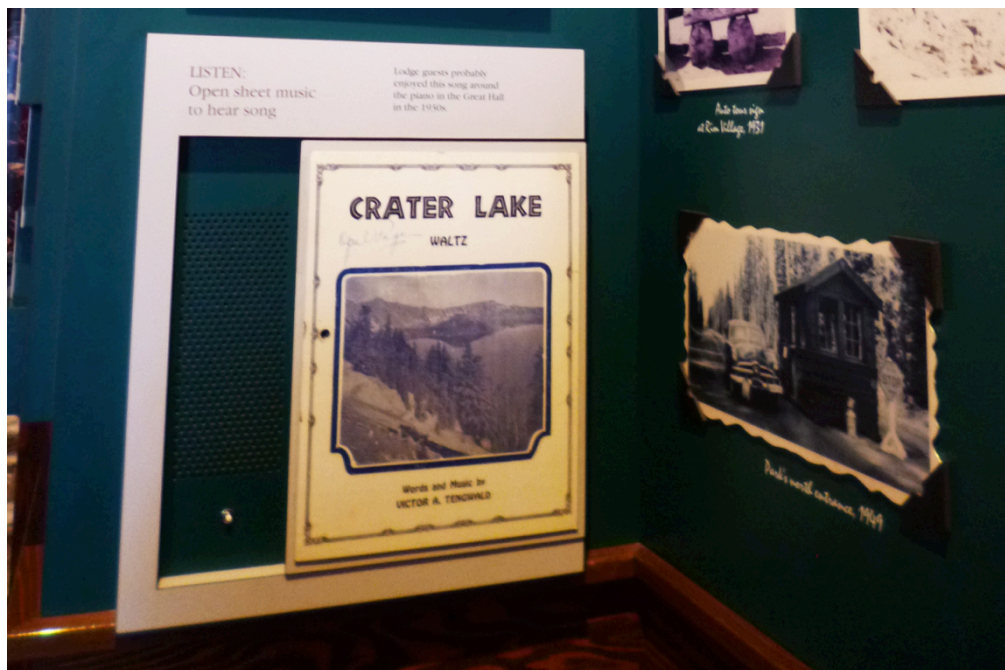


Figure 4.14: Panel that plays “Crater Lake Waltz.” August 2013.

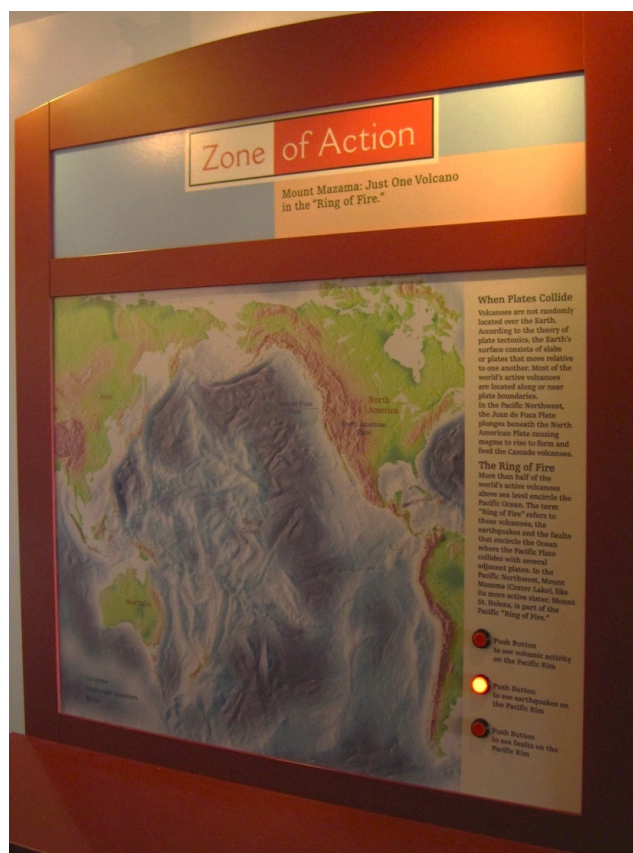


Figure 4.15: Interactive element for the Ring of Fire at Sinnott Memorial Overlook. July 2013.

When these interactive components are “out of order,” an opportunity is lost for physical connection to broader concepts through interaction. Tilden, when writing on such technological elements clearly states that,

No institution should install any mechanical devices until it knows that such gadgets can be adequately, continually, and quickly serviced. No matter how good they may be when they are working properly, they are a source of shame and chagrin, as well as an imposition on the public, when they are allowed to be more than briefly inoperative.¹¹⁸

Crater Lake NP during the summer season in 2013 had a few issues with inoperative interactive elements in the Sinnott Memorial Overlook. The lever used to reveal impact zones was out of order in July (Figure 4.16), but was operational again by August; whereas the Ring of Fire element was nonoperational for the entire summer season. It is presumed that this malfunction occurred when rodents chewed through the fiber optic elements during the exhibit closure in the winter season. Crater Lake NP does not have in-house personnel with the ability to remedy the problem, which means the work has to be outsourced. This takes more time than would be ideal from the visitor perspective.¹¹⁹ It is incumbent upon the park to ensure that such elements are fully functioning to enable the visitor’s active participation.

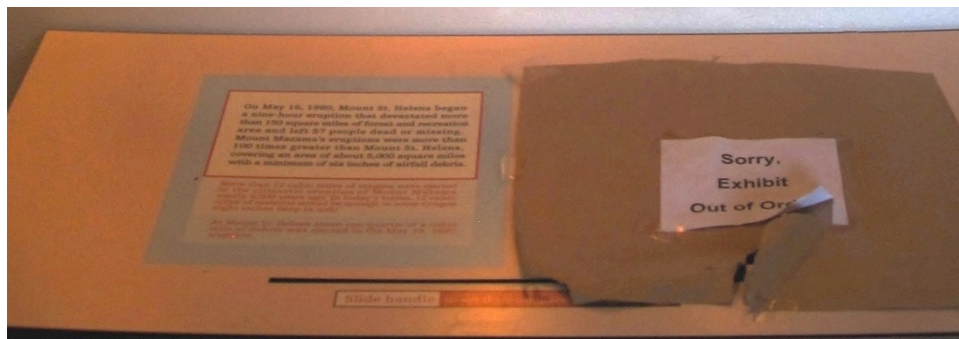


Figure 4.16: Inoperable exhibit element in Sinnott Memorial Overlook. July 2013.

¹¹⁸ Freeman Tilden, *Interpreting Our Heritage*, 134.

¹¹⁹ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

Another form of participation that Crater Lake NP might contemplate implementing is the use of questions. Visiting natural and cultural sites is at its essence a social experience.¹²⁰ In the case of Crater Lake NP only 5% of visitors experience the park by themselves, while the vast majority come in pairs or groups ranging from three to more than eleven persons.¹²¹ This social aspect can be supported through the placement of questions within nonpersonal interpretation. An open-ended question such as, “what do you think happened here?” can prompt a dialogue between the visitors, allowing them to critically think about the resources and enjoyably engage with one another. Through the use of this tactic and other participatory inclusions, more opportunities arise for the visitors to actively engage with the resource and each other.

