Visitors' Long-Term Memories of World Expositions

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ABSTRACT

This article reports on the outcomes of a study that investigated the nature and character of visitors' long-term memories associated with their experiences at large-scale exhibitions. The study investigated themes that characterized visitors' memories of two global exhibitions: World Expo 86, hosted in Vancouver, Canada in 1986; and World Expo 88, hosted in Brisbane, Australia in 1988. There are a few studies in the literature that have considered long-term memories associated with visits to informal learning environments, but no studies to date that have considered the impact and long-term memories associated with large-scale exhibitions such as world expositions. This study probed the long-term memories of a total of 50 visitors who attended either Expo 86 or Expo 88, through in-depth face-to-face interviews. Analysis of the interview data suggests that the key themes in memories of these events center on the social dimensions of visitors' experiences, visitors' recalled agendas at the time of the experience, and the socio-cultural identities of visitors at the time of the experience.

INTRODUCTION

Large-scale exhibitions such as world's fairs and world expositions have delighted, entertained and inspired millions of people around the world by conveying the culture, hopes and desires of people of the era, and the political voices of nations. These events present opportunities for people to explore the world outside their everyday experience and to encounter different cultures, new scientific advancements and inventions. Moreover, these events have often served as catalysts of cultural, economic and political change in the course of nations and international relations (Rydell 1993; Rydell 1984; Rydell, Findling and Pelle 2000; Rydell and Gwinn 1994). The origin of world's fairs can be traced back to the 1851 Crystal Palace Exhibition held in London; this particular fair displayed many aspects of industrialization and communicated to the world British superiority in

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mechanization. Many argue that this event was a powerful impetus in the Industrial Revolution (Rydell 1984).

The American fairs in Chicago in 1933 and in New York in 1939 were organized around themes of science and industry. Their implicit messages of the power of science and its application to industry contributed to the revolution of western thinking around the importance of science and the scientific method, and encouraged the belief that such a path would better our everyday lives, ushering in a utopian world of tomorrow (Rydell 1993). The fair of 1958 in Brussels exhibited Russia's Sputnik and communicated the power and mysteries of the atom. In 1962, the Seattle World's Fair showcased United States advances in space technology in direct answer to concerns about the need to demonstrate U.S. superiority in the field. Both the 1958 and 1962 World's Fairs were instrumental in reviving interest in improving science education in schools and universities, resulting in massively increased levels of government spending in these areas (Rydell, Findling and Pelle 2000). The fairs of the mid- to late-1980s were held in an era in which computers and computer technology were beginning to pervade the lives of people in first world countries. Expo 86, held in Vancouver, Canada, and Expo 88, held in Brisbane, Australia were organized around technology themes: Transportation and Communication and Leisure in the Age of Technology, respectively. Both expositions left a profound impact on the economics and identity-transformations of their host cities afterwards.

There have also been many historic connections between world's fair exhibits and museums. For example, the South Kensington museum complex in London—comprising the Victoria and Albert, the Science Museum and the Natural History Museum—grew out of the 1851 Crystal Palace exhibition. Many of the exhibits of the Centennial Exposition in Philadelphia in 1876 were donated to the Smithsonian Institution's National Museum (Hansen 1996). The Field Museum in Chicago was the result of the ethnographic exhibitions in the World's Columbian Exposition of 1893. Curators of the Chicago Museum of Science and Industry (MSI) helped develop the exhibits for the Hall of Science at the 1933 Century of Progress Exposition; these exhibits later became part of the MSI permanent collection (Pridmore 1996). In recent decades, the designers and design firms specializing in exhibition development for museums are also called upon to create exhibitions at world expositions.

The histories of world expositions point to the significant long-term social, political and economic impact these exhibitions have had on the nations and cities hosting these events (Rydell and Gwinn 1994). However, studies of the impact of these kinds of events on visitors' memories are surprisingly absent from the literature, and thus remain unexplored in any systematic fashion. It would seem reasonable to suggest that there are insights to be gained from such studies—insights that could prove useful as we consider the design and experiential elements of our own museum exhibitions, be they grand or small in scale.

