Anthropology and Museum Science

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Introduction

There are an almost limitless number of ways in which anthropological theories and methods can inform museum science. This is true in part because anthropology deals with virtually every aspect of the human condition. So, too, do museums. In addition to this broad overlap in subject matter, there is also a significant degree of overlap in the general orientation of the two disciplines. Museologists are interested in understanding how visitors experience a museum – what goes on "inside their heads" during (and after) a museum visit. In the same way, anthropologists strive to understand how the members of a culture experience different aspects of their physical and social world – what goes on "inside their heads" during a puberty ceremony (Drucker, 1951), a ghost dance (Mooney, 1965), a trip to McDonald's (Kottak, 1978), or even a trip to a museum.

In anthropology the term for "what goes on inside people's heads" is emics. Emics can be defined as those domains or operations whose validity depends upon distinctions that are real or meaningful (but not necessarily conscious) to people of interest to the anthropologists. But anthropologists and museologists are also interested in objective empirical analysis. Practitioners in both disciplines want to document what they can see happening during a puberty ceremony or a trip to a museum, respectively. The anthropological term for the empirically verifiable analysis of data gained through scientific observations is etics. According to Harris (1968; 1971), "Etic phenomena are those that are identified and studied independently of the native's cultural judgments" (p. 149). The etic/emic distinction corresponds roughly to how people actually behave in the iudgment of anthropological observers versus how people think of themselves as behaving, their purpose for behaving in such a manner, and their own explanation of their behavior. The anthropological exploration of the emic domain requires a different set of scientific techniques than the scientific exploration or the etic domain.

Given the broad overlap in subject matter along with an overlap in orientation, it should come as no surprise that there is (or at least should be) an overlap in methods. What we have seen to date in museology however, is that while there is most certainly an overlap in etic methodology,

museum scientists have been much more reticent to avail themselves of the emic methodologies developed in anthropology. Virtually all of the techniques in what is now coming to be called naturalistic evaluation by museologists (or emic analysis by anthropologists) were developed in anthropology. Despite its potential contribution to museum studies, emic analysis is seldom used by museologists. Nevertheless, the possible overlap in methods between the two fields is great.

Above and beyond the potential commonality of methods, orientation, and subject matter there is an over-arching commonality. Anthropologists have a characteristic way of looking at the world, an anthropological perspective, which could be employed to great effect by the people who design and evaluate museums. This chapter begins with a discussion of what is meant by the "anthropological perspective" and then demonstrates how the unique viewpoint of anthropology can cause us to rethink our ideas on what is interpreted in the museum context and on how it is interpreted.

Secondly, this chapter presents an example of how the subject matter of anthropology can inform museology. While the general characteristics of the anthropological perspective remain constant, what anthropologists choose to look at using this unique viewpoint can vary tremendously. Anthropologists are interested in virtually all aspects of a cultural system—material culture, art, music, politics, law, economics, psychology, medicine, religion, sexuality, kinship, family life—encompassing every major aspect of human existence. I have selected a relatively narrowly defined area of interest in anthropology, socialization and learning, in order to illustrate how a specific domain of interest in anthropology might influence our ideas on museums.

Finally, this chapter will briefly examine how given the similar orientations of museology and anthropology, anthropological research methods can expand the repertoire of museum researchers. Such fertile collaboration results in new understandings that will help us increase the effectiveness of museums.

The Anthropological Perspective

Anthropologists view the world in a way that is systematically (and, to a degree, fundamentally) different from the perspectives engendered by other disciplines. I feel that this perspective can provide some new views for both organizing and assessing museums. In general terms the anthropological perspective can be defined as one that is:

- Based on cross-cultural, or comparative data. By examining what is unique to different social groups and what is common to all social groups, anthropologists can focus on what makes people unique in the context of what is universal;
- 2. Based on a long-term perspective. By examining socio-cultural phenomena over time (or diachronically) anthropologists hope

- to gain a clearer understanding of the enduring significance of human actions;
- Based on an integrated approach. By bringing together a variety of disciplines, anthropologists strive for a holistic view of the broader cultural context; and
- 4. Based on a firm notion of cultural relativity. By assuming, a priori, that no cultural phenomena are to be regarded as "wrong" simply because they are different, anthropologists seek to avoid imposing their own value systems on those of others.