Enabling Learning

People primarily strive to learn first and foremost for the *joy* of it.¹²² Learning in this way then becomes a means for the visitor to engage with the site in a pleasing and rewarding manner. There exists no formulaic approach that applies to all persons to enable learning, because each individual and situation is distinct.¹²³ The NPS recognizes this and seeks to foster learning within the visitor experience. At Crater Lake NP this is done primarily through the acknowledgement of individual learning styles, an informal learning atmosphere and options for formal learning. Each of these three aspects coincides with the park’s interpretive offerings.

¹²⁰ John H. Falk and Lynn D. Dierking, *The Museum Experience Revisited*, 148.

¹²¹ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 6.

¹²² Graham Black, *The Engaging Museum*, 129.

¹²³ Howard Garner, *The Development and Education of the Mind: The Selected Works of Howard Garner* (New York, NY: Routledge, 2006), 162.

An indispensable aspect, according to Barbara Levy and other scholars, is to understand how people learn *before* interpretation is organized and planned.¹²⁴ The way people learn, their preference, is commonly known as their ‘learning style.’ Each person has a sensory learning preference. It can be visual, auditory/verbal, or kinesthetic/tactile.¹²⁵ When thinking of interpretive offerings, the questions become: What can the visitor see? What can the visitor hear or say? What can the visitor do or touch? If an organization wants to promote education, their programs should be sensitive to all three sensory preferences and address each of the corresponding questions. The participatory aspects, previously discussed, address all of those sensory preferences and so too do other interpretive techniques within the park. What is important to grasp is that these learning styles can be successfully incorporated into the informal learning environment offered within Crater Lake NP.

Informal learning is a self-directed learning method in which the learner has absolute control over the whole process.¹²⁶ As Judy Diamond et al. have concluded, there are four primary outcomes for the visitor in the informal learning environment: 1) Awareness or knowledge; 2) Engagement or interest; 3) Attitude change; 4) Behavior or skills acquired.¹²⁷ Each of these outcomes is an entry point into the creation of meaning and aligns with the desires of the park mission. Of the four outcomes the first is the

¹²⁴ Barbara Abramoff Levy, “Interpretation Planning: Why and How,” in *Interpreting Historic House Museums*, ed. Jessica Foy Donnelly (Walnut Creek: AltaMira Press, 2002) 45-49.

¹²⁵ Marilee Sprenger, *Differentiation Through Learning Styles and Memory* (Thousand Oaks, CA: Corwin Press Inc., 2003), 34-35.

¹²⁶ Richard Banz, “Self-Directed Learning: Implications for Museums,” *The Journal of Museum Education* 33, no. 1 (Spring 2008): 48.

¹²⁷ Judy Diamond, et al., *Practical Evaluation Guide*, 16.

easiest to determine through self-reporting measures in the park and allows the NPS insight into *what* the visitors *are* learning and what they *desire* to learn.

Self-reporting measures occur when a visitor communicates his or her personal evaluation of learning rather than the learning outcomes being tested directly by the agency.¹²⁸ It is a method that is quite beneficial in determining if the key messages or topics are being conveyed to and remembered by the visitor. When visitors to Crater Lake NP were given the open-ended prompt, “in your opinion, what was the most important information that you learned during this visit to Crater Lake NP?” visitors responded as follows (Table 4.1):

Comments	Number of times mentioned
Geological history of lake formation	129
That it is the deepest lake in the U.S.	48
Awareness of unique beauty	28
General information about the area	27
Why it is important to preserve environment	25
Volcanic activity	17
Why lake is so blue	13
History of park establishment	12
Water in lake not from river	8
Purity of park environment	7
History of lodge	7
Information about fish/aquatic life in lake	6
Native American archeology	5
Wildlife	4
Park management cares about visitor opinions	3
Need early reservation for park lodging	3
Need to get to boat tour earlier	3
Visitors should not feed chipmunks/squirrels	2

Table 4.1: Table highlighting learned knowledge of visitors to Crater Lake NP as found in Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 88.

By far the visitors demonstrated that what they ‘learned’ resulted in knowledge and awareness about the park’s resources: the first outcome of informal learning. Through

¹²⁸ Judy Diamond, et al., *Practical Evaluation Guide*, 20.

this knowledge and awareness, a deeper understanding and appreciation on the part of the visitor will develop through time.

Visitors also were asked what they would prefer to learn about the resources of the park in their future visits. The phrasing of this question was more guided in its construction than the previous one for the topical options were provided. Those alone made up the final percentage distribution, although a visitor could indicate multiple interests.¹²⁹ The results were: geology/volcanism (81%), park animals/plants (65%), park ecosystems (52%), wilderness (51%), cultural history (47%), and preserving the park (41%).¹³⁰ This distribution serves as an indication into the *interests* of the visitors, which serve as an influential component in the learning process.

The second reason for learning is to explore an *existing interest*.¹³¹ If a visitor has a specific topical interest already, he or she should be encouraged and guided toward offerings that align with that topic. All of the above topics *are* addressed within the current Crater Lake NP interpretation, but a problem exists in the communication of the various topics, especially for the ranger talks, to the park visitor. The scheduling of the topics are only known to park staff approximately a week in advance due to the timeline for creating the personnel's work schedules. To the park visitor, the topics are only accessible in physical postings within the park. This means that only once the visitor is already *in* the park do they know about the specific topical offerings available that day

¹²⁹ There was not option to fill in their personal preference outside the provided categories, but in a future study an 'other' option with room for a visitor's explanation should be incorporated into the design.

¹³⁰ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 89.

¹³¹ Graham Black, *The Engaging Museum*, 145.

during the summer season. If they have a specific interest in one of the Rim Talks, they have approximately a one in ten chance of experiencing it.

In order to accommodate the visitor to a greater extent, the ranger talk program schedule should be posted on the Crater Lake NP website under the ‘Plan Your Visit → Things To Do → Ranger Programs,’ or at the very least a list of the program titles and descriptions should be posted so that the visitor can reference a particular talk if they call the park for scheduling information. This addition would appeal to those visitors that have a tendency to plan their agenda out in detail rather than spontaneously participating in any program that might be offered.¹³² What is more, this change would allow the visitor more opportunity to tailor their visit to their *individual* learning interests, thereby making meaningful connections, and learning more about the park’s resources.

As for formal learning, where specific outcomes are predetermined, Crater Lake NP offers two education programs that comply with the Oregon Common Core State Standards for education.¹³³ Both of these programs are done through the Science and Learning Center in the park where science and education join together through research for the public benefit.¹³⁴ The first is Classroom at Crater Lake and is geared to primary school students. On a daylong fieldtrip, either in the fall or spring, students visit the park or with a ranger they begin a series of activities investigating the forest, geology, and

¹³² John H. Falk, Theano Missouri, and Douglas Coulson, “The Effect of Visitors’ Agendas on Museum Learning,” *Curator: The Museum Journal* 41, no.2 (June 1998): 107-120.

¹³³ Crater Lake National Park, “For Teachers,” National Park Service, <http://www.nps.gov/crla/forteachers/index.htm> (accessed March 8 2014).