This study seeks to address this gap by considering two significant contemporary world expositions: *Expo 86* and *Expo 88*. These two expositions have several interesting similarities that make them useful in studying visitors' memories: their close chronological positions (they were held only two years apart); their staging in culturally similar,

western, predominantly English-speaking countries (Canada and Australia); their common era (similar world-political and economic climates); their overall attendance (both attracted relatively large attendances of 22 million and 18.5 million visitors respectively); their size and scale (173 and 100 acres, respectively); and their six-month duration in their host cities: *Expo 86* ran from 02 May to 13 October 1986, and *Expo 88*: 30 from April to 30 October, 1988 (figures 1 and 2).

BACKGROUND

Although there are no studies that have systematically investigated visitor memories of world's fairs or world expositions, there are a handful of studies that have considered long-term memories of visitors' museum experiences. Falk and Dierking (1997) investigated the long-term impact of school field trips on the social, physical, and personal contexts of participants, and the subsequent understandings the experiences provided in other experiential contexts. The study employed a qualitative approach in which 128 individuals (34 fourth-year students, 48 eighth-year students, and 46 adults who were 20 years and older) were interviewed about their recollections of their school field trips to museum settings during the early years of their education. Overall, 96 percent could recall their school field trip experiences, and the majority could recall when they went, with whom they went, where they went, and three or more specific aspects of what they did. Falk and Dierking (1990) investigated the earliest childhood memories of museum visits

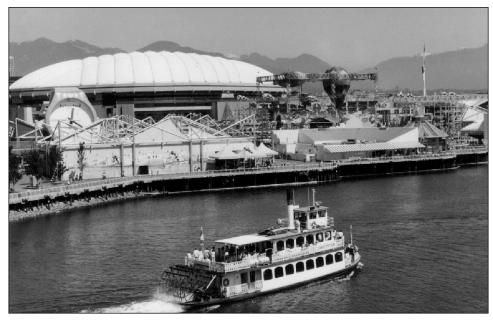


Figure 1. View of central Expo 86 site, Vancouver, Canada. Photo courtesy of Scott Goble.



Figure 2. Night view of west end of Expo 88 site, Brisbane, Australia. Photo courtesy of David Anderson.

made by 12 museum professionals who were in their 20s and 30s. The study revealed that the social dimensions of their early visits (who they were with, what they did together, and so on) were highly memorable aspects of the experiences. The study also found that memories of frequent and infrequent museum visitation varied both qualitatively and quantitatively: Those who claimed to be frequent visitors as children (attending museums more than three times per year) had significantly fewer recollections than did infrequent visitors.

Similarly, Anderson and Piscitelli (2002, 26–27) investigated the memories of 75 parents of young children concerning their own childhood memories of school field trip visits to museums. The study-focus centered on the attitudinal memories that parents held about their early museum experiences. The study revealed that more than 80 percent of the participants could describe in some detail their very early museum memories. While half of the parents described the experiences as highly positive, the other half described negative attributes: visits being too rushed; having to deal with teacher rules or teacher-directed tasks; being dull or sometimes scary experiences.

Stevenson (1991) investigated the long-term impact of visitors' interactions with hands-on exhibits at *Launch Pad* (part of the Science Museum, London). He sought to evaluate whether visitors' memories of the experience were *episodic* (autobiographical information about events in visitors' experiences of the gallery) or *semantic* (memories

resulting from some kind of cognitive processing of evidence gained from experimenting with the interactive exhibits). The study tracked 20 families within the gallery, and interviewed 109 family groups after their gallery visit, followed up with written questionnaires a few weeks after the visit; 79 individual family members were interviewed in their family group six months after the experience. The study concluded that most visitors could recall in vivid detail much of what they did and what occurred at various exhibits; furthermore, they were able to describe how they felt and what they thought about their exhibit experiences. Stevenson found that a significant number of reported memories indicated that cognitive processing led to the formation of semantic memories.

McManus (1993) investigated the recollections of 28 visitors at *Gallery 33 – A Meeting Ground of Cultures*, at the Birmingham Museum and Art Gallery, United Kingdom. The study required visitors to write a short essay of their recollections of *Gallery 33*, an average of seven months following the gallery experience. The analysis revealed that 51 percent of all memories related to objects or things in the gallery; 23 percent were concerned with episodic events or experiences related to the visit; 15 percent related to feelings and emotions about the visit; 10 percent were *summary memories* or distilled conclusions arrived at after the earlier experiences and memories had been digested.