The first characteristic of the anthropological perspective, the notion that anthropologists examine the world in a comparative manner, can be translated into the museum context in a very literal fashion. If this aspect of the anthropologist's view were taken at face value, it would mean that museums would consistently offer a cross-cultural view of whatever it was they were interpreting. For example, a number of proposals for the creation of exhibits and programs for the 500th anniversary of the discovery of the Americas featured contrasting viewpoints of the significance of this event. Interpreting the significance of Columbus' "discovery" varies wildly depending on whether it is done from a European or Native American point of view. Indeed, AmerIndians maintain that they knew they were here all along, making the whole notion of "discovery" suspect and perhaps ethnocentric as well. A truly comparative approach to the examination of European-AmerIndian contact might focus on, for example, the similarities and differences between the settlement of South Africa by the Dutch and the settlement of the Americas by the French, English, or Spanish. Such a comparison would be fascinating, if only because it would draw attention to the similarities and differences between the AmerIndian and Black South African experiences.

In a less literal vein, however, offering a comparative perspective featuring multiple points of view might serve our audience's interests better than a more singular approach. An excellent example is provided by the Smithsonian's interactive videodisc on the tropical rain forest created to travel with the "Tropical Rain Forests: A Disappearing Treasure" exhibit. This disc provides the visitor with an opportunity to solicit opinions from a variety of sources on whether a hypothetical road should be cut through the Amazonian rain forest. The viewpoints of natives are contrasted with those of settlers, government officials, conservationists, and so on.

A similar approach is used in the Interactive Videodisc Science Consortium's (IVSC) "Earth Over Time" disc. In this disc the question turns on how a small community should respond to its rapidly eroding beach front. Six different people advocate six different responses (plant beach grass, build a breakwater, pump in sand, move the threatened homes back, and so on). The viewer is encouraged to see that there are multiple

perspectives on a given issue, and as a consequence can acquire a deeper understanding.

The second aspect of the anthropological perspective concerns taking on a diachronic point of view. If museum professionals were to adopt this as a part of our basic world view, we would consistently attempt to use the past to understand the present and project ourselves into the future. At the St. Louis Science Center we are creating a gallery called Altered States that shows how the environment of our bi-state region has changed over time. St. Louis was once covered by a vast shallow sea; it was a tropical forest and, much later, a tundra. The gallery goes on to illustrate how humans, with our technology, are causing great changes to our present-day environment. Finally, the gallery looks at what our environment might be like in the future if we continue in the current vein. Similarly, I recently learned of a major gallery that is planned for the Atlanta Historical Society that also promises to do an excellent job of showing how Atlanta's history helps explain why the city is the way it is today and why it faces specific challenges for the future.

The third major component of the anthropological perspective is that it is interdisciplinary in character. If taken at face value this would mean, for example, that science museums would no longer be organized around specific sciences (e.g., the Hall of Chemistry, Hall of Physics, Hall of Geology, Hall of Ichthyology, and so forth). Instead, they would bring a variety of disciplines together in order to illustrate a theme or tell a particular story. For example, I recently saw an exhibit on the peopling of Oceania. The exhibit examined three different theories on how these Pacific islands came to be inhabited and where the inhabitants may have come from. The exhibit then went on to show how linguistic evidence, archaeological evidence, botanical evidence and data from other sciences might be employed in order to shed light on this question.

The fourth component of what I am calling the anthropological perspective relates to the idea that we should not regard views different from our own as inherently wrong or evil simply because they are different. This does not mean that upon careful reflection it is not possible to judge some culturally sanctioned ideas as wrong, misdirected or evil. For example, the Field Museum has a diorama next to its Pawnee earth lodge that depicts the Morning Star Ceremony. In this ceremony a pubescent girl is stripped naked and killed as a human sacrifice. Near the diorama the Field Museum's staff has posted a letter from a representative of the National Organization for Women that takes the museum to task for interpreting (in a very graphic manner) sexual violence, concluding that the value system that the diorama represents has no place in the museum. Rather than overtly endorsing either point of view, the Field has chosen to present both.

One of the few exhibits that I am aware of that has succeeded in presenting all four of the basic elements of the anthropologist's world view was a travelling exhibit entitled *Wolves and Humans*. Produced by the

Science Museum of Minnesota in 1983, this exhibit was cross-cultural in that it examined the differing ideas about wolves from AmerIndian cultures, European cultures, and a variety of other societies. It took a diachronic perspective, examining both the evolution and development of wolves as a species as well as the early and recent history of human attitudes toward wolves. The exhibit brought together perspectives from literature, mythology, biology, psychology, ethology, ethnography and a host of other disciplines and sciences in an effort to help us discover more about our powerful fascination for these amazing animals. Finally, through the use of video, the exhibit gave us a glimpse of the values, beliefs and attitudes held by a variety of different people in Minnesota today. This was done in a sensitive way and the presentation technique clearly did not attempt to bias visitors in terms of their reactions to what were often diametrically opposed points of view.

