

On Interpretation

Sociology for Interpreters of Natural and Cultural History

R e v i s e d E d i t i o n



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Edited by
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Oregon State University Press
Corvallis, Oregon



Monster Time and Other
Ethnographic Insights at Wupatki
National Monument

(1989)

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Introduction

Humans carry their cultural values everywhere they go, and act out of those values, whatever they do. This makes it useful to know the diversity of beliefs and values people bring to a subject when designing an interpretation program. National parks, museums, and all other cultural events are venues where interpretation specialists must accommodate their messages to a wide variety of beliefs and behaviors in order to get information across to the public. Ethnography has been widely used as a research method in the social sciences and is becoming an increasingly important mechanism to assist interpretation programs. James Spradley provides a cogent definition of ethnography:

Ethnography. . . is a systematic attempt to discover the knowledge a group of people have learned and are using to organize their behavior (Spradley and McCurdy 1972:9).

This chapter presents a case study of the ways in which ethnographic research can be used to improve cultural and prehistoric interpretation. The author and his students were invited to do an ethnography of visitor behavior at Wupatki National Monument near Flagstaff, Arizona, in order to improve the interpretation at the park¹. When the findings from that research were shared with interpretation specialists around the country, we discovered that much of our specific data can be generalized to other parks, to

1. The basis for this chapter is a field school conducted during the summer of 1989 at Wupatki National Monument as one element in an existing cooperative agreement between the Monument and the Anthropology Department at Northern Arizona University. The project was funded by a grant from the U.S. Department of Education and included a companion archaeological field school at Wupatki Ruin. In addition to the research questions being answered by the field schools, the two field schools were designed to provide research training to undergraduate minority students, to encourage those students to seek graduate careers. Both field schools lasted seven weeks. Six students received ethnographic field training. Their instruction included direct observation and recording of visitor behavior, interviewing techniques, computer-based field note development and management, ethnographic analysis, and the presentation of ethnographic data. Their research education was directed by the author and supported by two anthropology graduate assistants, Ms. Duffie C. Westheimer and Ms. Lisa M. Leap. The students were asked to address

museums, and to other organizations that interpret human prehistory and other aspects of human culture to visitors from many different backgrounds.

The chapter is organized as follows. First, the research methods employed in the study are briefly described, along with a brief background on the Monument. Next, a general profile of visitors to Wupatki is presented. Since a significant portion are international visitors, a detailed profile of one group is included, to demonstrate the understanding that can be gained through the ethnographic approach. Next, visitor behavior is described, focusing upon the gender roles, family dynamics, and vandalism found at the site. Visitor needs and expectations are then explored, and the chapter ends with the implications of these results for interpretation.

Research Methods

Our ethnographic research design was directed at understanding the behavior of visitors in and around the visitor center at Wupatki Ruin and at two other outlying archaeological sites which are easily accessible to visitors. Decisions on where to concentrate our research and the kinds of information to collect were guided by two initial steps in the research process.

First, the author conducted two focus group sessions with park management and personnel, to determine the most pressing information needs that could be met using an ethnographic research approach. The Park Service personnel decided that their greatest needs were in the areas of interpretation and the control of behavior deleterious to the park resources. They requested that the research effort determine how long people stay at the ruins, where they go, what interests them, what types of interpretation work well, and

the general interests of Park Service personnel while selecting their research topics. The focused topics that they chose were visitor interest and beliefs about the monument (Cha 1989), the interaction between Park Service and visitor beliefs about boundaries and permissible behavior (Hopkins 1989), family dynamics at the park (Winkfield 1989), visitor center information services and employee interaction with visitors (Brown 1989), German tourists at an archaeological park (Orozco 1989), and behavior at outlying sites (Valero 1989).

how visitors generally behave. They decided that they would most like to know the answers to two questions. What do people really want to know about the ruins? Why do people vandalize the ruins?