¹³⁴ David J. Parsons, “Supporting Basic Ecological Research in U.S. National Parks: Challenges and Opportunities,” *Ecological Applications* 14, no. 1 (February 2004): 10, <http://www.jstor.org/stable/4493514> (accessed October 28, 2013).

sights to be seen about Crater Lake NP. Each of these activities is accompanied by pre-visit and post-visit lessons that introduce the resources to the children and provide follow-through after the personal experience. Teachers can access curriculum materials including lesson plans, video resources, and samples of student work through the park's website. The second program is Earthcaching, for middle and high school students to explore the park through GPS units. Both programs afford the opportunity for Crater Lake NP to be a place to encourage learning that aligns with state and national learning standards.

Inspiring Passion

Each and every visitor to the park has his or her discovery moment, when they see the lake for the first time or from a new vantage point. From a gentleman's loud exclamation of "now that's what I call blue!" to a person's silent wonder, everyone has a unique reaction to viewing the wonders around them. Nature itself is seen historically as 'sublime', a strong catalyst for these moments of *great* discovery and *awe-inspiring* sentiments.¹³⁵ Crater Lake NP recognizes these reactions to the viewshed as an integral aspect in the visitor's experience and holds to Tilden's fourth principle of interpretation: "The chief aim of interpretation is not instruction but provocation."¹³⁶ The main stimulus for these reactions is the beauty found in nature. This intangible aspect of meaningful experience, along with the passion it inspires, generates powerful memories that will connect the visitor to the quintessence of Crater Lake NP.

¹³⁵ Warwick Frost and C. Michael Hall, *Tourism and National Parks: International Perspectives on Development, Histories and Change* (New York, NY: Routledge, 2009), 81-83.

¹³⁶ Freeman Tilden, *Interpreting Our Heritage*, 59.

The National Park Service thinks of beauty as an intangible quality; yet, it is a universal concept that each individual can relate to in his or her own way. Although each individual's definition and perception of 'beauty' may differ, an interpreter can cultivate its perception through their strategic choice of stopping locations and moments of silence.¹³⁷ All about the park are overlooks placed to capture a view, ones that generates the "ohs and ahs," as Tilden would call them, from the visitors.¹³⁸ With each stop comes a look at new scenery and more topics of conversation; among them are the Pumice Castle, the Pinnacles, and Phantomship (Figure 4.17). Visitors can reflect on what they are seeing with each other or take a moment for personal contemplative reflection. At Crater Lake NP, "awareness of unique beauty" ranked third in the list of what was the most important takeaway from the visitor's experience.¹³⁹



Figure 4.17: Scenic views of Pumice Castle (left), the Pinnacles (center), and Phantomship (right). August 2013.

¹³⁷ Kerry Mitchell, "The Soul of Things: Spirituality and Interpretation in National Parks," *Epoché: The University of California Journal for the Study of Religion* 23, no. 1 (Spring 2005): 53, <http://www.epochs.ucsb.edu/MitchellSpring05.pdf> (accessed October 26, 2013).

¹³⁸ Freeman Tilden, *Interpreting Our Heritage* 119-120.

¹³⁹ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 88.

From all of these reactions comes the maxim, “passion brings out passion.”¹⁴⁰ Interpreters must first discover their own passion for the site *before* they can enable other’s passions to thrive.¹⁴¹ Likewise, in members of a group, a child’s wonder can empower a sibling or parent’s passion. One’s passion is tied directly to his or her emotional state. The power of emotion is this—if one can feel it, he or she will remember it. Emotion is, in fact, the foremost aspect in memory.¹⁴² If the end goal of the NPS is to generate a visitor’s strong connection to the park’s resources, they must inspire an individual’s passion and emotion through their experience of beauty within the park.

¹⁴⁰ Larry Beck and Ted Cable, *Interpretation for the 21st Century*, 158.

¹⁴¹ Carol A. Shively, “Get Inspired Again: Tilden for the Next Century,” *Interpretive Sourcebook* (1999): 151.

¹⁴² Marilee Sprenger, *Differentiation Through Learning Styles and Memory*, 59.

CHAPTER V
GETTING BEYOND OBSTACLES: MOVING TOWARD
PERSONAL CONNECTIONS

Thus far, the majority of the examination into the creation and cultivation of heritage-related meanings has focused upon the components that *enable* them. Only brief discussions of the methodological drawbacks that hinder specific interpretation and visitor engagement approaches have been addressed. The truth is that there are some factors that go beyond an individual approach, and can inhibit the *whole* of the Mission and Meanings Triad Model. They manifest themselves primarily in the forms of visitor disorientation, fatigue, limited evaluation, and inclement weather. Steps can be undertaken to limit these factors' potential negative effects at Crater Lake National Park (Crater Lake NP). Once the common obstacles are addressed to the best of the park's ability, the last step can be taken—the visitor's personal connection to the resource.

Disorientation

When it comes to orientation there are two types that relate to the visitor: conceptual and physical. Graham Black has demonstrated that in order to engage the visitor with the resource, they must be in the “right frame of mind.” This includes a welcoming atmosphere and orientation.¹⁴³ Both types of orientation are, therefore, essential to the experience and subsequent formulation of meanings.

Conceptual orientation comes from the clear communication of the broader themes and information presented to the visitor. If the visitor does not immediately understand the message that is trying to be conveyed, or if he or she cannot do so with a

¹⁴³ Graham Black, *The Engaging Museum: Developing Museums for Visitor Involvement* (New York, NY: Routledge, 2005), 4.

minimal effort, then conceptual orientation is deficient. Recall that the reason that heritage interpretation exists is to tie the audience to the resource through clear communicative techniques. This clear communication comes to fruition in instances where the information is repeated at multiple locations, reinforcing the textual message, and when said information is consistent.¹⁴⁴

At Crater Lake NP, a common form of repetition is the wayside graphic for the geological creation of Crater Lake (Figure 5.1). All through the park, visitors will be able to understand how what they see before them was created. The more that knowledge is reinforced through their multiple exposures to it, the greater the opportunity for comprehensive understanding. On the other hand, if the occasion arises that information is repeated, but the details are different, the resulting inconsistency will thwart the conceptual orientation of some visitors. An example of this inconsistency at Crater Lake NP was when, in the 2013 summer season, rangers used multiple numbers for the world record clarity reading of the lake water in 1997. Numbers given ranged from 142 feet to 144 feet. The actual record was 143 feet.¹⁴⁵ As this number was a record, the discrepancies between the numbers could prove confusing and potentially frustrating to the detail-oriented visitor who is seeking an educational experience. As such, the visitor could lose the broader conceptual orientation that is necessary in the visitor experience.

¹⁴⁴ Louise J. Ravelli, *Museum Texts: Communication Frameworks* (New York, NY: Routledge, 2006), bk.

¹⁴⁵ National Park Service, *Crater Lake: The Waters of Crater Lake*, (Crater Lake, OR: Crater Lake National Park, 2011): 2, [http://www.nps.gov/Crater Lake NP/planyourvisit/upload/2011-Waters-of-Crater-Lake.pdf](http://www.nps.gov/Crater%20Lake%20NP/planyourvisit/upload/2011-Waters-of-Crater-Lake.pdf) (accessed March 31, 2014).