Fivush (1983) studied the sustainability of children's memories of novel events and compared children's general event representations of "what happens" on visits to museums and "what happened" on a class visit to a museum. The outcomes of the study demonstrated that children's general event reports and their specific episodic memories remained stable over a six-week period. A measure of recall conducted a year later indicated that children recalled far less about their visit, but that there was no decrease in visual recognition memory over time. Hudson (1983) found that young children could give long and detailed accounts of novel events such as visiting Disneyland or going to the circus. Other studies suggest that the ability to recall semantic and episodic memories decreases with age (Reese, Puckett, Cohen, Jurden, and Laipple 1989; Braddeley 1999).

These studies support the notion that visitors' social contexts are important and memorable elements of their experiences in informal settings. They also point to the saliency of visitors' episodic memories of their museum visits. In addition, these studies report some divergent—and to date under-researched—themes of long-term memories of visitors' experiences in informal settings such as frequency of visitation, attitudes, and sustainability of memories. These themes are important elements in this study, in addition to other emergent thematic issues of memory that are to date not explored in the visitor studies field.

THE STUDY

From the outset, the study had three key objectives: First, to broaden current understandings of the extent of visitors' long-term memories associated with these kinds of large-scale exhibitions—events that remain salient years later. Second, to provide insights about the themes and character of the memories visitors hold of these events. Finally, the study aimed to provide insights that could prove useful for museum staff and exhibition developers to reflect on as they consider their current and future exhibitions. The purpose of this study was not to detail the lists of displays or specific physical exhibition elements that visitors were able to recall, but rather to qualitatively describe the themes of visitors' long-term memories. Furthermore, the study sought to document descriptive conceptual generalizations about these themes of memory, rather than to statistically generalize memory themes by the participants' demographic variables such as age and/or gender.

The study could most closely be characterized as a phenomenology, in that it sought to interpret the phenomenon of the nature and character of visitors' long-term memories of world expos (Holstwin and Gubrium 1998), while its theoretical location resides with the examination of declarative or explicit long-term memory, and in particular, the episodic and semantic aspects of recall (Conway 2001; Squire 1992; Squire, Knowlton and Musen 1993; Tulving 1983; Tulving and Donaldson 1972). Explicit long-term memories are considered by many researchers to comprise conscious reflection of events, defined as *episodic memories*, as well as knowledge possessed by the individual but not necessarily embedded within an experiential episode the individual can recall, defined as *semantic memories*. Gardiner makes the point that "episodic memory is identified with autonoetic consciousness, which gives rise to remembering in the sense of self-recollection in the mental re-enactment of previous events at which one was present" (2001, 11).

Fifty participants, comprising 25 who visited *Expo 86* and 25 who visited *Expo 88*, were recruited by means of an e-mail advertisement sent to various community listservs in the cities of Vancouver and Brisbane. Participants varied in the number of visits they claimed to have made to the Expos over the six-month staging of the events: from individuals who came once alone, to those who visited on more than 100 occasions. Their self-reported individual visits ranged from one hour on a given day, to a full 16-hour visitation experience. No participant in the study visited an Expo for less than a total of 12 hours. Table 1 details the distribution of participants' claimed frequency of visitation at each Expo.

The study participants ranged in age from 25 to 65 years; their ages at the time of their Expo experience ranged from 8 to 48 years. In early analysis of the interview data, it became evident that the socio-cultural identity of participants at the time of their Expo experiences was a key determinant in what they were able to recall of their experiences. In this study, socio-cultural identity is defined as the inherent set of interests, attitudes, beliefs, social roles, stage of life and behaviors that collectively define the participants at the time of

Table 1. Distribution of claim number of visits that participants claimed to have made to Expo.

No. of Visits to Expo	Expo 86	Expo 88
1–2 visits	5	2
3–7 visits	8	7
8–21 visits	7	8
> 21 visits	5	8

their Expo experiences. The age of the participants at the time of their experiences was a key, but not the sole descriptor, in defining their socio-cultural identities. Table 2 depicts the distribution of the study's participants in relation to the Expo they visited and age/socio-cultural identity at the time of their visit.

Cultural Identity/Age	Expo 86	Expo 88	Total
Child (8–12 y.o.)	5	4	9
Adolescent (14-17 y.o.)	5	6	11
Young Adult (18–27 y.o.)	9	7	16
Middle Age Adults (28–48 y.o.)	6	8	14
Total	25	25	50

Table 2. Distribution of study's participants as a function of the Exposition visited and Age/Cultural Identity at the time of their visit.