Second, a two-week period of general observations was undertaken. This exploratory research phase allowed us to discover and monitor the most common patterns of visitor behavior. The ethnographers periodically timed visitors, unobtrusively followed their movements through the ruin, listened to public conversations, and asked a few preliminary questions. From these observations we devised questions to ask the visitors to gain more in-depth information about their experiences in the park. We pooled and discussed our findings, to provide everyone with the broadest view of visitor behavior at the park. From this preliminary work, we selected individual topics for additional observations and ethnographic interviewing. The next four weeks were spent completing these specific research assignments. At the end of the research project, team members presented their findings to Park Service personnel and provided written reports for further reference.

Background on Wupatki National Monument

Wupatki National Monument receives approximately one quarter million visitors each year. The heaviest visitation is during the summer and on holidays during other seasons. The park maintains a steady, but reduced, flow of visitors at all other times. Wupatki is known for its rich archaeological resources, which include 2,668 sites with historic significance within a 53-square-mile boundary. It is administratively and ecologically tied to nearby Sunset Crater National Monument.

Wupatki is designated, by park personnel, as an "on-the-way-to" park. While it is a destination park for local residents, a significant portion of its visitors are either on the way to or are coming back from the Grand Canyon or other parks in the southwestern United States. Some visitors are on a grand tour of archaeological monuments in the southwestern United States, with Wupatki being wedged among better known archaeological parks such as Canyon de Chelly or Mesa Verde.

Wupatki is not easily accessible. Visitors must enter at the South Entrance, pass by Sunset Crater National Monument, and drive an additional 18 miles into the desert to Wupatki. Or, they must come in the North Entrance and drive an approximately equal distance to reach the visitor center from that direction. The total loop is about 36 miles and tends to discourage the more casual type of visitors. In fact, every day we observed potential visitors turning around and leaving the park, after having driven 15 miles and being within a mile of the first ruin in the park. It takes about 45 minutes to simply drive through the Wupatki boundaries, without stopping at any of the available sites, so visitors feel they have spent a great deal of time in the park, even when they don't get out of their car.

General Findings on Wupatki Visitors

The student ethnographers found that Wupatki visitors are well educated and are commonly more interested in archaeological history than the general population. Therefore, the overall profile of visitors to the park differs from that of visitors to parks that are more easily accessible, and parks that are primary destination parks, such as the Grand Canyon.

Wupatki visitors are predominantly middle-class Anglo-Americans. This was first determined by direct observation of key social markers, such as dress, material items (cars, camera equipment, etc.), and speech patterns, and later confirmed by direct questions about background, employment, and educational status during interviews. The second largest contingent at Wupatki is of foreign visitors from Europe and Asia. The most common are those from Germany, Austria, and Switzerland. Numbers of French-speaking tourists also visit the park, as well as a sprinkling of people from Japan. One of the smallest contingents is of visitors from various minority groups in the United States. The students observed Black, Native American, and Hispanic visitors but they are the exception. This trend had been noticed by park personnel and was of concern to them. One of the questions we had hoped to address was why the number of Native American and Hispanic visitors is so low, but the small numbers prevented any extensive exploration of this issue.

The average length of stay at Wupatki Ruin and the visitor center is less than thirty minutes. In this time visitors typically move from the parking lot into the visitor center, look at the displays and make purchases, and then move beyond the visitor center to the archaeological site itself. About 10 percent of the visitors circumvent the visitor center and go directly to the ruin. Beginning at the overlook to the ruin, people choose among several routes which shorten or lengthen their stay.

Some visitors never make it out of the visitor center. They use the toilet facilities, make purchases, ask directions, and return to their cars. It is not uncommon for some of the teenage visitors to not even get out of the car in the parking lot, while members of their family group visit the ruins.

About 20 percent of those who visit the ruin walk out to the overlook, read part or all of the trail guide, and return to the visitor center or directly to the parking lot. The rest go at least part way into the ruin. As many as one-third of the visitors miss the sign that points the direction to take around the ruin, corresponding to the trail guide numbers. They end up going around the ruin in reverse order. Most accommodate rapidly by reading the trail guide backwards, but this does cause some confusion.