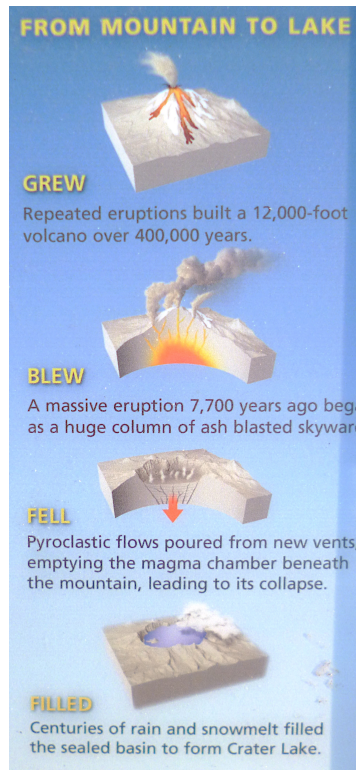


Figure 5.1: Wayside graphic showing the process of Crater Lake’s creation. August 2013.

Perhaps more important from the visitor’s viewpoint is his or her physical orientation, where the individual is in relation to the elements within the site, what those elements consist of, and how to get from one point to the next. This is the sort of information that the visitors to Crater Lake NP found the most lacking in the 2001 Visitor Services Project survey.¹⁴⁶ Remedies since that time have been provided to the audience to limit the effects of physical disorientation, primarily through more detailed information on the National Park Service (NPS) website and in the *Crater Lake Reflections Visitor Guide* that is handed out to each vehicle upon arrival to the park (Figure 5.2). Of the two, however, the latter is more effective as studies have shown that a preference lies in


¹⁴⁶ Margaret Littlejohn, *Crater Lake National Park Visitor Study: Summer 2001* (Moscow, ID: University of Idaho Cooperative Park Studies Unit, 2002), 17.

handheld brochures for physical orientation.¹⁴⁷ The newspaper provides information regarding activities within the park, detailed hiking information, climate charts, a listing of services and facilities, and a map of the park with driving routes and overlook locations (Figure 5.3). With this tool in hand, the risk of physical disorientation that could hinder a meaningful experience is diminished.



Figure 5.2: Crater Lake Reflections Visitor Guide.




¹⁴⁷ Stephen Bitgood, *Social Design in Museums: The Psychology of Visitor Studies: Collected Essays Volume One* (Edinburgh: MuseumsEtc, 2011), 353.



Let's Go Hiking!

Hi, I'm Ranger Emily. We have 90 miles (145 km) of hiking trails here at Crater Lake. Our most popular day hikes are listed on this page. If you are visiting in June or July, be aware that some trails might still be closed by snow. Please help us protect this special place by following a few important rules:

- ⚠ No hiking or climbing inside the caldera! The walls are dangerously steep and unstable. The one exception is the Cleetwood Cove Trail, the only legal access to the lake shore.
- ⚠ Leave all rocks, plants, animals, and artifacts undisturbed for the enjoyment of future hikers.
- ⚠ Overnight backpacking requires a permit, available at Park Headquarters between 9:00 a.m. and 5:00 p.m. Some areas are not open to backcountry camping.
- ⚠ To protect vegetation and prevent erosion, please stay on the trails.
- ⚠ Pets are not allowed on park trails (see page 2).

Trail	The Pinnacles	Godfrey Glen	Plaikni Falls
Castle Crest 0.5 miles (0.8 km) loop trail 100 feet (30 meters) 30 minutes	Lady of the Woods 0.5 miles (0.8 km) loop trail 100 feet (30 meters) 30 minutes	Sun Notch 0.9 miles (1.4 km) loop trail 150 feet (46 meters) 30 minutes	Discovery Point 2.2 miles (3.5 km) 100 feet (30 meters) 1 hour
Flowers, Meadow, Creek Loop trail through a beautiful meadow. Abundant wildflowers in July. The trail is rocky and slippery in places. Self-guiding brochures are available at the trailhead.	Historic Architecture Loop trail around Park Headquarters. Self-guiding brochures, available at the trailhead, describe how early park architects incorporated their designs with the natural landscape.	Views of Phantom Ship Short uphill walk through a meadow to the rim of Crater Lake. Great views of the Phantom Ship. Use caution near cliff edges. Trail improvements are underway. If you see our trail crew, say hello!	Lake Views Trail along the rim of Crater Lake through a sparse forest of whitebark pines and mountain hemlocks. Fine views of the lake and Wizard Island. Use caution near cliff edges.
East Rim Drive, 0.5 miles (0.8 km) east of Park Headquarters. Car also access from the Steel Visitor Center.	Behind the Steel Visitor Center, on the south side of the building.	East Rim Drive, 0.4 miles (0.7 km) east of Park Headquarters.	West end of Rim Village, where the paved walk. See page 3 for information.
The flowers here are nourished by springs emerging from the ridge.	The trail's name refers to a sculpture of a woman carved into a boulder along the trail.	This U-shaped valley was carved by glaciers that once flowed down Mt. Mazama.	Gold prospector John Wesley Hillman first spotted Crater Lake from this point in 1853.
Easy	Easy	Easy	Moderate

Trail	Fumarole Bay	Watchman Peak	Annie Creek
Wizard Summit 2.2 miles (3.5 km) 760 feet (232 meters) 1 1/2 hours	Cleetwood Cove 2.2 miles (3.5 km) 700 feet (213 meters) 1 1/2 hours	Garfield Peak 3.4 miles (5.5 km) 1,010 feet (308 meters) 2 to 3 hours	Mount Scott 5 miles (8.1 km) 1,200 feet (366 meters) 3 hours
Views, Summit Crater Rocky climb to the top of Wizard Island. Spectacular lake views, including geology. A path leads around the 360-foot-deep (27-meter) crater at the summit.	Swim, Fish, Boat Tours The only legal access to the shore of Crater Lake. Strenuous trail with a steep grade. The trail descends to the 360-foot-deep (27-meter) crater at the summit.	Panoramic Views Rocky climb to a high peak. Spectacular views along the way and at the top. Diverse plant life, many wildflowers. No section may be closed until mid-July due to snow. Use caution near cliff edges.	Panoramic Views Gradual ascent of the park's highest peak. Great views in all directions. Best in morning, when the light is best for lake viewing. May be closed until mid-July due to snow.
Wizard Island dock, accessible only via a boat tour from Cleetwood Cove. See page 3 for information.	North side of the lake, 11 miles (17.6 km) from Rim Village. 11 stairs clockwise on Rim Drive.	East end of Rim Village. Walk behind Crater Lake Lodge along the paved promenade on Rim Drive.	East Rim Drive, 14 miles (22.5 km) east of Park Headquarters.
The dead trees at the summit have been killed by dwarf mistletoe, a parasitic plant.	Below 200 feet (61 meters), the water in Crater Lake stays 381° (2°C) year-round.	Rocky slopes along the trail are home to American pikas and yellow-bellied marmots.	Mt. Scott is the park's highest peak—9,329 feet (2,721 meters) in elevation.
Strenuous	Strenuous	Strenuous	Strenuous

Figure 5.3: Excerpt from the park newspaper at Crater Lake NP showing hiking details.

