

Audience Research and the Museum Experience as Social Practice

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ABSTRACT Museum use is an inherently dialogic and social practice—sets of actions and cognitive processes that are enacted in response to, and within, specific socio-cultural contexts and within specific social relationships. By studying those practices, visitor research can tell us a great deal about how users operationalize the communicatory function of the museum. Studies that investigate how visitors interact with each other, use the interpretive tools of the museum, engage socially with their peers, or operate as groups within the exhibitions, are illustrative of these practices. Audience research may also afford insight into the contexts for user practice. Importantly, visitor research is an active component of the museum process, as it engages the audience directly and incorporates their views into the practices of museums.

KEY WORDS: Visitor studies, Museum use, Audience research, Social practice, Dialogic inquiry

Introduction

There is general recognition among museum practitioners that museum use is a social experience. A large proportion of visitors come in pairs or in small groups, and for these visitors, interaction with their companions is an important aspect of their museum experience. Marketing efforts are organized according to perceptions of "typical" audience segments, public programs are developed for specific audience groups, guided tours are given, etc. This recognition of a social museum experience is often overlaid onto a perception of communication or learning as the independent effort of individuals, with the concomitant view that the museum speaks to the visitor through the frameworks of objects, physical presentation, text, etc., and that the visitor responds perceptually, reflectively, and emotionally.

While many museum specialists recognize visitation as a social activity, not as widely recognized is that every act of museum use proceeds within complex—extensive and diverse—cultural matrices created by and comprising the users' social practices. By social practice is meant that our actions and thoughts are not devised in isolation, but are enacted in response to, and within, sociocultural contexts as components of various social relationships (Geertz 1973; Wertsch 1985). The importance of these social practices extends beyond the physical results of collaborative acts. Writing 70 years ago, the Russian psychologist, Lev Vygotsky, argued that all higher mental processes are internalized from social practice; that personal development and acquisition of knowledge "presupposes a specific social nature" (Vygotsky 1978, 88), and that as "humans introduce artificial stimuli; they signify behavior and with the

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help of signs create new connections in the brain that constitute external influence" (Vygotsky 1960, 111–112, cited in Wertsch 1985, 91). This process is fundamentally dialogic: initially through interactions with more experienced persons, and subsequently through internalized dialogue that draws on, or re-creates, alternative perspectives (Vygotsky 1986).

In recent decades, a rediscovery of Vygotsky's research regarding the relationship between social practice and semiotic mediation has exerted an important influence on psychology (Wertsch 1980, 1985, 1991; Shotter 1989, 1993; Wertsch and Tulviste 1992; Duncan 1995; Fernyhough 1996, 2004, 2007), anthropology (Goodenough 1990; Tomasello and Rakoczy 2003; Tomasello et al. 2005), linguistics (Schieffelin and Ochs 1986), and in some quarters of education theory and practice (Resnick and Nelson-LeGall 1997; Wells 1999; Haenen et al. 2003; Schmittau 2003). However, mainstream learning theory and pedagogy, especially in the United States, remain centered on concepts of individual "intelligence" (James 1904, 1905; Thorndike 1926; Dewey 1933; see also Gould 1981 for an important critique) and the "personal" construction of knowledge, including among museum users (Falk and Dierking 1992; Davis and Gardner 1996; Hein 1998; Anderson, Lucas and Ginns 2003).

In addition to explaining the mediational practices that comprise museum use, the further theoretical importance of Vygotsky to the present discussion is that, essentially, museums are keepers and interpreters of signs and symbolizations created through the social practices of art, history, science, etc. In that spirit, this paper is an argument for recognizing that the communicatory processes of museums are operationalized through users' social practice, which is revealed both explicitly and inferentially through audience research and program evaluation.