There are several decision points during the tour where visitors either continue on or skip some part of the tour and return to the visitor center. The first decision point is at the overlook, which provides a panoramic view of the main ruins, an amphitheater, a ball court, and a small geological formation called the blow hole². Some people stand at the overlook and read the Wupatki trail guide without getting closer than about 100 yards to the ruin. The second major decision point is whether or not to visit the amphitheater. This

2. The blow hole is a small crack in the ground, which has been bricked over with a small grate to prevent accidents. Under the opening are thousands of cubic feet of cracks in the rock formation below Wupatki. The blow hole gets its name from the fact that the cyclical heating and cooling of air at Wupatki causes air to either blow strongly out of the hole, or to be sucked into it with considerable force. Visitors often stand on top of the crack, to allow the outflow to act as a natural air conditioner on very hot summer days.

adds 50 yards to the tour, and it is a moderate climb. At 5,000 feet in the desert heat, these decisions are important. The third decision is whether or not to go from the end of the major ruin complex down to the ball court and blow hole. This adds at least 150 yards to the trip, with no shade available. Those who do visit the lower part of the monument are among the group whose visit lasts longer than the average. In almost all cases it is common for the visitors to read the sections of the trail guide that describe the areas they are not visiting, while looking at them from a distance.

German Tourists in the Southwestern Desert

The general demographic surveys done in the park, along with visitor logs, indicate that approximately 20 percent of the Wupatki visitors have a Germanic cultural background. One of our student ethnographers developed an interest in these visitors when he observed that almost every rental car in the visitor center parking lot that had California license plates disgorged a group that was speaking German (Orozco 1989). He began to wonder why Germans were the most frequent tourists, rather than an even mixture of people from other European countries. British and Japanese visitors were present on an irregular basis during the summer, and they tended to arrive by bus. The Germans arrived every day by the car load.

One of Orozco's findings was that many of the German visitors had developed an interest in American Indian cultures, and in U.S. prehistory, on the basis of reading children's books written by a German author named Karl May. May wrote a large number of highly romantic books about Indians, and their treatment by the dominant U.S. culture, at about the turn of the century. Many of the visitors, especially those over forty, came to the Southwest with expectations of experiencing contact with Indian groups, and to play out childhood dreams. The younger visitors were less likely to expect things to be as Karl May portrayed them, but nonetheless, many had read his books and gained an interest in the region because of them. Orozco also found a general desire on the part of these visitors to have a greatly expanded German language trail guide. Most of the Germans visit a variety of archaeological sites

throughout Arizona, New Mexico, Colorado, Nevada, and California. They are very well educated, as a group, and have a high level of interest in U.S. prehistory. They commonly read books about the Southwest prior to traveling to the region, and purchase other books during their travels. They also receive large volumes of materials from German travel agencies. The existing interpretive materials at Wupatki, and most of the other archaeological parks they visit, provide far less detail than they would prefer.

Visitor Behavior

Gender Roles and Family Dynamics

Visitors play out a number of middle-class American cultural patterns as they tour the ruins. The most visible patterns are consistent differences in gender roles, age-related role behavior, and differences in the family dynamics of visitors. These cultural differences have important implications for interpretation.

After exiting the visitor center, tourists pass a box on a post which contains trail guides for a self-guided tour of Wupatki Ruin. Most single individuals pick up the trail guide, and tour each numbered station independently of other visitors. If the visitors come in a group, then one or more members of the group pick up trail guides and move around the ruins more or less in contact with one another, depending on the composition of the group and the factors described below.

Couples and families with children tend to take a single trail guide (although children occasionally demand to have their own separate guides). Usually one of the children or one of the adult males in the family takes the trail guide out of the box and carries it to the first station, an overlook of the ruin. At the overlook, the trail guide is handed over to the "central female" in the group, who begins to read the guide to everyone in the contingent. We designated this person the "central female," because in groups where more than one adult female was present only one normally took on the role described below. She was typically the oldest female, unless the oldest was in her sixties or older. This woman seemed to take the lead in sharing information about the ruin with the rest of the family. At the same

time, the “central male” took on the role of photographer, recording the visit with either a still or a video camera. If he used a still camera, he simply alternated between taking photographs and listening to the female who was reading the guide. If he used a video camera, he normally recorded the sound of the trail guide being read as he panned across various scenes in the ruin that corresponded to each section of the trail guide. This division of labor continued throughout the ruins.