Another strategy to orient the visitors is to inform them of what they can see, do, and learn within the park, *before* they arrive. Yosemite National Park has a series of videos on its park website to help guide the visitor and to provide for more in-depth exploration. The videos span a range of topics and places including overall orientation,

hiking options, camping, plant types, night sky, saving frogs, and employment.¹⁴⁸ As a set, they seek to address both conceptual and physical orientation, helping the visitor preemptively.

Fatigue

Fatigue is a condition when attentiveness and general interest of a visitor decreases over a period of time through the extended viewing of the resource and corresponding physical activity. If nothing new is presented for consideration, if nothing sparks interest, or if the individual is too physically tired, their attention and connection to the resource begins to fade. To help minimize this “fatigue” factor Bitgood has six suggestions that the organization can implement in their interpretive design:¹⁴⁹

- 1) Provide attention-focusing aids.
- 2) Design a viewing experience to minimize physical and mental exertion by pacing visitor viewing.
- 3) Provide effective and easy wayfinding.
- 4) Minimize the mental processing workload.
- 5) Maintain high interest with provocative design.
- 6) Encourage visitors to take breaks.

These suggestions align with the formula produced by Wilbur Schramm, in which he indicates that the probability of attention is equal to the potential benefit or reward over the effort and amount of work required.¹⁵⁰ Essentially, it is imperative that an organization seeks to minimize effort, whether mental or physical, and increase the resulting benefit. If effort is required, then ample opportunity must be provided for rest and recuperation.

¹⁴⁸ Yosemite National Park, “Multimedia Presentations,” National Park Service.
<http://www.nps.gov/yose/photosmultimedia/multimedia.htm> (accessed May 9, 2014).

¹⁴⁹ Stephen Bitgood, *Social Design in Museums*, 263-64.

¹⁵⁰ Wilbur Schramm in Sam H. Ham, *Environmental Interpretation: A Practical Guide for people with Big Ideas and Small Budgets* (Golden, CO: North American Press, 1992), 19.

The balanced relationship among the components of physical effort expended, reward, and rest is best encapsulated at Crater Lake NP in the Cleetwood Cove Trail. This trail is the *only* legal access point down to the water of Crater Lake. The hike is classified as “strenuous” for the elevation changes by 724 feet along a 1.1-mile route (Figure 5.4). If a visitor wants to touch the pristine water (Figure 5.5) or participate in the boat tour (Figure 5.6), he or she must make this journey down the trail and then face the more difficult task of going back up it. Hiking up this trail is the equivalent of walking up sixty-five flights of stairs and the physical exertion is high. To account for this, the visitor is first made aware at the start of the trail concerning the risks involved and how to combat them with water, rest, and sturdy shoes (Figure 5.7). It is also suggested that the visitor already be in good physical condition for this hike. On the way from the lake to the rim, copious amounts of resting areas with benches are provided for the visitors. If one takes the opportunity to rest along the way, he or she will find the reward of interacting with the lake water and seeing the caldera walls from below far outweighs the physical effort needed to hike the trail. With this result, the inhibitor of fatigue is minimalized.



Figure 5.4: Cleetwood Cove as a strenuous hike from lakeshore to caldera rim.



Figure 5.5: Visitor experience of touching the water of Crater Lake. July 2013.



Figure 5.6: Visitors participate in ranger-led boat tour of Crater Lake. July 2013.



Figure 5.7: Signs at Cleetwood Cove trailhead preparing visitors for hike.

Limited Evaluation

It is one skill to know the theories of communication, interpretation, and audience accommodation, but it is another to put them into practice. If the time is not taken to *evaluate* the programmatic offerings, then the effectiveness of the interpretive practice cannot be ascertained. Evaluation should be an ongoing, consistent process, and revision a constant companion to improve the visitor’s experience and learning outcomes.¹⁵¹

Evaluation should be done both for personal interpretation and nonpersonal interpretation to ensure a high quality of service for the visitor to experience and to maximize learning.

When it comes to personal interpretation, Crater Lake NP has a strong “coaching” program, but the agency should consider more encouragement of self-evaluation amongst the staff. Over the course of the season, established interpreters “coach” newer seasonal interpreters by shadowing a program, and then providing comments and suggestions both

¹⁵¹ American Association of Museums, *Excellence and Equity: Education and the Public Dimension of Museums* (Washington, D.C.: American Association of Museums, 1992), 17.

in oral and written form. Coaching is an attribute; it uses provisional language; and it is specific in its feedback.¹⁵² The premise of coaching is that all programs, no matter how exceptional, can always be improved for the betterment of a visitor's understanding and enjoyment. This evaluation method involves analysis from an outside source, but equally necessary is evaluation conducted by the interpreters themselves.

Self-evaluation is not a required process at Crater Lake NP, but much can be gained through its use. Both William Lewis and David Larsen are advocates for individuals knowing their own strengths and weakness through personal assessment. What is more, the individual should know the source of his or her passion and bring it into their programs.¹⁵³ Self-evaluation can be conducted in a couple of ways, such as answering written questions, rating performance attributes, or even watching a recording of one's own presented program. When this evaluation is done, however, the results are of a personal nature—one that is more memorable than being told the findings from a third party. Each interpreter should invest his or her time into personal reflection and self-evaluation. By doing so, the effectiveness of the interpretive program will likely improve.

As for the evaluation of nonpersonal interpretation, consistent formal evaluations are uncommon at Crater Lake NP, but evaluations are conducted under certain circumstances. There are four types of evaluation: front-end, formative, summative, and remedial.¹⁵⁴ Each contributes an influential analysis and in the ideal world each type is

¹⁵² Marsha McCabe, e-mail message to author, "Basic Principles of Coaching," July 25, 2013.

¹⁵³ David L. Larsen, ed., *Meaningful Interpretation: How to Connect Hearts and Minds to Places, Objects, and Other Resources*, 2nd ed. (Washington, PA: Eastern National, 2011), bk; William J. Lewis, *Interpreting for Park Visitors* (Philadelphia, PA: Eastern Acorn Press, 1981), bk.

¹⁵⁴ Judy Diamond, Jessica J. Luke, and David H. Uttal, *Practical Evaluation Guide: Tool for Museums and Other Informal Educational Settings*, 2nd ed. (Plymouth, United Kingdom: AltaMira Press, 2009), 3-4.

conducted for every exhibited element. Crater Lake NP utilizes each form of evaluation, but not always in conjunction with one another.

Front-end evaluation is done prior to the planning of programmatic events. When Crater Lake NP initially considered a shuttle bus that would transport visitors about Rim Drive, they first polled the current visitors to see if there was interest and whether or not they would be willing to pay for such a service.¹⁵⁵ 46% indicated that they would take the shuttle for a fee if the ride included a park interpreter.¹⁵⁶ This front-end evaluation led to the trolley tour, offered in the park since 2008.