I believe that these four ideas can be applied to both exhibits and programs in museums. They certainly are not all relevant in every context, but taken together they can help us to plan and evaluate culturally rich exhibits and programs.

An Example of the Anthropological Perspective: Socialization

Anthropologists will tell you that every culture is faced with the task of educating its young. All children come into the world with an enormous amount of learning that must be accomplished before they can survive on their own. While humans have a lot to learn about the world around them in general terms, they must also be socialized or enculturated. They must be inculcated with the norms, values, attitudes, beliefs, and ideas – in short, the characteristic world view – of the social group of which they are a part. Much of this learning takes place in the context of the family and is best described as socialization – the processes by which individuals selectively acquire the skills, knowledge, attitudes, values and motives current in the groups of which they are (or will be) a member (Sewell, 1969).

While all cultures undertake this process of education somewhat differently, the learning that takes place is universally accomplished in three basic ways (e.g., Fried, 1967): (a) situational learning (for example, when a child touches a hot stove); (b) social learning (for example, when a child watches his father touch a hot stove and learns directly from observing the father's reactions); and (c) symbolic learning (when the father explains that there is a hot stove in the next room and the child shouldn't touch it).

Socialization, in the context of the family, mixes all three types of learning. Furthermore, their relative importance varies according to circumstances such as the age of the learner. Very young children learn a great deal about the world through direct experience, or situational learning, but every parent has wanted to say, "Do as I say, not as I do!" at some point

during their child's life (vivid testimony to the power of social learning). As children grow older the relative importance of symbolic learning emerges as paramount.

Socialization experiences shape the individual for life. Many museums seem to recognize and acknowledge the important role that they can play in the socialization process and are designed to facilitate this process, particularly in the family context. Yet, I believe that all too many museum professionals are unaware of the role that institutions can and should play in the socialization process. Museums should take advantage of the proclivity of young people to engage in situational learning. This means that we should provide learning situations that allow for direct exposure to the "real thing" (the primary object) and provide for "learning by doing" (the primary experience). In order to effectively reach certain segments of the museum audience, we must also provide multi-sensory learning experiences. If we want older visitors to recapture the excitement and wonder of learning as a child we should create situational learning experiences geared more specifically to them.

Another characteristic of socialization is that the learning, particularly in the family context, is highly diffuse; it is on-going, but very much unstructured and unfocused. For example, when my son recently told his first outright intentional lie we viewed it as an opportunity to explore for the first time (at least in any "formal" way) the moral aspects of truth-telling. What we discovered, however, is that my son had already learned a good deal about lying without ever having the benefit of a structured lesson from me. He knew about good lies and he knew about lying for the greater good. He had not really sorted out when it was appropriate to do what, but he was learning how to apply his general notions about lying to specific situations. In a related way, learning in the context of the family is highly generalized. Individuals come to acquire a complex of generalized values, beliefs and attitudes. These generalized values are then applied to specific situations.

In light of the fact that individuals in our culture are imbued with very generalized, diffuse values, a key potential role for museums in our society is to help our visitors connect their generalized values to specific issues. Just as my son has some very generalized notions about telling the truth he also has or is developing notions about his responsibility (or lack thereof) to care for the natural environment and about the sanctity of life. Some day he will have to bring these generalized notions to bear on specific issues. He and other members of our society will face questions such as, "Should we renew the environmental Super Fund?" or "Should we allow individuals on life-support the unequivocal right to die?" Connecting generalized values to specific issues could take place in any kind of museum but should be an especially key aspect of the exhibits and programs in science museums. Scientific and technological change continues to result in the creation of pressing new ethical issues. Science alone cannot address these issues.

Their resolution calls for the application of our generalized values, beliefs and attitudes in a cogent and sensitive way.

There are other characteristics of learning in the family context that transfer easily to the museum context. For example, learning in the family context is self-directed. It is task or problem-oriented and relies, to a significant degree, on internal motivation and self-assessment. One cannot force learning in the family context – it is voluntary and self-paced. All of these characteristics are typical of the museum context and contrast vividly with the formal educational system.

Finally, learning in the context of the family is highly reciprocal. Sometimes I think that I have learned as much from raising my son as he has learned from me. By way of comparison, museums would do well if they could begin to learn as much from their visitors as they claim to teach them.