This gender-typed behavior is not universal. Males occasionally read the trail guide out loud to the family or group, and some women did a considerable amount of photography. But these were less common. The few times we observed males reading to families, most sounded as if they did not have much practice reading out loud. This probably ties into the fact that it is much more common in American families for mothers to read to their young children than for fathers.

In a single-sex group, it is most common for everyone to take a trail guide, but to proceed around the ruin together. Occasionally, especially where the group was two or three females, one individual would read the trail guide out loud, in the same manner as in a family group. However, it was more common for individuals to read silently at each marker, and then to make comments to one another or ask additional questions raised by the trail guide at that point in their collective experience.

Overall family dynamics were explored through interviews (Winkfield 1989). We found that families differed greatly in the amount of control exerted over various members of the group. They also differed significantly in the purpose they expressed in visiting the monument and this often correlated closely with observed behavior in relation to social control.

The behavior of children in these family groups depends on the level of social control that the parents exert on them. At one end of the spectrum the children stand with the guide book reader and the photographer at each station, listening and participating in a group experience of the ruin. At the other end of the behavioral spectrum, the children range far ahead of the parents, paying no attention to

the adult roles being acted out around them, and often straying from the trail boundaries. If the family was visiting the monument as one stop on their vacation, they tended to maintain far less control of the children, even encouraging behavior beyond the boundaries of acceptable behavior in the park. But if one of the main purposes for the visit was to instill a sense of history, to educate the family and the children in particular, then the parents tended to show respect for the ruins and to demand the same respect from their children. These families seemed to be more concerned about the preservation of resources than those whose purpose was solely entertainment or relief from the boredom of a long drive. These differences have some direct bearing on interpretation in the parks.

The behavior in the educationally oriented families was relatively consistent. These families nearly always took a copy of the trail guide, and deliberately kept the family together as the guide was read at each numbered point. If the family had small children, one or both parents normally held their hands or carried them. These parents tended to be proactive in teaching the children proper behavior before they had a chance to misbehave, explaining to them, for example, why they should stay on the trails and not disturb the ruins. These families also tended to be very responsive to the presence of rangers and were eager to talk with them and ask additional questions.

The behavior of families lacking an educational orientation differed in nearly all respects. There were far fewer attempts to keep the family together; individuals were allowed to experience the ruin on their own, at their own pace. Far less behavioral control was exhibited, and it was nearly always reactive. When the trail guide was read, it was rarely to the whole family group. These differences in family dynamics suggest that at least two different approaches to encouraging appropriate behavior in visitors and their children need to be attempted by Park Service personnel.

The following sections provide specific case study material derived from the ethnographies. These include findings on vandalism and monster children; visitor needs, expectations, and interpretive preferences; and the implications of our research.

Vandalism

All of the ethnographers were alerted to watch for, categorize, and understand vandalism at the monument. This sometimes created a delicate balance between participant observation and intervention. We needed to see what was happening, in order to record it and understand it for appropriate park staff intervention in the future. We also were concerned for protection of the resource.

One of the students focused on the issue of social and physical boundaries in her ethnographic research. Hopkins (1989) describes boundary ambiguities and misbehavior of visitors in a tour of Wupatki Ruin. She also identifies nine forms of ruin abuse, and provides profiles of the location and frequency of these forms of vandalism, along with recommendations for reducing both their severity and their frequency. Table 1 is an adaptation of Hopkins's findings on vandalism.

The anthropological literature would predict that the strongest agreement about the size, shape, and purpose of social boundaries in the parks would exist among Park Service personnel, since they share a single corporate culture, while visitors do not. It would also predict that many of their beliefs about these boundaries would not be shared by visitors until, or unless, visitors are educated about them.

