ARCHAEOLOGY ON EXHIBIT
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Today's modern museums increasingly emphasize education as their primary role in society. Naturally they want to perform this task in an entertaining, informal way. In order to better carry out their educational mission, museums should mount archaeology exhibits that offer a concept approach rather than the usual object orientation supported by extensive labels and text. In addition, museums must pay more attention to the needs of their visitors, if the public is really to benefit.

INTRODUCTION

This presentation honors Dr. Makoto Kowta. My wife, Karen, and I have known Mark since we were freshmen at UCLA way back in 1953. Mark was the Teaching Assistant in Karen's first introductory anthropology class. Ten years later I was appointed Instructor in Anthropology at Chico State College. I was the first archaeologist at Chico State. Indeed, I was the only anthropologist on the faculty and was hired specifically to initiate an archaeology field program. Archaeology became very popular on campus, and I soon realized I needed help to handle the increasing student interest in Native American prehistory. In 1969, Mark agreed to come to Chico and together we developed a strong field-research program. As soon as Mark was on board, I felt secure enough to turn part of my attention to launching a museum training course of study on the undergraduate and graduate levels. The Museum of Anthropology at Chico State opened to the public in 1970, and my interest in museum management has increased over the years. It is therefore fitting that this paper combines archaeology and museums in a discussion of educational exhibits.

Museums are unique in that they provide public access to "real stuff." Museums offer reality, not virtual reality. At home you can play on the Internet and watch educational programs on TV, but if you want to experience the real thing, you have to go to a museum. This is where the real stuff is. You can get close to it. You can see it. You may even be able to touch it. Those museums that clutter their galleries with computers, TVs, other high-tech gadgets and two-dimensional graphics will fall into mediocrity and lose their unique place in society. At the very least, archaeology exhibits must emphasize actual archaeological materials.

CONCEPT VERSUS OBJECT ORIENTATION

Years ago Stephan de Borhegyi (1969), among others, called for a concept or problem approach to anthropological exhibit design, rather than the more common object-oriented approach. He believed that the concept approach would enable museums to reach their full educational potential, and he offered examples that explained the concepts of diffusion, acculturation, culture change, culture areas, cultural diversity, and so on.

Figure 1 is an example of an acculturation display using artifacts from New Guinea. Blue denim cloth rather than the traditional strips of bark is wrapped around the head of the long wooden drum. An open copy of the New Testament depicts a picture of Christ with Native New Guinean physical features. Figure 2 is from a culture-change exhibit and shows California Indian basketry miniatures made for white people.

If we consider archaeology exhibit design in the context of concept vs. object orientation, it becomes obvious that the object-oriented display is much less challenging to the museum curator and display designer than is the concept approach. In the former, for example, you simply take prehistoric artifacts, stick them on pedestals or in a case, add explanatory text, and turn on a spotlight. Figure 3 offers a typical example of an object-oriented display from the Smithsonian Institution. The object-oriented display method is akin to mounting an ethnographic art exhibit (Figure 4). Because it is the easiest, it is by far the most common approach found in museums.
Figure 1. Acculturation in New Guinea display. **Dimensions of Anthropology** exhibit, CSU Chico Anthropology Museum, 1970.

Figure 2. California Indian miniature baskets display. **When Cultures Collide** exhibit, CSU Chico Anthropology Museum, 1993.
Pointed projectile points resembling those made thousands of years ago by Folsom and other early big-game hunters in the western U.S. have been found in many places east of the Mississippi River. On some points the flaring consists only of thinning of the base, and, as in the western specimens, the edges of the base are often rolled smooth.

Most of the eastern points, like those shown here, are unidentifiable artifacts with no associated animal remains, and there is no geological or paleontological evidence from which their age can be determined.

Figure 3. Early Man projectile points display. American Museum of Natural History, Smithsonian, 1983.

Figure 4. Makonde woodcarving display. Dimensions of Anthropology Part 2 exhibit, CSU Chico Anthropology Museum, 1971.
Figure 5. Broken Northwest Coast Indian mask in front of a large photomural of the Christian Church. Royal British Columbia Museum, 1977.

Figure 6. Sports Fan display. Games People Play exhibit, CSU Chico Anthropology Museum, 1985.
Figure 7. German Resistance Under The Nazis display. CSU Chico Museum of Anthropology, 1994.

Figure 8. Llano Seco projectile point sequence display. Early Chico exhibit, CSU Chico Anthropology Museum, 1972.