Participants were individually interviewed by the author in a face-to-face, semistructured encounter lasting approximately 45 minutes, and in some instances up to 90 minutes. Interviews of participants who visited Expo 86 took place in Vancouver, Canada in March and April 2003, while participants who visited Expo 88 were interviewed in Brisbane, Australia, in June 2003. The interviews were guided by a specially designed protocol (informed by the literature on long-term memory) that interrogated memory with the assistance of visual cues and stimulated recall. The interviews centered around seven key themes: 1) episodic memory—events, occurrences, and happenings; 2) subject/content memory—what was seen in pavilions and on display; 3) social dimensions—aspects of the social setting and group context; 4) spatial memory—layout, visual recall, scale and dimension of the physical setting(s); 5) miscellaneous sensory experiences and emotions; 6) memories of events and incidents since Expo that have caused visitors to think about their experiences at the Expo; and 7) their cultural and individual identities as they saw themselves at the time of their visits to the exposition. All interviews were video recorded and later transcribed. Interviews were qualitatively analyzed in terms of their emergent themes and characteristics (Erickson 1986) that were the subject of visitors' memories of Expo experiences.

OUTCOMES

The analysis of the data sets yielded several interesting themes of long-term memory and recall of Expo experiences. The key themes that emerge as common to both Expos are discussed with supporting quotations from participants.

Memories of the social context were the most dominant and vivid of all memories—When the data sets of the 50 participants were considered in their entirety, the most dominant and vivid recollections of their experiences centered on accounts of their social context and their social interactions. In particular, participants' most detailed and dominant recollections very frequently centered on conversations they had, and social experiences they shared, such as having dinner at a restaurant or café on the Expo site, walking together, standing in lines for pavilions and progressing through a queue together, and the episodic

script of sharing experiences. These memories were more significant than recollections of displays, exhibitions or pavilions. Overwhelmingly, participants' memories of their Expo experiences, and their attitudes toward their Expo, were highly positive.

Expo was a very social event more than anything else. . . . I didn't go there with the mission of learning anything. . . . To me it was a big event, and I wanted to experience it. I remember running into a friend, having dinner at a little café with a girlfriend, and the excitement of sharing it all. Young Adult (Female)—Expo 86.

I remember lots of conversations I had with people about the line-ups and in the line-ups and which line-up to get into, how long it would take, and the best pavilions to get into and absolutely had to see. . . . Consequently, there were a lot of conversations about what you had to get though in order to get the pavilions. Middle-aged Adult (Female)— Expo 86.

Expo... it was very much a social thing. We'd all get together on Friday nights at a friend's house and get on the train to go to Expo; there might be a big group of us. It was something to look forward to and something to do. We'd get there and all start off at the German Beer Hall and order the big Steins of beer. Young Adult (Male)—Expo 88.

Participants' long-term memories, rich in social themes and even the recalled expectation that their Expo experiences were to be of a social nature, are affirming of several studies in the context of museum-based visitor studies (Falk and Dierking 1990, 1997; McManus 1987, Rosenfeld 1980). McManus suggests that—since part of the reason for visiting a setting like a museum is the enjoyable social interaction—it may be safe to assume that visitors are not willing to "reduce their attention to, and responses to, the social climate they have brought with them when they give their attention to the exhibits, as they would be prepared to do when receiving educational communication in a more formal control environment" (McManus 1987, 263). Certainly, participants' recollections of their Expo experiences strongly affirm the importance of their social context in creating dominant memories that remain many years after their encounters of the exposition.

Visitors' ability to recall exhibitions, displays, and pavilions were highly deficient—In general, few participants (less than 20 percent) in the study could describe in any detail what was on display or in the pavilions of either Expo, despite in-depth probing during the interviews.

I can't really remember what was in those pavilions. I was trying to remember, before I came here today [for the interview] what was in those pavilions, but I really can't [remember]. Young Adult (Male)—Expo 88.

I remember Highway 86 [see figure 4], and a colorful bus that was all decorated. . . . It's weird 'cause I can remember these things better than I can remember what was in the

GM pavilion or any of the other shows [exhibitions]. Middle-aged Adult (Female)— Expo 86.