This is a classic situation, found in many instances where a professional group controls special cultural information and interacts with a public which lacks access to this information. It is common for the professional group to believe that their cognitive patterns are shared. This is why doctors confuse their patients when they use medical jargon instead of normal social language. In the same vein, we discovered a Park Service culture that includes a relatively well shared cognitive map of the "proper" boundaries at the monument. As predicted, it is not adequately shared by visitors. Hopkins found this creates problems of a number of varieties, including confusion over boundaries in the monument.

No culture is completely homogeneous. We found variation in beliefs about appropriate boundaries among various groups of individuals working in the park. The full-time and seasonal staff

Table 1. Types of vandalism at Wupatki Ruin.

Perpetrators	Type of vandalism	Frequency
General public	Walking on impacted areas, off trail; leaning on ruin walls	Extremely common
Children	Walking in ruins; climbing walls; picking up and throwing objects; graffiti	Extremely common
Touchers	Touching artifacts; sitting on walls; walking on walls	Very common
Photographers	Walking off trail; posing people in restricted areas	Very common
Curious	Walking off terrain into restricted ruin areas	Quite common
Nature lovers	Walking far off trail	Common
Collectors	Walking off trail; going into back country; picking up artifacts, rocks, & other specimens without permission	Uncommon
Graffitiists	Writing marks or ruining surfaces	Uncommon
Miscellaneous	Trespassing cattle; offroad vehicles, etc.	Common

shared professional orientations and standards that tended to make them relatively consistent in defining both physical and behavioral boundaries. More variation was noted between these people and the volunteer staff. But all of the staff controlled tacit knowledge that was not easily accessible to visitors. As one of the students stated, inconsistencies in the beliefs of the staff, combined with a lack of definition of some of the boundaries, make it easy for tourists to be legitimately confused about what is or is not permitted.

Loopholes also allow deliberately destructive individuals to manipulate the situation, since the staff is anxious to maintain positive relationships with the public. Hopkins cites the example that the people who visit the outlying ruins, where there are few

clear boundaries, expect to have the same freedom of access at the main ruin. They occasionally become angry when confronted by official requests to not behave at Wupatki in ways that were uncontrolled at Wukoki or the Citadel. The inconsistency of the controls placed on visitors leads to confusion and other more serious problems, permitting deliberately destructive individuals to manipulate the situation, since the staff is anxious to maintain positive relationships with the public. The information provided in Hopkins's report acts as an excellent model for similar studies at other sites and could be useful for establishing and maintaining workable boundary controls for archaeological parks.

Monster Time at Wupatki Ruin

One type of vandalism that occurred regularly in the park became the focus of much interest during our research. We discovered that Wupatki Ruin had a special time of day that we labeled "monster time." This was a very predictable form of child misbehavior which occurred in the ruins every afternoon.

Monster time begins at approximately 3:00 P.M. and lasts until 4:00 or 4:30 P.M. During that time period at least one child, and frequently more, would be observed actively climbing all over the ruin and getting into areas that were far outside of appropriate visitor boundaries, despite the numerous signs requiring visitors to stay on the paths, stay off the walls, and not disturb the ruins.

We developed a basic profile of the "monster child." The most common monster was a young Anglo male, between the ages of 10 and 13, distinguished from non-monster children by several characteristics. Monster children tend to wear clothing that has bright colors, or they are dressed all in black. Their t-shirt normally has a logo with a rebellious message. The monster child visits the ruin with his parents, but quickly leaves the family group. Monsters move very rapidly into the ruin and begin cutting trails, walking on walls, and moving into restricted rooms in the middle of the ruin. They continue to exhibit this behavior, ignoring any parental comments, throughout their visit. The monster always appears to be very full of energy at a time when the rest of the family is dragging. The parents tend to lag far behind, probably because they have been

cooped up in a car with a monster child for the entire day, or longer if they are traveling on a family vacation. In no case did we observe family members effectively controlling the monster's behavior. Most of the time their parents were not close enough to comment to them anyway, let alone close enough to control their behavior. The only condition that appeared to deter monster behavior was the immediate presence of a uniformed ranger.