The Study of Visitors

It is increasingly agreed that visitor studies are important to understanding how the museum communicates in specific ways. Funding organizations, for example, typically require summative studies of how a project affects its intended audience. What is less frequently explored through research is how museums exert influence as sociocultural agents, less overtly, but perhaps more extensively throughout society. Within the museum sector, the processes of evaluation and audience research most often describe investigations centered on current operations. For example, Bicknell describes research as that which "[helps to] identify characteristics unique to a particular audience, or segment of the audience that can have a lasting effect on visiting" (Bicknell 1999, 282); Swift values research for "addressing broad, long-term questions regarding the relationship between museums and their users" (Swift 2001, 36). Even so, both types of investigation can contribute to understanding museum use within the larger sociocultural context.

Many, perhaps most, museum audience investigations are conducted with the specific intent to survey the attitudes or understandings that visitors may have about specific topics, but not necessarily how those attitudes have been formed. Broader demographic studies that attempt to measure the performance of the museum sector (Martin 2003) do not often inquire about specific sociocultural effects that museums may have, or how museum use fits within users' cultural repertoires. An evaluation is

often conducted at the request of external stakeholders who are interested in demonstrable proof of the results (i.e. success) of a project. Audience research, broadly speaking, is often engaged to describe existing audiences and how better to market the museum to these audiences. These are both important categories of investigation.

However, sociocultural investigations also hold the potential of illuminating the intensive and extensive ways that museums are used. Regardless of the initial premise, much existing research can provide insight into the sociocultural demographics of museum users, the social interactions that comprise museum use, and the sociocultural specificities of structured or informal learning activity, as well as outline congruent visitor attitudes and understandings. This paper will review a selection of studies and findings to illustrate how that may be so.

Demographic Implications

Although limited in depth, quantitative survey data may suggest certain cultural patterns. For example, the periodic surveys conducted for the National Endowment for the Arts provide demographic snapshots of museum attendees in the United States. These surveys tell us that 26.5 per cent of adults visit a museum each year, and that most of those visitors are Euro-American (81.2 per cent), with an annual income above \$50,000 (61.8 per cent), and with some type (79 per cent) of post-secondary (e.g. college) education (Bradshaw and Nichols 2004). Similarly, research conducted in 1999 for Resource in the United Kingdom found that 28 per cent of British adults visited a museum or gallery during the prior year. Those respondents were predominantly 'White-European' (94 per cent), with 36 per cent from the 'AB' social strata (higher and intermediate managerial/professional) and another 30 per cent from the 'C1' social strata (junior managerial/professional) (MORI 2001).

These profiles describe visitors mainly drawn from upper-income social strata and who have participated in the formal enculturation of post-secondary education. The profiles also suggest that museum experiences are valued by sections of society that may share—ideologically, materially, and culturally—in the dominant social relationships of stratified society, and find in the museum various narratives that culturally and ideologically support those relationships. The museum visit may build on, or reinforce, these overarching "prior experiences." But in order to better understand these connections, more fully qualitative forms of investigation, not used in the MORI, NEA or NSF studies, are required. Hood (1981, 1983, 1993) and DiMaggio (1996) have discussed some of the sociocultural characteristics of museum users in the USA. The significance of audience sociocultural and ideological qualities in other societies has also been examined in studies by Kirchberg (1996) regarding users in Germany, Lin (2006) regarding users in Taiwan, and Gaav and Potapova (1996) regarding users in Russia.

Dialogic Practices

Museums use is very often a social experience (McManus 1987, 1988; Falk and Dierking 1992; Litwak 1993; Perry 1993). Not only do many visitors come to the

museum in pairs or as part of a small group, but they also continue their visit as a shared experience with at least some members of their group. Studies of science and natural history museum users, in particular, have documented different kinds of visitor behaviors, and are instructive regarding the mediational functions of those museums.