Figure 9. Scale model of a prehistoric Maidu Indian house. Dimensions Of Anthropology exhibit, CSU Chico Anthropology Museum, 1970.
Figure 10. Status at Antelope Cave display.
Inside Antelope Cave: The Virgin Anasazi exhibit,

Figure 11. Aztec Woman display.
Women-Worker-Warrior-Witch exhibit,

Figure 13. Cluttered display of objects from California Dreamin' exhibit. Oakland Museum of California, 1985.
If you want to go beyond the visual impact of the real object to the next educational level, you need to design an exhibit that employs objects to explain a concept, idea, or technique. Here artifacts are chosen and so arranged in a display that the concept is visually clear to the visitor without the need for extensive labels and explanatory text. One of the best examples of this method can be found in the Royal British Columbia Museum in Victoria, British Columbia (Figure 5). A charred and broken Northwest Coast wooden mask is displayed in front of a large photomural of the Christian church. No label or printed explanation is needed to clarify the powerful message of this display. Figure 6 is of an introductory display for the exhibit “Games People Play.” It includes a tiny, very brief white label – Sports Fans. The double meaning here is obvious without requiring additional written explanation.

So the goal, not always achieved, is to mount concept exhibits that are more or less self-explanatory, thereby reducing the need for extensive labeling. Don't put a book (or a computer or TV) on the wall! We want visitors to learn from the real stuff, not spend their time reading labels. Figure 7 shows the kind of exhibit that should be in a book and not in a museum. Notice the inordinate amount of verbiage accompanied by a few photographs. The exhibit is all two-dimensional flatwork. There are no objects, no real stuff.

Good exhibits on archaeology present or are based upon any of several archaeological concepts. By far the most prevalent is the ubiquitous culture-history approach (Fagan 2002:17), wherein archaeological sites and their associated artifacts, food remains, etc., are placed into the context of time, space, and complexity. Figure 8 shows an innovative way to visually explain a projectile point sequence. The points are attached to a clear sheet of glass several inches in front of a colored panel depicting the age range and frequency of each point type. Note the absence of accompanying text. More information on the display can be found in a free brochure that offers a self-guided tour of the entire exhibit.

Research efforts to archaeologically define the Valley Maidu people in order to trace their geographic extent are presented in Figure 9. A scale model of the interior of a round, semi-subterranean Maidu house is reconstructed to show the burned wooden posts, off-center fireplace, and two stone mortars sunk into the floor. Combined, these attributes uniquely characterize a Maidu earth lodge and thereby assist in the identification of Maidu territory in California’s northern Sacramento Valley.

Cultural complexity, or the lack thereof, at an Anasazi cave in northern Arizona is demonstrated in a display on status in Figure 10. As shown here, the variations in styles and manufacturing abilities reflected in the projectile points, sandals, and pottery designs, etc., suggest an egalitarian social organization. Each family living in the cave was self-sufficient, and there is no evidence of a status hierarchy.

Archaeology exhibits based on culture-process or the various post-processual archaeology models are rare. However, a nod to feminist archaeology (Staeck 2002: 80, 81) can be found in Figure 11, even though the drawings depict women on their knees. Part of an exhibit titled “Woman-Worker-Warrior-Witch,” the display includes small pottery deities, textile weaving, and food-preparation articles all employed by Aztec women in their role as household managers. The Maidu dwelling in Figure 9 might also lend itself to a feminist archaeology interpretation. The two mortars set into the floor on opposite sides of the hearth indicate the presence of at least two adult females in the home. Whether this is a polygamous situation or an extended family of genetically related women is undetermined. However, no matter what the interpretation of these two displays may be, it will be based largely and appropriately upon the direct-historical approach (i.e., culture history) in archaeology.

**VISITOR NEEDS**

As part of their effort to improve the learning experience of their visitors, museums, with or without archaeology exhibits, are paying much more attention to the needs and expectations of their audiences – at least in the literature (see Durbin 1996; Falk and Dierking 1992, 2000; and Hooper-Greenhill 1994). Remember when the fabulous Getty Museum opened in Los Angeles in late 1997 and there were not enough restrooms for the public? Visitors were encouraged to use the facilities in the parking structure before they went
up to the museum. This was not an oversight by the Getty planners. They simply did not want to pipe a lot of water into the museum for fear that leaking or ruptured pipes during a catastrophe would jeopardize the collections. Soon, however, the Getty folks bowed to the needs of their thousands of visitors and added adequate bathroom facilities inside the museum. Today the Getty offers visitors a number of amenities other museums would do well to adopt. Examples include a welcoming staff member standing at the entrance, free umbrellas provided during inclement weather, and docents stationed in the galleries to answer visitors’ questions.