Monster children tend to take signs very literally, as a manipulation device. For example, we interviewed one monster child after he had jumped three walls and was climbing up into the middle of the ruin. He belligerently stated that he had strictly obeyed the sign that said, "please stay off the walls." He had carefully jumped the walls and not touched a single one of them. Another child said, when asked to get off a wall, that the sign which said to stay off the wall was in an entirely different part of the ruin (about 25 feet away), not right where she was sitting. She felt the sign didn't apply to this particular place.

This instance of a female monster child was unusual. Monster children are rarely female. We did observe instances of female monster behavior, but almost all were accompanied by males that fit the primary monster profile. Their behavior in most cases appeared to be tagged to male monster behavior, rather than being self initiated. Most girls were simply accompanying a monster male on his run through the ruins.

The ethnographers also noted monster behavior at the outlying sites, but it was not as easy to confirm the timing of these events. It did become apparent that some of the children who performed monster activities at Wupatki exhibited the same type of behavior at outlying sites. This was confirmed by direct observation when students moved from one site to another at the end of the day, first observing monster behavior of a particular child at an outlying ruin, and then, when they returned to the visitor center, observing the same child in the Wupatki ruins. It was also confirmed by indirect evidence as the students compared notes which allowed them to recognize similar individuals who were observed in two different locations by different ethnographers.

Visitor Needs and Expectations

The student ethnographers spent several hundred hours interviewing visitors about their interests and interactions with the monument. In addition they recorded natural conversations between visitors, between visitors and Park Service personnel, and between visitors and other visitors. This allowed us to explore the types of questions that visitors would like to have answered about archaeological ruins in general, and Wupatki in particular. This appears to be an excellent guide for the development of interpretive materials, and for training Park Service personnel for interpretive duties. The areas noted below are described in more detail in several of the ethnographic reports, and especially in Cha (1989).

Lifestyles

One of the major topics of interest to visitors is finding out details about the lifestyles of the people who lived at the site. Their questions provide an excellent profile for the development of trail guides at any archaeological park, and for the types of interpretive material that can be transmitted by park personnel. The most common things visitors wanted to know were:

1. The physical characteristics of the people at Wupatki. What did the people look like? How big were they? (Some thought they must have been very small because of the small doorways at Wupatki, not realizing that small doorways lose less heat during the winter).
2. Their resources. What did they eat? Where did they find water? (This was a very common question in this desert environment.) How did they get the food they ate? Did it all come from hunting or agriculture or both?
3. What kind of rituals did they perform?
4. What was their language?
5. What were their religious beliefs?

Many people wanted to know about the cycles of daily life at Wupatki. They wanted to know what kind of game the people hunted, and where they found it. They asked when and where the crops were planted and when and how did the people at Wupatki harvest them. They wanted to know how all the different kinds of

foods were cooked. Others wanted to know if the environment and the climate were the same or very different from those at Wupatki today. Some were surprised by the amount of technological knowledge that went into the construction of the ruins and wanted to know more about it. Visitors also wanted to know the architectural history of the ruin, and how many people lived in it (and in the surrounding area) at any given time. They wanted to know who the people at Wupatki were related to, who they traded with, and whether or not they engaged in warfare. They also wanted to know where they went when they abandoned Wupatki, and why that abandonment occurred.

Architecture

The visitors were fascinated with the architecture at Wupatki Pueblo. The men, in particular, were interested in learning about the construction methods used in the ruin. They wanted to know how the stones were shaped, how the walls were laid, what was used for mortar, and what kinds of tools the people used for construction. The women were more interested in domestic activities. They asked where people did various tasks, and how the rooms were set up for comfort and utility. The women also made far more comments about the aesthetics of the architecture and were interested in how people would create beauty in their lives.

Visitors realized that the ruin had been stabilized, and some people wanted to know how they could easily distinguish between the parts of the ruins that have been reconstructed and what remains of the original buildings. In one case, a visitor thought that Wupatki had been built by the Park Service, for her entertainment, much like at Disneyland. This was an extreme example of the types of beliefs visitors take into the monument, but there are many other pieces of misinformation that needed to be handled appropriately.