Crowley and colleagues have studied the learning strategies of children, including within the context of science museums, and have demonstrated that explanation is significantly important to children for developing new problem-solving strategies (Crowley and Siegler 1999). Likewise, parent-child dialogues "provide an opportunity for children to learn factual scientific information and to practice scientific reasoning, but they also provide an opportunity for children to participate in a culture of learning about science" and potentially "form an identity as someone who is competent in science" (Crowley et al. 2001b, 730–731). As these studies point out, the impressions gained from these types of museum experiences are not so much memories of individual facts, as they are contributions to the growing understanding of concepts and confidence in one's ability to engage in more complex analysis and reasoning.

Ash (2003, 2004) also studied family groups in museums and found that such visits comprised a sequence of dialogic segments that engaged the group. The members of the ensemble "hold information, revisit it, challenge it, and offer it at opportunistic moments" (Ash 2003, 157) to each other in conversation. She also notes, "exhibit designers might expect understanding to arise from within a single exhibit; instead, these [dialogic segments] families collected complex information across exhibits and over time. They also identified and weighed the role of the speaker as well as the reasonableness of the argument" (Ibid, 157–158).

Ash and Crowley both found this dialogic activity included interrogating the museum, either by way of interpretive graphics or museum staff. Thus, "the family was pulling together information to make cognitive leaps into further complexity ... these leaps relied on the funds of experience that members brought with them, complex and generative content, mediation of several kinds, as well as strategies for meaning-making" (Ash 2004, 880). Ash notes that the interrogatory process can be obstructed by the mediational language the museum uses in its interpretive material, and notes "mediation is most productive when the learner is 'just' ready to learn new material, while simultaneously being offered material that encourages more complex ways of talking, acting, and understanding" (Ibid, 865).

Just as the dialogic process can enable children to participate in a culture of learning about science, withholding it may be seen as detrimental to the development of that participation. Crowley et al. (2001a) have observed, disturbingly, that some parents explain more often to boys than to girls during shared scientific thinking. Similarly, as the study by Patterson (2007) indicates, parents in parent-child dyads are often able to redirect or truncate inquiry so that it conforms to their own "comfort level" and worldview. Suppressing conversation may have long-term, enculturating consequences since, as other investigators have noted and many professional scientists have recalled anecdotally, museum exposures are important stimulants to developing lifelong interests in science (COSMOS 1998).

As Ash observes, "dialogic inquiry allows content to be layered progressively, so that participants recognize the understanding gained as superior to their previous understandings" (Ash 2004, 862). This, she compares to knowledge formation generally, such as "scientific discourse [which] is also discontinuous, including events over time, rather than a linear sequence" (Ibid).

Thus, research into the dialogic process of the museum visit is not only essential to developing specific museum communication (exhibitions and public programs), accessibility and inclusion, but it also informs a broader understanding of developmental psychology and how we acquire knowledge.

Structured User Practice

As distinct from recreational visitation, school groups come to the museum as part of a structured learning experience. In most instances, a museum field trip is justified by its relevance to specific curriculum or educational goals. The museum visit may be part of a planned sequence of teaching events that combine the experience of the museum with further instruction in the classroom. School groups also constitute a significant number of visitors, and school support is a community expectation of many museums.

There is a growing body of research regarding the social dynamics of these types of visits and the characteristics that distinguish school groups from other audience types. In particular, Cox-Petersen et al. (2003) and Kisiel (2005, 2006) have investigated teacher-student audiences in Los Angles; Griffin (2004) and Griffin and Symington (1997) have written about school groups in Sydney; Gilbert and Priest (1997) have studied students at the Science Museum in London; and Jarvis and Pell (2005) have studied school groups at the National Space Centre in Leicester. This combined research provides a wealth of information to inform our understanding of these audiences and their specific use of museums.

Griffin and Symington have reported on task-oriented field trips by school groups in Sydney. In that study, "completion of the museum worksheets loomed large as the ultimate goal for teachers" but "only half of the teachers were able to give a purpose that could be considered related to the students' learning of content or skills" (Griffin and Symington 1997, 768). Furthermore, "(if) the teacher had no clear goals or expectations, the students expectations and general behavior reflected this" (Ibid, 774).