If socialization were a "perfect" process, people would grow up looking at the world exactly as their parents did, and exactly as their parents before them. We know, however, that this does not happen. The socialization process is not exact – cultures do change. As Harris (1971) points out, the rate of cultural innovation and nonreplication is increasing. This is especially alarming to adults who were programmed to expect crossgenerational continuity (p. 139). A related area in which anthropological theory can inform museum analysis and design relates to museums as agents of cultural stability and as agents of cultural change. I would guess that most museum professionals view museums as agents of stability. Museums set archetypal standards (thus the notion of the "type specimen" or the notion of "museum quality"). While fads come and go, museums present to the public what is most generally recognized as the accepted truth. We see museums as providing what anthropologists might call an intellectual baseline. But if I might be permitted another personal view, I feel that museums have not been nearly so effective in their potential role as agents of cultural change as they have in their role as agents of cultural stability.

Orientation and Methodology

Over and above the commonality between anthropology and museology in terms of what the two disciplines look at, there is also a similarity in terms of how they look at what they look at. The most significant area of overlap is in the area of what I have called orientation. Anthropologists study the vast inner mental world of thought and feeling, what I referred to earlier as "what goes on in people's heads." But anthropologists also study behavioral activities and events — what actually happens or what people actually do. Some anthropologists study one to the virtual exclusion of the other, and others study both at the same time. There is a perpetual debate

within anthropology as to the relative importance of these two modes of inquiry.

Museum science shares this two-fold orientation, although until very recently much more consideration has been paid to etic or behavioral concerns. For example, measuring station time, attracting power, or the holding power of an exhibit are all based on etic or behavioral indices. In fact, all time/motion studies constitute good examples of etic analysis. On the other hand, museum science is certainly interested in what people are thinking about or learning as they stand in front of an exhibition or sit through a program. For this reason, we have pre- and post-visit tests designed to elicit what people have learned in terms of content, acquired as process skills, or how they have changed their attitudes. These modes of inquiry are emic in character.

As I have discussed elsewhere (Bonner, 1989), the recent history of research and evaluation in the museum setting has shown a tendency toward the etic analysis. That trend is reversing, which would be a welcome change were it to occur in a reasoned fashion. History reveals, however, that when paradigms change, practitioners characteristically over-react. Usually a small but highly vocal cadre of individuals push for a radical reform, stating their position in such an extreme fashion that they wind up advocating "throwing out the baby with the bath water."

It is certainly true that: (a) a combination of emic and etic analyses will yield a much more complete and revealing description of the effect of museums on visitors; and (b) that the emic analysis performed thus far in the museum context has been weak. We really don't know much about the subtle long-term and short-term effect of museums on the thoughts, beliefs, emotions, values or attitudes of different segments of our audience. Nor are we likely ever to find out if we continue as we have to date. An effective emic analysis would look a lot more like an ethnography than it would a survey. The truth of the matter is we haven't done many surveys, much less ethnographies. Researchers would have to spend a great deal of time with a small group of people prior to a visit, during a visit, and after a visit (in some cases, long after a visit) before they would begin to feel competent to describe the cognitive and/or emotional impact of a museum visit on even a small, highly homogeneous group of people. Given the incredible diversity of museum audiences, a thorough view would require the infusion of considerable resources. On the other hand, behavioral scientists have given us powerful insights into the thoughts and feelings of such diverse groups of people as high school students (Wolcott, 1975), drunks (Spradley, 1970), executives (Whyte, 1957), people who eat in fast food restaurants (Kottak, 1978), and visitors to Disneyland (Kottak, 1982) and it seems clear that the same thing could be accomplished for museum-goers.

Conclusions

This chapter has attempted to show how anthropology can inform museology. I began by looking at the anthropological viewpoint writ large, and offered some specific examples of how that viewpoint could affect the design and assessment of specific exhibits and programs. Adopting this perspective would affect museums in several ways. Because the anthropological perspective encourages comparative analysis, it might lead to a more pluralistic orientation in our exhibits and programs. Certainly its use would encourage a more holistic, interdisciplinary approach to interpretation, along with an increased tendency to view phenomena over time as opposed to viewing them at one point in time. Finally, it might encourage the development of exhibits and programs that are at once value-focused and bias free (an effort that is certainly possible to strive toward, but perhaps impossible to attain).

I next examined how a specific body of theory, this one relating to how individuals are socialized or enculturated, could be applied in the museum context. This theory was chosen from among a number of areas of interest to anthropologists that could be applied in the museum context. Certainly other subject-specific bodies of theory in anthropology could have a great deal of impact as well.

Finally, this chapter briefly examined orientation and methodology of museology and anthropology. I noted that there has been a long-standing debate in anthropology on the relative importance of emic and etic analysis (for example, see Berreman, 1966). It is important to bring both types of analysis to bear in order to achieve a complete understanding of the significance of museums in the lives of our visitors. In closing, I believe it is possible to design museum exhibits and programs that meet the needs and expectations of our audience and to assess those programs in a holistic manner. Anthropological theories and methods can help us to do both.

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