Formative evaluation is done during the creation process, and of the four types it is the least utilized at Crater Lake NP. When creating more permanent elements such as the waysides and park film, a design charrette is created to brainstorm ideas and to improve the conceptual and physical framework throughout the process. The members of these charrettes are primary park staff, persons from the Harper Ferry Center, and outside contractors. Due to logistics and budgetary constraints, focus groups with the public and in-depth user analysis are not currently being done.¹⁵⁷ Park staff does recognize this deficiency and hope in the future to utilize student fellows at the Science and Learning Center to conduct such formative evaluations.¹⁵⁸

Summative evaluation is conducted after the interpretive element is complete, and is open to the public. It focuses on visitor outcomes. The manner in which summative evaluation is conducted at Crater Lake NP is through the Visitor Services Project, as

¹⁵⁵ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 90-91.

¹⁵⁶ Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 90.

¹⁵⁷ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

¹⁵⁸ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

discussed in Chapter IV. Those surveys account for the service oriented components, as Eva Reussner suggests, and for the visitors' learning outcomes, as advised by Stephen E. Weil.¹⁵⁹ There is no thorough summative evaluation at present for the individual interpretive elements within the park.

As for *remedial evaluation*, it is done after the interpretive content is made public, but quickly seeks to address an issue that has arisen. The interactive panel that plays the song "Crater Lake Waltz" in the Lodge exhibit represents remedial evaluation at work. It used to be that when the panel was open, the music would continue to play until the panel was closed. People would leave it open all the time, even when no one was present in the exhibit. Its constant play was a technical concern, and an irritation to the front desk staff that could hear it from their post. The panel was adjusted so that it no longer played in a continuous loop, fixing the original problem.¹⁶⁰

Evaluation is, therefore, a tool that can be utilized to ensure the effectiveness of the interpretive elements in meeting the goals of the park and the needs of the visitors. It is understood that limitations, such as personnel, agency procedures, and monetary resources prohibit the implementation of thorough evaluations and assessments every year. However, the agency should understand the value of these assessments and make it a priority to conduct investigations and reflections at regularly spaced increments of time.

¹⁵⁹ Eva M. Reussner, "Strategic Management for Visitor-oriented Museums: A Change of Focus," in *Museum Management and Marketing*, ed. Richard Sandell and Robert R. Janes (New York, NY: Routledge, 2007), 157.

Stephen E. Weil, "From Being *about* Something to Being *for* Somebody: The ongoing transformation of the American Museum," in *Museum Management and Marketing*, ed. Richard Sandell and Robert R. Janes (New York, NY: Routledge, 2007), 39.

¹⁶⁰ Marsha McCabe, interview by author, Crater Lake, OR, March 7, 2014.

Inclement Weather

Inclement weather is a factor that is beyond the NPS's control and has the ability to affect the interpretive programs and visitor experience in a negative manner. Weather affects both the visitor's physical and personal contexts. It delves into the physical through temperature changes, air quality, and visibility. Many experts in interpretation and education refer to Maslow's Hierarchy of Needs in instances such as this, for the physical comfort and the safety of an individual must be met before higher needs, such as the formation of meaning, can be obtained.¹⁶¹

As for the personal context, changes in weather may hinder a visitor's enjoyment of his or her visit from being fulfilled. When weather is such that it impedes the visibility of park resources, visitors to Crater Lake NP miss their primary reason for entering the park: to see Crater Lake.¹⁶² This can occur in both the winter and summer seasons (Figure 5.8).

While weather patterns can be unpredictable, the staff at Crater Lake NP have striven to ensure that the public is informed with the most up-to-date information regarding weather conditions. Available through the Crater Lake NP website is an assortment of the "current conditions" within the park, including the weather and lake visibility.¹⁶³ The weather links to the National Weather Service forecast page and to the park's own weather report. Together, they provide an in-depth look at the past, present, and predicted weather situations in the park. Perhaps more important from the

¹⁶¹ A.H. Maslow, "A Theory of Human Motivation," *Psychological Review*, 50 (1943): 370-396, <http://psychclassics.yorku.ca/Maslow/motivation.htm> (accessed April 1, 2014).

¹⁶² Margaret Littlejohn, *Crater Lake National Park Visitor Study*, 19.

¹⁶³ Crater Lake National Park, "Current Conditions," National Park Service, <http://www.nps.gov/crla/planyourvisit/current-conditions.htm> (accessed April 1, 2014).

perspective of the visitor is knowing if the lake can be seen before making the journey to the park. A webcam is located within Sinnott Memorial Overlook that provides an updated feed on the view of the lake throughout the day (Figure 5.9). Even with all these provisions, both forecasts and webcams, nothing regarding the weather or the visibility of the lake is guaranteed. Thus, the weather can become an inhibitor to visitor's connection to the resource.



Figure 5.8: Crater Lake obscured by clouds in summer. August 2013.



Figure 5.9: View of Crater Lake from Sinnott Memorial webcam on April 26, 2014 at 08:16.

The Final Factor

A park strives to do all in its power to enable opportunities for the visitors to connect with the resource, all the while limiting factors that might prove to be a hindrance. The park cannot, however, force the visitors to connect with the resources within the site. The last component in the Mission and Meanings Triad Model (MMTM), *cultivation of meanings*, is reliant upon the visitors themselves. They must make that final step toward a meaningful connection with the resource. It can be a subconscious or conscious connection, but it is the visitor's alone to make.

The dependence on the visitor is the reason it is the cultivation of *meanings*, emphasized in plural. There is no singular outcome or lasting “takeaway” from a visit to the park. Rather, each person leaves the boundaries of Crater Lake NP with a slightly or drastically different impression and varying degrees of personal connection. The result is

dependent upon his or her experience and contexts. A visitor can connect with the beauty of the pristine wilderness, the longstanding traditions of the American Indians, the blending of the built environment within nature, and/or the people with whom he or she interacts with onsite. A visitor can seek to know more knowledge or be content with the memories of a singular experience. Crater Lake NP and other national parks can provide the opportunity for the connection, and encourage it through strategies and knowledge that are within their means. Ultimately, the personal meaning, the takeaway, is within the purview of the visitor.

CHAPTER VII

SUMMARY AND CONCLUSIONS

Summary

Within the realm of natural and cultural heritage interpretation, the central aim of the National Park Service (NPS) is to connect the visitors on a personal level to the national parks and the resources therein. This is done to ensure the fulfillment of the agency mission through the long-lasting survival and enjoyment of the resources' diverse heritages. This thesis offers a framework for understanding the cultivation of meanings in the national parks by way of the Mission and Meanings Triad Model (MMTM). In this three-dimensional exchange model, a meaningful mission-driven connection is reliant upon the creation of a visitor-centered experience, appropriate techniques of interpretation, and the presentation of a holistic perspective of a site's resources.

Each national park consists of, and portrays, its own unique natural and cultural attributes. As David Parsons clearly states, for the preservation of a site, an essential component is to know the intricacies of the site's resources.¹⁶⁴ The resources acknowledged by the NPS must be holistic and comprised of the cultural components in addition to the natural landscape. Cultural heritage is a complex entity constructed of the contributions of many people spanning social classes, genders, and cultures through time. Scholars such as Eric Gable, Richard Handler, Teri Brewer, Regina Bendix, and David Lowenthal, to name a few, strongly encourage the representation of all cultures that contribute to the uniqueness of a site. Further, Diane Barthel points out that "cultural groups have a right to define their own cultural values and the means by which these

¹⁶⁴ David J. Parsons, "Supporting Basic Ecological Research in U.S. National Parks: Challenges and Opportunities," *Ecological Applications* 14, no. 1 (February 2004): 12, <http://www.jstor.org/stable/4493514> (accessed October 28, 2013).

values will be preserved and interpreted.”¹⁶⁵ Culture needs to be understood as a contributor to every heritage site. Barthel asserts that the presentation of cultural content should be done through a sensitive collaboration with the cultures being represented. When all resources are understood in their holistic perspective, they are then presented to the site’s audience through interpretation.