Kisiel's study at the Los Angeles County Museum of Natural History likewise found that "more often, teachers examined in these cases had undefined action plans ... having only thought about their plan of action during the bus ride or upon entry to the museum that morning" (Kisiel 2006, 12). Storksdieck (2001) also reported that teachers were unaware of their role in shaping students' fieldtrip experience. However, structure in itself is not necessarily helpful. Griffin noted that a field trip focused on worksheets "dampen[ed] motivation [and] reduce[d] opportunities for linking experiences with prior knowledge" (Griffin 2004, S62).

This research, while revealing specific programmatic shortcomings, also suggests the instrumental role that teachers or other experienced group members play in promoting dialogue within the group. For example, Gilbert and Priest studied grade 4 students before, during, and after their visit to the *Food for Thought: The Sainsbury Gallery* exhibition at the Science Museum, with specific interest in the mental models students developed during these group interactions. The class visit was organized

into small groups of pupils accompanied by an adult (e.g. teacher, education officer, explainer), who engaged the students in dialogue when necessary. Overall, however, the interactions of the students amongst themselves were the essential characteristic, as the following transcript illustrates ($P_{1,2,3,4}$ = pupils; E = explainer):

P₁: It's really hard work; you've got to do it fast.

P₂: It's like an exercise machine.

P₃: You have to use the wooden bit sticking up, a handle, really quickly—it's just like an exercise machine for your hands.

E: Why do you use exercise machines?

P₄: To build up muscles and make you fit.

E: What do you need to do that?

P₄: Energy.

E: So you need energy to turn it and make flour.

P₄: Oh I see —.

The explainer moved away, leaving the pupils looking at the amount of flour produced at different speeds of mill rotation. A discourse about energy investment in food production was established. (Gilbert and Priest 1997, 755–756)

In a similar vein, a study of student visits in Sydney and Melbourne monitored discussion among students by way of tape recorders and lapel microphones. That analysis showed that "when moving freely the students are conducting learning-related conversations for over 80% of their time" (Griffin, Meehan, and Jay 2003, cited in Griffin 2004, S62). Furthermore, their study found that much of this interchange took place apart from specific exhibits. Dialogues in front of exhibits took the form of drawing friends' attention to specific displays and commenting on them. Both types of experience suggest the museum visit as a continuum of knowledge-sharing interactions along the lines described by Ash (2004).

As the Science Museum study suggests, the roles of more experienced group members are very influential, and yet appear subtle as they prompt internal dialogue. What is clear is that the members of these ensembles rely on dialogue with other members of the group to form and confirm actions, observations and reflections.

Shared Intelligibility

In Hooper-Greenhill's discussion of education, communication and interpretation within the museum, she argues that "people are likely to see only that which they can go some way towards making intelligible. Without appropriate strategies of intelligibility, the collections appear (and indeed are) meaningless" (Hooper-Greenhill 1999, 14). Apart from pupils in organized field trips, museum visiting is a self-selecting activity chosen by those who have formed, in whatever way, some such "strategy of intelligibility" regarding the objects or stories they expect to find. The fact that museum organizations mediate the interpretation of objects, events or phenomenon demonstrates that this "intelligibility" has a social character, and that it is cultural and shared with others.

Understanding audience attitudes, understandings and intentions is consequently very important for developing all modes of museum communication. Front-end and summative visitor studies may sometimes provide that information, especially if qualitative interview methods are used.

