DESIGN CONSCIOUS INVESTMENT AND INTERPRETIVE DESIGN: THE CASE OF MUSEUMS, ART GALLERIES AND CULTURAL HERITAGE ATTRACTIONS

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Abstract

The significant growth in museums, galleries and cultural heritage attractions in recent years is evidence of a wider leisure industry that is replicated internationally. There has also been a number of high profile millennium projects developed in the UK as heritage cultural attractions. Inevitably this has led to increased competition to attract visitors and to embrace strategies that retain existing ones.

Families in particular are being highlighted and indeed, targeted as a new audience type. Exhibitions are designed with family activity in mind and exhibits on display increasingly designed to be interactive for all family members. The emphasis appears to be for innovative design, dynamic displays, informal learning and entertainment. The changing nature of design for interpretation especially in museums and galleries for family group activity reflects an emerging trend in design conscious investment. Yet there is little known or understood about what constitutes a family or indeed about family group activity in museums and galleries and much is supposition. Research is crucial if we are to understand and develop design solutions that will be innovative, dynamic and aid commercial competitiveness.

This paper discusses aspects of a major research project now underway in the UK that is exploring family visitors and their response to design and interpretation in leading museums and galleries. It is anticipated that the findings from this project will be of immense importance to the strategic use of design for heritage cultural attractions, to designers, clients and the briefing process.

The nature of family visitors response to exhibitions in various museums and galleries is explored in the research project as is also their response to different types of interpretive design including graphic design, interpretive panels, interactive multi-media and innovative displays. The benefits of this design research may well find an international resonance across a number of related disciplines and integrated into other initiatives.

Keywords: Design Research, Interpretive Design, Museums, Art Galleries, Family Group Visitors, Heritage Cultural Attractions

Introduction

The significant growth in museums, galleries and cultural heritage attractions in recent years is evidence of a wider culture based leisure and tourism industry that is replicated internationally. The extraordinary interest in all forms of heritage, its interpretation and display was a phenomenon of the 1980's that has showed little sign of slowing down. Even then it was recognised that heritage assets and tourism were increasingly the basis for economic prosperity (Fladmark 1994) and there is clear evidence that this remains the case today. As we entered the 21st century there was a number of high profile millennium projects developed as heritage cultural attractions in the UK, many built to complement urban regeneration projects. The UK's unique heritage has enabled designers to utilise heritage assets as the foundation for new cultural

based tourism developments that defines the spirit of its people, its community, its landscape and its distinct cultural identity. Inevitably this has led to increased competition to attract visitors and to embrace strategies that retain existing ones.

Families in particular are being highlighted and indeed, targeted as a new audience type. Exhibitions are designed with family activity in mind and exhibits on display increasingly designed to be interactive for all family members. The emphasis appears to be for innovative design, dynamic displays, informal learning and entertainment. The changing nature of design for interpretation especially in museums and galleries for family group activity reflects an emerging trend in design conscious investment. Yet there is little known or understood about what constitutes a family or indeed about family group activity in museums and galleries and much is supposition. Research is crucial if we are to understand and develop design solutions that will be innovative, dynamic and aid commercial competitiveness.

Within that framework this paper highlights both interpretative design as a plus factor that drives successful cultural attractions and also explores the nature and need of family visitors in museums and galleries. The author of this paper is leading a major AHRC funded research project in the UK which is now in its second year. One aspect of the project is to explore family visitors and their response to design and interpretation in leading museums and galleries. Although this is work in progress, this paper presents an insight into the project and to the issues of designing for families in cultural heritage attractions.

Designing for families

In recent years the successful application of multiple levels of interpretation and interaction, with learning through entertainment and exhibitions that are fun, has increasingly been recognised as a successful format by designers in museums. Although in the main creative design has been the province of large museums and major visitor attractions, art galleries are also enjoying a renaissance of new techniques in interactive design (Simpson, 2001). Many ideas have been generated by the need to attract visitors and in particular in recent years, visiting families.