This outcome is rather intriguing, given that both expositions contained pavilions intended to impress the "world"—yet long-term memories of their content were for the most part qualitatively thin. This outcome quite possibly speaks to the nature of visitors' long-term memories of events like these, and not to a judgment that the exhibitions at these two Expos were somehow deficient or flawed. Exceptions to this widespread lack of recall were seen among those who had a specific personal interest in a particular exhibition theme or country, or a specific agenda to visit a particular pavilion or display. (Characteristics of these recalled memories will be discussed later in the paper.) Overwhelmingly, participants' memories of their Expo experiences centered on shared social, episodic and experiential scripts.¹

Richness of recall does not correlate with frequency of visitation—The richness of visitors' long-term memory—in terms of what they were able to describe as being on display at Expo—does not correlate with the number of visits they claim to have made. Generally speaking, the quality of description of visitors' accounts was not richer in detail for participants who visited often, compared with those who visited only once or a couple of times. Moreover, there appears to be no pattern when comparing the number of visits with either the quantity or quality of participants' long-term memories. It appears there are other more dominant factors at work that influence the richness of long-term memories of these experiences.

Participants at times inappropriately attributed memories from other similar life experiences to their recalled expo experiences—Some participants described episodes from experiences they had at state fairs, heritage festivals and Disneyland as part of their recalled Expo experiences.

The memories for me are a kind of melding! Because I went to Expo 98 in Lisbon. . . I went into a bunch of pavilions there as well, so when I'm thinking of the Canada pavilion with the geese and the Mounties, I'm thinking "Hmmmmm?!? Was that at Expo 86? Which Expo was that?" Young Child (Female)—Expo 86.

This outcome affirms the literature on the nature of long-term memories: They are at times not discrete recollections of past events, but rather constructions and/or reconstructions of events and other memories generated since the original episode (Braddeley 1999).

Memories were overwhelmingly dominated and mediated by the socio-cultural identity of the individual embodied at the time of the visit—Despite the fact that practically all participants in the study felt they saw many different things and had diverse experiences, they were very often unable to report experiences outside the realm of the culture that characterized who they were at the time of the visit. There appears to be strong evidence

of visitors' inability to report experiences outside the realm of their socio-cultural identity at the time. It appears conversely true that participants' socio-cultural identities permitted them to see and ultimately remember aspects of the Expos that others could not. Thus, socio-cultural identity acted as both a powerful filter and a powerful enabler of perception. Emergent from the data sets were some clear categories of memory that are distinguished by participants' socio-cultural identity:

Young Mother Culture—Participants who were young mothers at the time of their visit(s) to Expo frequently provided highly detailed accounts of their Expo experiences mediated through the cultural lenses of young mothers. These young Moms could vividly describe the washrooms, cleaning children's faces, shepherding children through crowds and onto transportation, the social dynamics of their group and conversations with others on the day(s) of their visit(s).

I most vividly remember struggling to get on and off the buses, struggling carrying the baby in the crowd. Mostly I remember the routines of cleaning up the children, trying to get into the washrooms, there were long line-ups for the washrooms.... I remember trying to wash the children at the taps. There was a mother waiting outside the washroom with me, I remember saying to her, "You know I wish they just had a hose out here so we could just hose off!" and she said, "Yeah it would be good if they had a bucket."... A lot of my memories are feeding the children, getting them off and on the buses, crowd control of this little flock of children, making sure no one got lost, making sure the children get their little passports stamped. Young Adult Female (Young Mom)—Expo 86.

Well, we enjoyed it! We took two children—Tony would have been 4, and Steven, he was 2, and a stroller. So we were fairly loaded up! And, in those days there weren't any disposables, so we had a nappy bag and I remember being very loaded up. We watched a lot of buskers, because the kids enjoyed that! We avoided any queues—the kids would get too bored waiting. We had lunch in a little playground area where the boys played for quite a while. It was a beautiful day, and quite busy! I remember a pavilion where they had a baseball pitching game, and entertaining Tony there. Young Adult Female (Young Mom)—Expo 88.

Young Moms seemed to describe their own Expo experiences in terms of the agendas and experiences of their children, or events that were of interest to their children. Seven of the nine participants categorized as Young Moms could not readily retrieve specific memories about the exhibitions, displays or pavilions. (Obviously these participants are no longer Young Moms. However, their memories—like those of other socio-cultural groups identified in this study—are encoded by and filtered though their identities at the time of the experience.)

Young Child Culture—Participants who were young children (aged 8–10) frequently reported experiences that appeared to be mediated through the common socio-cultural

experiences of children: climbing on large-scale sculptures, playing in the water sculptures, going to McDonalds, collecting pavilion stamps, going on rides, and inter-family relations both positive and negative.