The American Museum of Natural History staged an exhibition on climate change in 1992 entitled *Global Warming: Understanding the Forecast*. An extensive summative visitor study was conducted, including 251 open-ended interviews with visitors, which provided ethnographic insight into the attitudes of some of the museum's audiences. The museum was surprised by the response to the interpretive displays:

[This exhibition is in the] future tense rather than the past tense. It's what the museum should be doing. (Adult male)

This exhibit shows that the Earth is alive. The rest of the museum has dead stuff. This is the best exhibit in the museum—glass cases haven't got the spirit. (Adult male)

Perhaps the most striking finding of this evaluation was that so many visitors thought the exhibit should have given them more information. Well over one-fourth of the respondents (29%) said that *Global Warming* was superficial, and that it should go deeper into the issues, touch on more topics or take a stronger stand. (Giusti 1993, 23–24)

These findings suggest that a significant section of the audience came seeking the museum's narrative, but concluded that their own knowledge and concerns about the subject apparently outstripped the museum's, calling into question whether the museum "had the spirit" to seriously explore topics such as global climate change.

In preparation for an exhibition about the human genome, the same museum conducted a front-end audience survey to probe for interest about that topic. This quantitative survey interviewed 208 museum visitors plus 92 middle school students, using a multiple-choice questionnaire, and revealed audience attitudes concerning society and ethics.

"The adult and [student] samples differed markedly on moral and ethical questions. [...] Twice as many adult visitors as students wanted to learn about genetic research to judge social and ethical issues" (Giusti 2000, 1). This was illustrated by responses to specific statements about genetic research. Respondents were asked "Please tell us if you agree or disagree with the following statements." Answers were sorted as indicated in Table 1.

The wide variation between adult and student responses highlights the powerful effect of maturity on visitors' ability to understand the implications of genetic research.

Only the first statement aroused strong feelings among AMNH visitors: only 9% of the AMNH visitors agreed while 83% disagreed. [Middle school] students did not appear to understand the implications of this question: 59% of them agreed. AMNH visitor responses varied with age: the youngest respondents were less concerned (1 in 2), while 85%–95% of working and

Table 1. Visitor reactions to specific statements about genetic research

Issues	% Agree		% Disagree		% Not sure	
	Student	Adult	Student	Adult	Student	Adult
Employers should be permitted to test employees to find out if they carry the gene for a serious disease such as colon cancer.	59	9	29	83	12	7
I am in favor of research that will enable scientists to clone humans.	36	22	37	63	12	15
Scientists who identify important human genes should be able to profit financially from their research.	60	48	18	27	22	25
I am concerned that genetic research will be used to justify racial or ethnic discrimination.	26	41	42	38	32	22
Genetic research should be left to the private sector (e.g. drug companies) and should not be funded by the government.	32	13	44	66	24	22
Government should fund research on genetic alteration and cloning of animals.	50	38	33	39	18	24
I am concerned that further genetic research will lead to a world in which individuals will be able to select the traits of their children.	50	67	38	20	12	14

retirement age AMNH visitors disagreed that employers should be able to test employees. (Giusti 2000, 7)

The researchers posed the questions as statements and asked if respondents agreed or disagreed. The answers given, therefore, contain some degree of ambiguity. Did the divergent responses represent divergent ethics, or different life experiences with organizational hierarchy and authority systems? To the average student respondent, "employer" may have connoted an adult as an experienced source of knowledge, whereas to the adult visitor, the concept posed in the question may evoke a different set of experiences regarding age peers in charge. In any event, these survey responses suggest that users hold socioculturally formed and divergent ethical views that, perhaps, extend beyond the subject of genomics. Evaluative studies are typically conducted with project objectives in mind, but as these examples suggest, front-end and summative studies may also uncover significant information about audience attitudes more broadly.

Dialectics of Practice

The museum is a profoundly social experience. Even when we choose to wander the galleries alone, and not interact with docents or explainers, we have situated ourselves within public exhibitions presented by collectives who intend to express socio-cultural narratives to us through objects that are also (perhaps archetypal)

social products. The research examples cited above show how multivariate any interpretation can be, precisely because museum use is a social practice. Cultural preconceptions are impressed on the museum experience from various sources, including friends, parents, curators, scholars, classmates, labels, worksheets, teachers and docents.