In this study, a concerted effort has been made to access diverse cultural meanings through interpretive programs. Interpretation is effective communication that utilizes appropriate techniques to engage the visitors with the site’s resources. Whether interpretation is personal or nonpersonal, the interpretative approach should be, as Sam Ham suggests, organized and thematic.¹⁶⁶ *Organized* entails a clear hierarchy of accurate information, that as Stephen Bitgood suggests, is clear and concise.¹⁶⁷ The *thematic* aspect encapsulates the overarching messages of the national park. The themes are the foundational long-term takeaways that not only aid in the understanding on the part of the visitor, but also can affect the actions of his or her day-to-day life. These techniques of organization and themes coincide with the cognitive abilities of the human brain as outlined by scholars including Perry Thorndyke and George Miller.¹⁶⁸ By communicating in these ways, a connection to the site’s resources is cultivated. Interpretation, however,

¹⁶⁵ Diane L. Barthel, *Historic Preservation: Collective Memory and Historical Identity* (New Brunswick, NJ: Rutgers University Press, 1996), 26.

¹⁶⁶ Sam H. Ham, *Environmental Interpretation: A Practical Guide for people with Big Ideas and Small Budgets* (Golden, CO: North American Press, 1992), 411.

¹⁶⁷ Stephen Bitgood, *Social Design in Museums: The Psychology of Visitor Studies: Collected Essays Volume One* (Edinburgh: MuseumsEtc, 2011), 183.

¹⁶⁸ Perry W. Thorndyke, “Cognitive Structures in Comprehension and Memory of Narrative Discourse,” *Cognitive Psychology* 9, no. 1 (1977): 77-110; George A. Miller, “The Magical Number Seven, Plus or Minus Two: Some Limits On Our Capacity for Processing Information,” *Psychological Review* 63, no. 2 (1956): 81-97.

goes beyond implementing logistical techniques to knowing and accounting for the visitors in the experience of the site.

As demonstrated in this study, an experience in a national park should be visitor-centered with regard to the interpretive programming. In order for this to hold true, the NPS must first know the characteristics of their specific audience. This can be done through annual surveys or an in-depth Visitor Services Project. What is *vital* is that the park has up-to-date knowledge of its visitors and how they interact with the *current* interpretive offerings. As this has become a standard practice in the interpretive field, it must be incorporated more strongly into the practice of national parks. This audience knowledge serves as the basis for which a park can plan for and encourage enjoyment, education, and inspiration. An example offered in this study is in the park's programming for different age groups. Children with their distinct developmental abilities should have, as Freeman Tilden suggests, distinct programs. The same holds true for the teenage visitor group, for which Ted Beck and Larry Cable encourage programs centered on jobs and activism. Interpretive programming for youth groups and other age groups, it was found, required knowing the audience and their experience of the site: who they are; why they visited, what they do onsite; where their interests lie; and what the outcomes of their experiences are. It is only through the knowledge of the visiting audience that personal meanings can be cultivated by the actions of the NPS.

All components within the MMTM interact with one another and influence the outcome of a visitor's meaningful connection to the park. In this era of cultural resource management, it is a *necessity* that they be considered not only as separate entities, but also in conjunction with one another. In reality, the elements of the triad never stand-

alone, but affect the formulation of a visitor's individual connections to a national park *together*. Moreover, emphasis must be placed on the meaningful connection itself rather than merely creating an "opportunity" for that connection to occur. This will require a change of mindset within the NPS. Therefore, it is encouraged that the MMTM be utilized to understand and evaluate the creation of personal meanings at other national parks as was done in this thesis for Crater Lake National Park (Crater Lake NP), where other western national parks, such as North Cascades and Yosemite, were used as reference points.

Further, the application of the MMTM as a framework for analysis not only results a deep understanding of the interplay between the factors that contribute to the cultivation of meanings, it produces recommendations that are informed by the individual site's current needs. The analysis of Crater Lake NP has led to suggestions that when implemented would improve elements across the entire spectrum of the MMTM. These recommendations were grouped into four overarching categories: themes, personal interpretation, nonpersonal interpretation, and visitor surveys.

The *themes* group concerns the rewording of the primary parkwide themes, the use of theme titles, and the need to orient the visitor conceptually. *Personal interpretation* suggestions encompass items that include addressing the cognitive abilities of the visitors, creating teen-specific programs, and encouraging self-evaluation for personnel. For *nonpersonal interpretation*, accommodating different ages, languages, and technological options in printed and downloaded materials were proposed. Under the *visitor survey* category, suggestions were geared toward the need to gather in-depth knowledge of the summer visitors through a Visitor Services Project and the winter

visitors through a bi-annual survey. A summary of these recommendations can be found in Appendix B.

Moving Forward

With the start of the twenty-first century, came a period of time for reflection on the past and a renewed hope for what the future might bring in cultural resource management. Scholars and practitioners within the NPS joined in an effort to define what the profession of cultural resources *should* entail in this new century. One particular gathering of minds was at the conference entitled “CR 2000: Managing for the Future.” Two outcomes were determined with regard to the spectrum of the professional contributions: acknowledgement of the “dynamic nature” of the field, and the need for updates in the professional approaches as the nation continues to evolve through time.¹⁶⁹

Cultural resource management is not limited to one specific *niche*. Rather, it encompasses multiple focal areas including stewardship, preservation, education, ethnography, archaeology, cultural sensitivity, history, and agriculture, to name a few. The most relevant to this thesis is the recognized inclusion of interpretation within the broader cultural resource management field. Interpretation, as an agency-guided initiative, provides the opportunity for a site’s resources to connect with the current generation. The NPS sees the usefulness of this method in fulfilling their mission for interpretation promotes personal stewardship of a resource within each visitor that will, in turn, help protect the natural heritage of the public lands through the visitor’s future actions.

¹⁶⁹ Antoinette J. Lee, “Managing for the Future,” *CRM: Cultural Resources in the 21st Century* 24, no. 7 (2001): 3.

This level of stewardship, however, only comes through a personal meaningful connection with the resource on an individual level—one that must be encouraged further through accurate knowledge of the resource, an appropriate interpretive approach, and accounting for the visitor experience. The full extent of what techniques are deemed “appropriate” varies from context to context, and from scholar to scholar. Nonetheless, emphasis should be on the current visitors in a site’s interpretive approach. This entails knowing more up-to-date facts about the specific audience of a site, how to communicate the intangible concepts of a national park to them, and, in this digital age, recognizing and accommodating the visitors’ personal technologies. As Dirk Spennemann asserts, if the resource is not connected to the present generation, then it will not be preserved into the future. We preserve and communicate the heritage found within national parks for *ourselves* first. Therefore, all interpretation must be relevant to the *current* audience.¹⁷⁰

It is now the second decade of the twenty-first century. Historic preservation and, consequently, cultural resource management have been at times for patriotic, economic, and social activist reasons.¹⁷¹ The moment has come to move toward putting the current and future audience first and foremost in the planning and implementation of interpretation at a heritage sites and within the field at large. The approaches and suggestions made by professionals and those included herein should be considered for ways in which this can be accomplished. The public needs to be engaged with the nation’s natural and cultural resources to provide for the landscapes’ protection, and to enrich their personal lives through education and inspiration. As a professional in this era

¹⁷⁰ Dirk H.R. Spennemann, “Beyond ‘Preserving the Past for the Future’: Contemporary Relevance and Historic Preservation,” *CRM: The Journal of Heritage Stewardship* 8, no.1&2 (Winter/Summer 2011): 7-22.