Child oriented exhibitions with educational value have been in existence in America from the late 19th century but innovative design and creative planning for spaces dedicated to children has been growing in number and popularity since the mid 1980's with examples such as The Children's Own Museum in Toronto, Please Touch® in Philadelphia, The Miami Children's Museum and others worldwide such as the Vienna Children's Museum, the Samsung Children's Museum in Seoul and Eureka in the UK. (Lord 1999). The Association of Children's Museums (ACM) has over 500 registered museums with a remit that children's museums have 'the capacity to act as town squares for children and families where play inspires creativity and lifelong learning' (www.childrensmuseums.org)

The success of the creative approach in interpretation and the presentation of innovative interactive design in children's museums has led to a focused emphasis on activities and events in many other types of museums that involve all members of the family group. Often in competition with theme parks, wildlife centres and heritage attractions, museums have had to take on board new design initiatives that increase the enjoyment of families, yet still trying to impart complex information. Awards such as the annual Guardian Family Friendly Museum Award and the National Family Attraction of the Year award has ensured that cultural heritage attractions are in a very competitive environment and management teams forced to provide the investment needed

for creative design responses in exhibitions if they are to retain existing visitors and to increase their family group audience.

Winner of the Family attraction of the Year Award 2003, 'Enginuity' at Ironbridge Gorge Museum is a hands-on design and technology centre (designed by Rouse Associates) in which families have to work as a team in order to coordinate activities such as building an arch out of foam blocks or harnessing water power to generate electricity in a seven metre long simulated river valley (Rouse 2002.) Exhibitions often include sophisticated technologies such as computer and video graphics and interactive sound and light with a variety of sensory and interactive elements encouraging creative thinking and enhancing learning (Simpson 2001).

Introducing technology in museums can often be a 'difficult and delicate' matter due to the complexity of need from all the stakeholders – users, curators, designers, educators and managers (Falk and Dierking 1995) Designers must consider family group interaction in particular if they are to attract these new audience groups and provide user friendly solutions such as large screens and multi-media applications which contain a number of hand-held devices that can be used simultaneously by all members of the group (Economu 1998). Discussing objects or interactive experiences with the rest of the family is an essential element in the group dynamic.

Identifying what represents a family group

Although I have been discussing design and the family, the term 'family' is not so easy to describe in simple terms even though it is universally recognised. In fact there are numerous and often varied definitions about what constitutes a family group. The General Household Survey for example defines the family as a married or co-habiting couple' (Family Policy Studies Centre, 2001) but it is clear that this is too simplistic and does not detail the complexity and structure of contemporary family groups or describe people who may well be related by blood, marriage or adoption or indeed un-related (Blackwell, 2001). We can no longer assume that a family consists of two adults who are married and who care for their own children (Spear 2000). Today's families are often single parents families and the nuclear family is no longer representative of society as a whole (Swarbrook 2002). Beaumont (2004) describes a range of wide variations of definitions for family groups which because of the growing diversity of family types and the contemporary changes in family formation and dissolution is extremely difficult to define. She concludes a family is 'any multi-generational social group of up to 5-6 people with children that comes as a unit to a museum', thus suggesting they may or may not be related.

Family members whether related or not, have a distinct role within a group visit and as visitors to a heritage site or attraction often have a collective agenda. There is little known about the nature of family visitor's response to exhibitions in museums and galleries and even less about their response to different types of interpretive design activity.

Interpretive Design

Interpretation in cultural heritage attractions has to convey the narrative of meaning and understanding of heritage and the past and to provide a synergy between what is often a commercial activity on the one hand and a special bond between people and place, and between community and culture on the other. Although the 'very concept of interpretation is challenging' (Hawkins 2003), interpretation projects do, in fact, provide designers with 'complex, eclectic and large scale design challenges' that often can only be solved by collaboration with a range of other

design professionals (Woodward 2003). Designers provide solutions and can 'help make the narrative engaging, tangible and more explicit' (Ettema 1997) and interpretation strategies can be a powerful and effective component in the exhibition designer's tool kit. Good interpretive design is crucial not only to visitor understanding of cultural artefacts and sites but to those whose culture is represented. On the other hand, interpretation can be a poorly managed resource with schemes that manipulate the product to suit the commercial activity.