An understanding of this social practice within the museum sector is still perhaps rather rudimentary, and may be prejudiced as well by our own situation as members of societies and cultures that drive the codification processes—whether it is privileging boys over girls, one ethnic group over another, or one social narrative over all others. The museum audience is not a singularity. It is a diverse array of audiences, just as any modern polity is not comprised of a single culture, but of many and various cultures. Thus, a conscientious study of museum audiences is not a single study, but a series of ongoing investigations. As Macdonald (1999, 269–270) notes, "the kinds of social and cultural conceptions which people may hold are often difficult to detect because far from being 'naïve' they are embedded in everyday life and make a good deal of sense within it."

This speaks to the importance of using qualitative research as well as quantitative, demographic snapshots. However, learning from the audience is not only a matter of method, it also requires an orientation toward communication and sense-making that situates both, not as "personal" or internally initiated, but as social practices. As key constituents of museum experiences, they produce both immediate and longer-term meanings and memories for those involved. This is documented by Ash (2003) in her observations of dialogic inquiry by family groups, by the observation of Crowley et al. (2001b) of shared thinking by parent-child groups, and by the study of Gilbert and Priest (1997) of primary school students, among many others.

Resnick and Nelson-Le Gall (1997, 152–153) argue, "the dominant cultural norm in the USA is an entity theory of intelligence ... when the emphasis in the classroom or the school is on relative ability and (presumed associated) performance outcomes, and when instructional policies and practices seek to sort students by aptitude, students and teachers alike are more likely to focus on performance than on learning goals." The studies by Griffin and Symington (1997), Kisiel (2005, 2006), Cox-Petersen et al. (2003), and Jarvis and Pell (2005) also observed this cultural phenomenon. Indeed, mainstream "goals based" pedagogies suggest a significant sociocultural bias against dialogic inquiry and shared sense-making. Furthermore, the body of museum visitor research provides both a general overview and a specific insight into the social practices of knowledge formation within major social structures outside the museum, such as the school system or the family group.

Conclusion

Visitor research can tell us a great deal about how museums function in their communicatory roles and how audiences use museums. Studies that investigate how visitors interact with each other, how they use the interpretive tools of the museum, and how they engage socially with their peers or dialogue within the exhibitions—all of these illustrate the broad patterns of social practices taking place.

Research suggests that museums exert extensive and intensive influence in defining cultural norms, and this is evident in observations of family groups (Crowley et al. 2001a; Ash 2003; Patterson 2007). It also surfaces in observation of school groups (Griffin and Symington 1997; Cox-Petersen et al. 2003; Jarvis and Pell 2005; Kisiel 2005, 2006). Other aspects of the social effect are suggested by broad surveys, such as those conducted by the National Science Foundation that identify museums as regular sources of information and important stimulants to interests in science (COSMOS 1998; National Science Board 2002). This influence is also indicated in studies that, although conducted for specific program purposes, reveal audience attitudes toward broader societal issues (Giusti 2000).

Audience research enables museum staff to investigate general forms of social interaction, such as the dialogue that takes place between parent and child, between explainer and pupil, between docent and pupils, or among less experienced or more experienced peers (Gilbert and Priest 1997; Crowley et al. 2001b; Cox-Petersen et al. 2003; Ash 2003, 2004; Griffin 2004). These types of studies illustrate specific features of museum communication without losing sight of the overarching context of cognition as social practice.

Taken as a whole, the body of research suggests ways in which museum communication and the audience use of museums, as distinct activities, interact in a dialectical process that results in the social practices of enculturation and cognition. Importantly for the museum, visitor research is a component part of that process, as it engages the audience directly and feeds back these views into the communication practice. Exploring the sociocultural specifics of museum use across the spectrum of audiences can better enable practitioners to devise and implement exhibitions and programs that more fully engage those social practices.

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Note

¹ The NSB study reports "sixty-six percent of those surveyed in 2001 reported that they had visited a science or technology museum at least once during the past year, the highest level of museum attendance ever recorded by the NSF survey. Museum attendance is positively related to formal education and attentiveness to S&T." (2002, 7–55).

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