These experiences included riding the monorail (figure 3), climbing on sculptures such as the Highway 86 transport sculpture (figure 4), and standing before the Australian Pavilion sign (figure 5):

I remember seeing [Highway 86] all the bikes.... I remember climbing all over the bikes and stuff, getting our picture taken.... They were really neat. I remember fighting with my brother to get on the bikes. Young Child (Female)—Expo 86.

I remember climbing and standing in the Big U of the Australian Pavilion sign and getting our pictures taken! I could see across everything . . . seeing all the people and what was going on. I remember being happy! It's funny, 'cause I think that was my most memorable experiences of Expo. Young Child (Female)—Expo 88.

Collecting stamps of the pavilions! Well that was pretty much it! My brother and I and our mates, we had this competition to see who could collect the most stamps and we counted them up at the end of the day. We didn't get a prize or anything but it was fun! Mostly it was about the family dynamic . . . the regular strains that you have when you've got six people with a baby . . . trying to coordinate who goes where . . . the big kids getting to go off with Dad, and me having to stick with the little kids and my Mum, and hav-



Figure 3. Switzerland pavilion and Expo monorail, Expo 86. *Photo courtesy of John Yanamoto*.



Figure 4. Highway 86 transport sculpture at Expo 86. Photo courtesy of John Yanamoto.

ing to do little kids things. . . . I have a memory of feeling left out. Young Child (Female)—Expo 86.

It's sad, but one of the biggest memories of Expo is McDonalds. I am from Prince George [a town in far northern British Columbia], and we traveled down with my cousin, and we were on vacation, and I just remember it as being one of the rare times that we were able to eat at McDonalds. So, every meal, that's all we wanted! We ate so much at McDonalds, the thought of it makes me sick . . . After [Expo] going to McDonalds would always make us think of Expo. Young Child (Female)—Expo 86.

author: change in wording here ok?

A study by Anderson, Piscitelli, Weier, Everett and Tayler (2002), reported similar themes pertaining to the common socio-cultural experiences of young children in museum settings. Their findings suggest that museum experiences that were connected in some way to common socio-cultural experiences of young children were later most vividly recollected of all museum experiences. In like manner, the data analysis of this study affirms the importance of matching the designed or intended experience to the socio-cultural worlds of visitors.

Adolescent Culture—Participants who were adolescent adults (aged 14–17) described experiences relevant to the socio-cultural world of teenagers. Participants would often report in detail their social agenda and social dynamic, perhaps in richer detail than any

other cohort. For example, young girls would very frequently recall "guy-watching," "hanging out with boys"—trying to figure out where relationships might progress, sharing social concerns about parents, and the interests of adolescent culture.

It [Expo] was a guy-watching thing.... We'd go and check out the guys.... So it was a social kind of experience, we'd go there and meet friends, and it was a time when it was exciting to meet guys and chat and see where it was going.... I remember hanging out with friends and stuff till late in the evening and feeling like I didn't want to go [home]. Adolescent (Female)—Expo 86.

I can remember an area on the site where kids skateboarded. I remember it because at that time that was kind of an interest to my friends and me. I can see guys on their boards, skate guys with their caps on backwards . . . milling around skateboarding and trying new tricks. . . . It's a sunny day, it's warm. There is sort of one guy that I can remember. . . . He was a skateboarder guy. . . . He had blonde streaked hair, with baggy shorts and tee-shirt. . . . When I think back on it, I think about Expo in terms of feelings of camaraderie, friendship, an emerging sense of freedom and responsibility and adulthood. Adolescent (Female)—Expo 86.

I remember the rides! I remember getting up the courage to go on the rollercoaster, and then chickening out, but then deciding to go on after seeing the girls getting on. Adolescent (Male)—Expo 88.

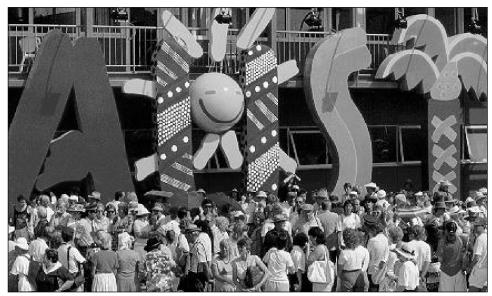


Figure 5. The Big U in the sign outside the Australian Pavilion at *Expo 88*. *Photo courtesy of David Anderson.*

This cohort frequently reported Expo experiences as a coming of age: being able to act independently, and formulating adult identity. Participants in this group were not able to retrieve memories about the exhibitions, displays, and pavilions despite acknowledging they visited many pavilions.