It is recognised that 'interpretation forges emotional and intellectual connections between the interests of the audience and the inherent meaning of the resource' and that interpretation 'should relate to something within the personality or experience of the visitor.' (Tilden, 1957) Thus interpretation is a two way process. Interpretation is a complex activity and new initiatives for cultural heritage attractions should not be influenced by a need to merely to tell the story of the past. As with all good interpretation it is not merely a matter of 'rummaging in the interpretive toy cupboard' (Uzzel, 1996) to find a solution. Methods may well include reconstructions, dioramas, animatronics, theme park type rides through constructed 'sets' accompanied by the sounds and smells of the past, graphic panels, audio-visual, computer terminals and interactive displays. Although interactive multi-media technology is often seen as the solution to providing new experiences and opportunities for innovative exhibition design this is not always successfully achieved. Investing in new technology without the understanding of an experienced designer and careful planning, can create a potential minefield.

Family response to interpretive design

A growing body of research has provided some insight into what families do when they visit museums although mostly drawn from USA studies. Beaumont, a leading researcher in the field in the UK, describes a taxonomy of published studies related to family group visiting at art galleries which illustrates the lack of research in this area (2004). Of existing published research there appears to be no common methodology even though studies may well have the same objectives. Studies also vary in quality and sample size (Beaumont 2004). There is a substantial body of evidence and ongoing research on individual visitors to museums and of audience development (such as Dodd and Sandwell, 1998) yet family group visitors in museums and art galleries appear to be under-represented in terms of robust academic research and publication.

Key factors for the lack of family visitor research include the length and cost of implementing useful studies and the lack of trained professionals in service who can conduct robust empirical research. Research is easier to conduct on single visitors and there is no set of formal measures for research into family group visitors. It is the collection of information from the group that is difficult to research and may well provide the answer to why there are so few studies of the family as a unit rather than as individuals. Do you ask questions of all members of the group (difficult) or balance your questionnaire in a language that will engage the group as a whole (Blackwell et al, 2001)? It is also difficult to interpret answers to surveys where there is conflicting opinion expressed by different family group members (Blackwell et al, 2001).

Thus the present research project grew out of a need to provide some answers and to shed light on this interesting aspect.

Stage 1 research project: the context

The quantitative research conducted specifically with family group visitors to 3 major museums and art galleries over this past year was specifically targeted to provide a context for the second stage design research project. We examined how we could define the term 'family' in its contemporary context; the motivation for a family visit to a museum or art gallery; the influences on that visit (eg. age, class, ethnicity, economic factors, education status) and the perception and expectations of the visit. A first year report has been produced and copies are available from the author. We are indebted to the close collaboration of foremost art galleries and museums to the project which was crucial and reflects the importance of the research context.

For research purposes we defined a family group as 'any multi-generational social group, related or un-related, of up to 5-6 people with children that comes as a unit to a museum'. Findings illustrate that the pattern of family visiting to museums and galleries is often spontaneous and not influenced by specific publicity, marketing or the internet. If a museum or gallery has a good reputation in its locality then families will use it for a leisure experience, a family outing. There was a clear willingness to participate in family activities once people were familiar and confident with the museum or art gallery. Expectations for the visit were overwhelmingly stated as the need for both a social outing that offered entertainment, and as a place that would enhance a child's learning. Family groups tended to be small with the majority comprising of 1 adult and either 1 or 2 children. In many of the groups the adult may well have been a grandparent. The main reason for visiting was based on the desire to engage in family group activities, or to see the general collection. A full breakdown of findings can be found in the year 1 report.

Present design research project

The present design research stage is qualitative and is intended to give an insight into the experience of the visit in terms of the family group member's reaction to exhibits, their attitudes to design, the family dynamics as they explore the exhibitions and their learning. We are observing and tracking the interaction, activity and behaviour of the group and their response to design and specific methods of interpretation. We are interested in whether that response is collective or individual, and dependent on the age and background of the individual. The research will focus on activity workshops for families in each of the museums and galleries and also on existing exhibitions designed specifically for family interaction. These will include an interactive gallery, a new metalwork gallery and a gallery of British Design. The main research activity will take place during July and August 2005 and additionally in October 2005, with a final report published in April 2006 and available from the author. Initial analysis of findings will be discussed at conference.