Easy exhibit access is an expectation of most individuals who enter museums. They want to know what and where things are and how to find them. Museums are not always helpful in this regard. Recently I visited a large, new (2001) Civil War museum in Pennsylvania. It featured state-of-the-art exhibits on two floors and included computers and many thin, flat-screen color TVs. The museum planners decided to organize the exhibition following the chronology of the war. They did not consider the fact that many museum-goers might not want to follow a time line around two floors but would prefer to see certain displays or objects, or to learn about the action of specific infantry, cavalry, or artillery units to which their ancestors belonged. That information is not available. When I requested a copy of the exhibit floor plan in order to find the displays I wanted to see, I was informed that none existed and I was to begin my visit at the start of the time line and proceed from the beginning to the end of the war. Like most museum visitors, I plunged ahead as directed and reluctantly began to browse through all of the displays, many of which were excellent, until I found some that interested me. To assist visitors, museum staff now are developing a computer data base which eventually will pin-point the display location of the various fighting units represented in the exhibition halls.

Visitor fatigue has long been recognized as a problem (Robinson 1928). Museums can wear people out. When visitors become mentally and physically tired, they don’t look, they don’t listen, and they don’t learn. Many researchers have addressed this problem (see, for example, Falk 1991; Melton 1935; Neal 1969, 1987), and some offer mitigation suggestions, since museum fatigue cannot be totally eliminated. Museum-goers need sufficient places to stop, sit, and rest as they move about the galleries. Displays should be designed for comfortable viewing; that is, objects and labels should be placed no more than a foot above eye level and no lower than 2 ft. 4 in. above the floor (Neal 1987: 29-34). Figure 12 is a “Smithsonian toe shot” showing a display label almost touching the floor. When people must bend or squat down to see things below their knees or stretch their necks to view objects above their heads, they begin to ache physically and soon lose interest. Cluttered displays (Figure 13) quickly produce stimulus overload and render visitors mentally tired. Unfortunately, such displays are commonly found in history museums, where objects are jumbled together, some on top of or behind others. Look at Figure 13 and see if you can identify the dead fish, the half-eaten hotdog, the bicycle, the Good Humor Ice Cream cart, and other stuff.

In 1994 I began a research project to evaluate the extent to which museums provide an effective learning environment by meeting the needs of their various publics. I call it “Searching for the 5-Star Museum” (Johnson 1998) and developed a rating system based on the following five general criteria:

1. Social Comfort — Friendly staff-public communication; good exhibit orientation (signage, floor plan).
2. Physical Comfort — Seating provided (three seats minimum), restrooms, water fountains, coat racks, etc.
3. Displays Varied and Uncluttered.
4. Displays within the Viewing Comfort Zone and Include Short, Legible Labels and Text — text less than 100 words.
5. Displays in Good Working Order and Objects Emphasized — including functional lighting.

To date I have visited 106 museums of all types, shapes, and sizes in the USA, Canada, and Mexico and evaluated each on these five criteria. Each criterion is scored 0, 1/2, or 1, with a total score of 5 being the highest rating a museum can achieve. The museums scored highest on criteria numbers 2 and 3 and lowest on numbers 1 and 4.
Results from these lowest-scoring criteria indicate there is much room for improvement. Museums need to work on happily greeting visitors, answering their questions, and providing useful orientation to the displays. Curators and exhibit designers must develop displays confined to the viewing comfort zone of their audiences, lessen the amount of explanatory text, and make the writing legible by increasing font size and placing it on a contrasting background. Less acute, but still important, is the obligation to better design track lighting so that spotlights do not shine directly in the visitor’s eyes, glare off the glass or plastic tops and fronts of display cases, or cast the shadow of the viewer over the objects and text on display (Criterion 5).

SUMMARY AND CONCLUSIONS

People go to museums in part to see the “real stuff.” In addition, they have needs and expectations that museums must address if they are to improve the learning experience of their visitors. Archaeology displays are more educationally effective when they go beyond the object-orientation approach to the explanation of archaeological concepts, ideas, and techniques. The best way to accomplish this latter, more sophisticated and difficult approach is to arrange objects to visually explain concepts without the need for much accompanying text. At least that is the challenge I am making to museum curators and display designers. Unfortunately, it will always be much easier to put archaeological materials in a display case, write and insert a comprehensive explanatory label, and turn on the light.

The vast majority of today’s archaeology museum exhibits are based on culture history, but there is good reason to produce displays that address culture-process or post-processual archaeology.

People learn better and learn more about archaeology or any other subject in museums when their needs and expectations are met. My continuing “5-Star Museum” study demonstrates that most of today’s museums successfully address their visitors’ needs for seating, restrooms, water fountains, etc., (Criterion 2) and provide an interesting variety of display presentations that are not overly crowded with objects, graphics, or text (Criterion 3). However, 65% of the sample museums need to improve in the area of social comfort (Criterion 1), and 76% should provide shorter, more legible labels and/or reconfigure their exhibits to fit within the comfort-viewing zone of their audiences (Criterion 4).

On balance, museums are doing a creditable job of meeting their educational mission, but improvements can be made, and museums still have a ways to go in welcoming their visitors and treating them like true guests instead of customers.

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