Specific Interest/Career Culture—Adult participants who acknowledged a specific personal interest or hobby at the time of Expo, or identified themselves through an on-site vocation, such as police officer or entertainer, dominantly mediated their experience and recall through their interest and/or vocational cultural lens to the exclusion of other experiences. Such participants may have been able to retrieve and report memories about the exhibitions, displays, and pavilions, but only within the bounds of their socio-cultural domains. For example, one 45-year-old (at the time of experience) adult male who described a keen interest in boats and things of a nautical/marine nature mediated his recall of the Expo 86 experience dominantly though the lens of these interests.

I remember the marine exhibits.... The Thai boat, various other water craft.... Spirit of Sharmanis [a boat].... Had a friend that owned that. The Ferries being run to Expo... I had friends who were captains on the ferries. The tugboat waltz on False Creek. I remember the fireworks because I am a boater—they were a bloody shambles!... You mix fireworks and boats and you've got a problem. Every night you'd have people drunk on their boats, falling off, having collisions, yelling. Mature Adult (Male)—Expo 86

A police officer who worked at *Expo 86*, policing the exhibition, dominantly mediates the experiences she had through the lens of the cultural world of a police officer:

My biggest memory was closing night, when there was close to 300,000 people on the site, and it was so close to pandemonium. We were really frightened as the police department. . . . We just didn't know what was going to happen. I had protection duties as a police officer. I remember Princess Diana fainted in one of the pavilions, which precipitated all the discussion of her bulimia disorder. Mature Adult (Female)—Expo 86

A young entertainer who had a keen interest in all things musical mediated the experience through the lens of the cultural world of entertainers:

I was involved with the Ran-Tan bush band and we used to play there. My husband was into concerts and music production. . . . We saw lots of concerts and got behind the scenes often. . . . I remember discussing the difference between Jonny Farnham [a famous Australian performer] in terms of quality of voice with shoddy PA system verses hearing him professional recorded in a sound studio. Young Adult (Female)—Expo 88.

Mature Adult Culture: The Lone Agenda-Driven Investigator—There appears to be some evidence that participants who were categorized as mature adults at the time of their Expo

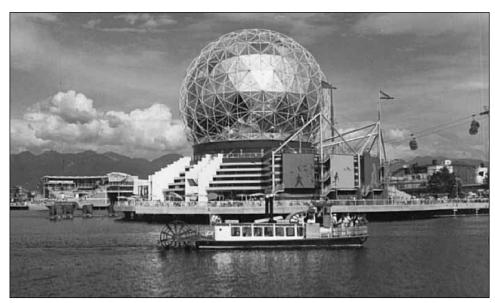


Figure 6. Expo Center at Expo 86. Photo courtesy of Jacquie Moon.

experiences were often those who could provide the most diverse and qualitatively rich recall of the exhibitions and displays compared with any other cultural group in the study. Analysis of the data sets indicated that the quality of the recall of their social context was the most impoverished of all participants in the study. These participants often reported openness, even a desire to explore the Expo experiences by themselves. The following discourse from a mature male who visited *Expo 86* typifies the memory themes of low levels of recall concerning their social set and a richness of specific memories about the exhibitions.

You'd enter Expo through the main gate and you could either turn left and walk down the midway, or you could turn right and walk to the Roundhouse, with some outdoor venues and the Kodak theater. The RCMP [Royal Canadian Mounted Police] did their musical ride with the horses. The outdoor venues, you could just walk in and see concerts, Rita McNeil or Gordon Lightfoot. Walking back down the midway, you see 70 or so pavilions. I remember going into the Russian Pavilions and seeing their displays about space and rockets just a few days after the Chernoble accident. . . . I can remember the display about the Chunnel in the UK pavilion. I remember being very interested in the model they had there and all the technical aspects of how they were going to dig it and how it was going to be built. Mature Adult (Male)—Expo 86.

Later the same participant was asked about his memories of Expo in terms of his social context and experiences:

Nothing specific comes to mind. . . . I can't remember any specific conversation while we were there . . . not even with my wife, but I am sure we must have talked about various



Figure 7. Kids on sculpture at Expo 86. Photograph courtesy of Peter Rosen.

things. It's interesting, I can't recall any interactions with people, other than a few very definite moments with my wife. I was interested in learning about the different countries, visiting the pavilions, and looking pretty carefully at the displays. Mature Adult (Male)—Expo 86.