¹⁷¹ Diane L. Barthel, *Historic Preservation: Collective Memory and Historical Identity*, 19-20.

of cultural resource management, one must know the *holistic* perspective of the resources within a site that provides it with a unique sense of place; strive to provide *opportunities* that take into account the needs and characteristics of the diverse audience; update the knowledge of the visitor *continually*; and provide for the enjoyment, education, and inspiration of the visitors. If this is done well the national parks will enhance the greater society and be more meaningful—to this and future generations.

APPENDIX A

INTERPRETATION INVENTORY FIELD FORMS

All interpretation inventory sheets are 8.5 x 11 inches in landscape format. They have been scaled down here for presentation purposes.

Interpretation Inventory: Stationary Programs			
Location:	Element:	Index #:	Date:
Photos:		Start Time:	End Time:
Guide:	Interpretation Presented:		
Methods:			
Personal Context: <i>(Consider- prior visits, agenda, past knowledge, general frame of mind, etc)</i>	Social Context: <i>(Consider- if alone, in group, # of visitors, # reads, interaction, age groups, etc)</i>	Physical Context: <i>(Consider-description of location, weather, atmosphere, noise, sights, amenities, orientation, pacing, intensity level, etc)</i>	

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Interpretation Inventory: Tours

Location:	Element:	Index #:	Date:
Photos:		Start Time:	End Time:
Guide:		Interpretation Presented:	
# of Stops:			
Methods:			
Personal Context: <i>(Consider- prior visits, agenda, past knowledge, general frame of mind, etc)</i>	Social Context: <i>(Consider- if alone, in group, # of visitors, # reads, interaction, age groups, etc)</i>	Physical Context: <i>(Consider- description of location, weather, atmosphere, noise, sights, amenities, orientation, pacing, intensity level, etc)</i>	

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Interpretation Inventory: Waysides

Location:	Element:	Index #:	Date:
Photos:		Start Time:	End Time:
Sign Face: <i>H:</i> <i>W:</i> <i>D:</i>		Interpretation Presented:	
Stand: <i>H:</i> <i>W:</i> <i>D:</i>			
Materials:			
Personal Context: <i>(Consider- prior visits, agenda, past knowledge, general frame of mind, etc)</i>	Social Context: <i>(Consider- if alone, in group, # of visitors, # reads, interaction, age groups, etc)</i>	Physical Context: <i>(Consider- description of location, weather, atmosphere, noise, sights, amenities, orientation, etc)</i>	

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Interpretation Inventory: Continuation Sheet

Location:	Element:	Index #:	Date:
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APPENDIX B

SUMMARY OF RECOMMENDATIONS FOR CRATER LAKE NATIONAL PARK

Themes:

- Rework the existing primary park themes to include a “takeaway” for the visitor.
 - For instance, Theme 3 can be reworded as: “The beauty of Crater Lake National Park relies on a fragile balance in its ecosystem that when altered has repercussions for its plant and animal life.”
- Add a fifth park theme centered specifically on the lifeways of the American Indians. Construct this theme with tribal input and reference Douglas Deur’s *American Indians and Crater Lake: An Interpretive Overview and Plan*.
- Perhaps make the primary park themes known to the audience on the park’s website. This will help to orient the visitor conceptually prior to their physical presence within the Crater Lake National Park (Crater Lake NP).
- Consider the use of theme-titles to identify interpretive programs and elements.

Personal Interpretation

- Make certain to state explicitly the theme at the *beginning* of each interpretive program. This will lead to higher long-term comprehension and retention on the part of the visitor.
- Keep in mind that individuals only remember five to nine separate new ideas at any moment.
- Provide for informal learning and recreational activity opportunities specifically geared toward the teenage audience.
 - For example, at Olympic National Park teens can go to the park website and learn about activities specifically for them. These include course options, a climate challenge, and ways they can volunteer.
- Add a list of the season’s Rim Talk titles and descriptions on the Crater Lake NP website under “Plan Your Visit → Things To Do → Ranger Programs.”
- Stress the importance of consistency in the information given in ranger-led programs.
- Encourage more self-evaluation of personnel.

Nonpersonal Interpretation

- Ensure that any photographs or visuals are directly tied to the visitor’s physical experience. This is especially needed for the Annie Creek Trail Guide, where illustrations do not always correspond to the designated stop locations.
- Provide trail guides for the more highly used trails: Garfield Peak and Sun Notch, as an ADA option. Perhaps in addition to handheld brochures, electronic downloads might be made available through the park website.
- Consider incorporating more poetics and quotes into the programing. It helps the visitor to connect on a more personal, emotional level to the resources, and helps the visitor recognize the heritage aspects of the site as appreciated by others.
- For the Junior Ranger Activity Book, it might prove beneficial to create multiple books that focus on different age groups, rather than a single one that serves a

broad age range. Also, it would allow repeat visitors to try new activities on future visits. Consider having one booklet geared specifically to Crater Lake NP in the winter season.

- For example, North Cascades National Park has divided their activity books into four age groups and the activities correspond to the cognitive and communicative abilities of children ages 3-5, 5-8, 8-11, and 12+.
- Consider providing interpretive materials electronically or at the Steel Visitor Center in multiple translations.
- Add a Japanese translation to the “Visiting the Park” options on the park website. Persons from Japan ranked third in the international visitors as found in the 2001 Visitor Services Project at Crater Lake NP.
- Add thought provoking questions to interpretive media as a means of engaging the audience.
- Keep in mind the use of personal electronic devices in the next wave of interpretive planning efforts.

Visitor Surveys

- Conduct another Visitor Services Project. Too much has changed in the services of the park since 2001 without a corresponding in-depth survey: new waysides, the implementation of the trolley tour, a new park orientation film, a redesign of the Sinnott Memorial Overlook exhibit, the addition of Plaikni Trail, and ADA accommodations. It should be a priority at this stage.
 - In this survey, consider separating and evaluating ranger-led interpretation and nonpersonal interpretation apart from other activities in the park.
- Gather information from the Visitor Comment Forms, and input it into a single database. This will allow long-term trends to be recognized and help the management to be preemptive in addressing problems in the future. It is, however, important that some visitor response options in the form remain open-ended with ample room for the visitor to elaborate on his or her comments.
- Implement a visitor survey during the winter season similar to the one conducted annually during August. This need not be done annually, it could be done every two or three years, but it is important to understand the winter visitors to Crater Lake NP.

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