The Setting

Tourists wanted to know why the people who built the ruins picked the particular sites they did, instead of nearby sites that looked more interesting or useful to them, or at least seemed equally advantageous as a home site. They wanted to know why they picked sites that were close to but not right on top of their water sources.

They also wanted to know how the volcanic eruptions had affected people at the ruins.

Burials

The trail guide describes a room with a small open grave as one of seven infant burials found in the ruins and states that burying stillborn infants inside the pueblo was a common practice for the Sinagua, the prehistoric group who built Wapatki pueblo. This marker triggers more questions than any other. Burials and funerary practices are an area of strong interest for Anglo-American visitors. People wanted to know where the other six burials are, and whether they are all in one room or not. They also wanted to know more about the beliefs of the people, especially those related to this custom. On the other hand, this particular part of the trail guide is considered highly inappropriate by many Native Americans. They feel it is improper to display or discuss such things in their culture, and doing so is insensitive of their cultural values. This is a type of cultural difference that the Park Service will increasingly need to address in the future, in order to provide the most sensitive interpretation of archaeological resources.

Visitor Preferences for Interpretive Methods

Visitors expressed clear views about their preferences for different forms of interpretation (see Cha 1989, Valero 1989). In general, the strongest preference was for a trail guide that allowed for a self-guided tour. The trail guide allows people to go at their own pace, to control their experience, but to have relatively dense information. It was preferred over both permanent signs and ranger-guided tours.

Interpretive signs received both positive and negative comment, depending on their function. The most popular were small signs (about the size of a 4 by 5 card) which gave the names of various plants and their uses. These were scattered unobtrusively at various locations and drew consistent positive interest and comment from visitors. On the other hand, large interpretive signs, such as the single sign at Wukoki (one of the outlying ruins), were often ignored or actively disliked. People disliked having to crowd around a sign with other groups who might be making comments the visitor did not like, and noted that it was difficult to read the sign in the glare of

desert sunshine. Visitors also pointed out that one cannot get as much information on a sign as in a brochure. If the Park Service put up as many signs as would hold the information in a trail guide, the place would be littered with signs.

Ranger-guided tours received both positive and negative comment. The trail guides were preferred by many, but others (perhaps those who learn better verbally than visually) gave the guided tours high marks. Other people seemed to merely tolerate ranger lectures in order to have the opportunity to ask their own questions about the ruins. In all cases, the visitors preferred short general lectures, followed by plenty of time to ask individual questions.

Whenever we observed park personnel on patrol, they were stopped by visitors and asked numerous questions. This is probably one of the most subtle and effective of all of the interpretive and educational modalities available to the Park Service. Brown's (1989) report indicates that there is wide variation in the quality, quantity of interpretation, and sometimes the style of these "interpretive patrols" between Park Service professionals and volunteers. But in all instances people expressed serious interest in this personalized form of interpretation. It appears to be one of the key forms of education that the Park Service can provide, but it is also the most sensitive to budget reductions and to movement from a professional to a volunteer work force in the parks. This is an area where there should be an expansion rather than a contraction of resources in the future.

Implications from an Ethnography of Interpretation

Using ethnographic techniques, we allowed the visitors to identify important interpretation issues. We observed their behavior, listened to their public conversations, and then asked them directly what they thought about the monument. We followed up on the leads they gave us in these interviews with more observations and more interviews on those subjects. Thus we were not only attempting to discover information that park personnel felt was important, but were also afforded the luxury of discovering issues that were imbedded in visitor behavior, but had not been previously identified

as critical to interpretation. The following are some of the implications of our findings.

Our family-oriented research identified an increasing use of video technology for recording visits to cultural sites. This raises the possibility that all interpretive guides should be reviewed not only for their written content, but also for their oral characteristics. It is obvious that the visitors have discovered an interesting way to create their own semi-professional quality "voice-over" effect for their personal video travelogues, by combining cooperative male and female roles in the park. Interpretation specialists should take advantage of this new use of media to get their messages across to not only individual visitors, but also to all of those audiences back home who will be given the opportunity to see their neighbors' tour on the visitors' home VCR.