The rich memories of things on display, and the minimal recall of social context, are not easily explained; rather, these sorts of participants seem to be characterized by a variety of traits. First, they are overwhelmingly categorized as mature adults at the time of visit. Second, they frequently described their agendas at Expo as being goal-directed towards learning, and not overtly directed at their social context (as was the case in most other socio-cultural classifications). Finally, they very often report that they experienced Expo by themselves, even if they came with other people. Thus there is a complicated combination of social orientation, agenda and age that appears to be producing these kinds of themes of memory. The work of Falk, Moussouri and Coulson (1998) supports the view that an individual's motivations and agenda for visiting a museum significantly impact how, what and how much he/she learns at the museum.

CONCLUSIONS

It is recognized that the developers and planners of exhibitions have many different goals for their visitors, and that concern and attention given to the long-term impact of such

experiences is but one of many issues that should be reasonably considered. It is also recognized that visitors to world expositions do engage in experiences differently than they do in a museum visit. The expositions' grand scale and spectacular nature often result in frequent visits to the event that may occur over many hours. Notwithstanding, the outcomes of this study provide several issues about visitors' long-term memories for contemplation by museum staff and the developers of museum-based exhibition experiences, large and small.

First, visitors' memories of social context dominated their recall of their Expo experiences—over 15 (*Expo 88*) and 17 (*Expo 86*) years after the event—more than any other encounter or episode they were able to report. In keeping with the outcomes of other studies in the visitor studies field, this conclusion highlights the importance of visitors' social context and social agenda expressed during their leisure time in settings like museums: hence the necessity for the exhibition developers to recognize and capitalize on these dimensions in their exhibition design.

Second, the long-term impact as derived from visitors' recall appears very strongly influenced by the socio-cultural identity of the visitor at the time of the experience. Indeed, it appears that visitors are very frequently not able to report experiences outside the characteristics that define their socio-cultural identities, despite knowing they had a diversity of other experiences beyond what they were able to retrieve in memory. The outcomes of the study also speak to the fact that socio-cultural identity acted as a powerful enabler, permitting visitors to see, perceive and ultimately remember aspects of the Expos that others in different cultural groups could not. In short, who you are largely determines what you are able to see and perceive, and what you ultimately recall after the experience. This important outcome points strongly to the need for exhibition developers to understand the needs and interests of their visiting audiences, and to find the links that enable audiences to connect and relate to the exhibitions they design and develop. Many visitor studies consider fundamental demographic variables such as gender, ethnicity, and age in order to describe and explore difference on other independent measures. This study gives some insights about the value of socio-cultural identity descriptors as determinants of impact. These socio-cultural identity descriptors may be considered to be derived from combinations of traditional fundamental variables (primitives) and have the potential to be more fruitful in understanding a range of dimensions of visitor impact in ways that traditional or "primitive" demographic descriptors cannot.

Third, visitors' agendas—co-mediated by their cultural identity at the time of the experience—defined the governing of their behavior and attention at the time of the experience and ultimately defined the impact of the experience in terms of recall many years later. This study presents some tantalizing glimpses into these co-mediated variables, and speaks to the need for further investigation of influence on these dimensions on memory and learning.

Fourth, in this study there appeared to be no correlation between the number of visits participants claimed to have made to Expo and the quality and quantity of their long-term memories. It would seem that there are other, more dominant factors at work

that influence the richness of visitors' long-term memories; this long-term memory theme is an area for further research and investigation.

This study provides some new and affirming insights into the nature of visitors' long-term memories of their experiences in informal settings, and in world expositions in particular. In two different expositions held in two different countries, the emergent themes of memory are strongly confirming of each other. In considering the overall outcomes of this study—its ramifications for the review and development of exhibitions large and small—it can be extrapolated that fostering rich social links to visitors' cultural identities, and incorporating visitors' agendas into the process of exhibition conceptualization and design, have the potential to foster rich long-term memories among the visitors the exhibitions serve.

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NOTE

1. Episodic script is defined as the sequential set of experiences visitors could recall of their day or night visits to Expo. Experiential scripts are defined as the descriptive nuances of individual experiences visitors could recall of their Expo visits, such as the description of having lunch at a café.