Our observational studies demonstrated that there was a very consistent pattern of behavior where guided tour markers are used. Individuals stop at each marker in the interpretive guide (whether it is written or taped) at least long enough to determine whether or not this was a place where they wanted to linger. This produces an excellent passive system for grouping people at key points in the system. The numbered markers on the guide also keep visitors focused on moving around the ruin in a consistent and predictable pattern to stop in designated areas, rather than encouraging them to get off the trail or to stop at points where they would cause difficulties for the flow of visitors. This tendency should be taken into account in developing both guides and other interpretive materials. It means that there can be some very subtle combinations of information and visitor flow management combined to create positive visitors' experiences in a park. Markers should not be placed where they will cause confusion or impede flow, but they can be used to "side-track" part of the visiting contingent during peak times and can be used to make overall interpretation management easier.

Monster time seems to be a very widespread phenomenon. We have received numerous comments about similar behavior at other parks. It seems most likely to occur in institutions that have a large

amount of territory that is not under direct observation from the institution's personnel. The data from our direct observations and interviews of "monsters" causes us to recommend that patrol times be changed in those institutions to anticipate the need for control of monster time. Since this is often the most uncomfortable point in a long day, prior to our observations this was a point at which there was very little patrolling going on. However, a modification in patrol schedules was effective at Wupatki in cutting the number of instances of monster behavior.

A request surfaced from the educationally oriented families that is worthy of serious attention as an interpretation policy. Many of these families felt that it would be very useful for the park to have a children's trail guide, in addition to the adult interpretation guide. This would be a guide written at an appropriate reading level (most suggested second or third grade) and containing the same type of information (or parallel information) about the ruin that could be found in the adult guide. Wupatki has a very nice workbook for children, which received praise. But the workbook does not provide much information about the ruin. It provides a series of educational activities that keep some children busy during their visit. It is more commonly used by the parents to keep their children occupied on the road after the visit, since it includes some drawing and word exercises that can be used as a game. However parents, and some of the children, suggested that the creation of a trail guide that has serious educational content about the ruin itself, but is written at a level that the children could read and understand, would provide a better all around educational experience for the children. It would teach them directly about the people who lived at Wupatki, as well as being an excellent vehicle for telling the children why it was important for the Park Service to preserve this type of heritage. We would recommend that similar services be considered for other institutions as well. These educationally oriented families are the future support for cultural institutions, and should be supported wherever possible.

The results of the research on the outlying sites (see Valero 1989, Cha 1989, Hopkins 1989) at Wupatki indicated that it would be

useful to increase the amount of interpretation at remote locations, for several reasons. Better interpretation would create clearer boundaries for visitors, using the full range of passive controls that are available for such sites. These controls could include well marked paths, increased use of signs to indicate boundaries, and the use of a trail guide. This would provide much better interpretation of the resources for the visitors, and would reduce accidental harm to them.

Another of our recommendations comes from our exploration of German visitation to archaeological parks. It would be useful for the interpretive division of the National Park Service (or any group with high levels of German visitation) to do an analysis of two or three of Mr. May's most popular children's books. This would allow for the development of interpretive materials for German visitors which could better meet the expectations of this audience, and at the same time would serve to clarify issues that are raised by the specific historical and romantic views portrayed in his books.

It would also be advantageous for U.S. cultural institutions to provide better interpretation for foreign visitors. For Wupatki, the German language material is a single typewritten page, rather than a full translation of the trail guide (with both pictures and words). This eliminates the opportunity for these visitors to learn about and compare various sites, unless they read English. This also means that major parts of the Park Service story and its policies go unheard for as many as one in every five visitors to this park and many others. It would appear that there is an unmet need for better interpretation materials in other languages, for the most frequent foreign visitor groups.

All in all, ethnography turned out to be a valuable tool for determining visitors' beliefs, their ideas, their knowledge, and their behavior. It allowed us to discover generic data that can provide information useful to the protection and interpretation of all archaeological parks, and promises to be an important tool in looking at similar issues in other venues.