There are a number of reasons why the collection of this data is crucial. It is clear that assumptions about the nature of a family visit from a number of perspectives, including curatorial and managerial and also about the nature of appropriate design solutions, may not be accurate and that much is based on supposition. It is also clear that the dynamics of a family visit are highly complex and that as consumer units they are of critical importance (Blackwell, R et al 2001). We anticipate that families behave differently than single visitors and that they transform what is in essence a formal experience into interactive activities between adults and children based on family background, mutual interests and shared understanding, but there is no hard evidence in support of this. We are unsure on quality of the family experience and on their mode of interaction. In terms of design we are unsure if family interaction with a designed experience

stimulates creativity, learning and a more thorough understanding of complex issues. We are unclear if particular exhibition displays/ interpretive strategies work better than others or how family groups use interactive multimedia displays.

The research focuses on a number of research methodologies including observation, tracking, questionnaire surveys and focused meetings with each family group member as they explore activity and exhibitions. We will be talking in depth to all members of the family group including children and eliciting a range of information on design and the designed experience. We will also evaluate if design objectives have been met thus shedding light on the intentions of designers and the actual experience of users.

The research data will be crucial as a measure of effectiveness, as an aid to design conscious investment and will inform the design process for future exhibition planning. Exhibitions designed with families in mind, based on sound research findings rather than assumptions, will be of fundamental importance to both the design and the museum professions. The findings will also inform the design of exhibitions in the wider field of cultural heritage attractions.

If 'exhibitions are 'at best magic' then they must be attractive, hold the visitor's attention, inform and enable them to want to know more (Velarde 1988). In terms of family visitors the focus for designers is complex as the family unit is multi-dimensional with a range of demands and needs. If being a good designer is to be 'an understander of people' (Velarde 1988) then this research will be crucial to understanding the behaviours and response of family visitors in a designed environment. It is anticipated that the findings from this research will be of immense importance to the strategic use of design for heritage cultural attractions, to designers, clients and the briefing process

Conclusion

The importance of recognising the family as a distinct area for design research cannot be under estimated. Families seek destinations that satisfy the diverse needs of the group which usually includes both adults and children. As competition for visitors increases in the wide range of cultural heritage attraction available to families the more understanding we have, the better placed we are to design exhibitions and experiences that will satisfy this discerning group. Grandparents may often take a supporting role in a group visit. Often they are discerning and experienced visitors and demand not only a good day out, social interaction and quality experience for all, but also good tea-rooms, souvenir shops, toilets, site personnel and ease of parking. They may well provide additional interpretation as they reminisce about a past triggered by what they see on display.

Families do change over time and priorities change as children get older. The experiential dimension of a visit may well change in emphasis and it would seem that the tangible products of cultural heritage visiting ultimately must depend on satisfying the needs of a range of visitors (Fyall et al 2003). The central challenge in satisfying a family group of mixed ages that includes both children and adults is multidimensional. Design research strategies are therefore crucial to support the family group experience in terms of their interaction with interpretive design and exhibitions.

The family visit may well be a social experience, it may well include seeing the visit in terms of former experiences, nostalgia and memories (Uzzell and Ballantyne 1998) and indeed there are a

number of early studies that support the notion that families visit cultural attractions as a making-meaning environment (Chase 1975, Dierking 1987, 1989, Hilke and Balling 1985). But contemporary visitors will not return if the designed experience is not energising and invigorating. They may well need more than a social experience and measures are needed to clarify the distinctions of a family visit that in turn will inform the design industry and those that invest in design to aid competitiveness. In today's climate of phenomenal growth in the global tourism industry, in the need for first class design in heritage cultural attractions to ensure economic success, in supplying visitor demands for first class quality attractions, it is not difficult to highlight the need for design research and robust data on those that visit.

Bibliography

AHRC Arts and Humanities Research Council, UK

Beaumont, E (2004) An Empirical Study of Family Group Visitors to a Millennium Art Gallery in the UK, Unpublished PhD thesis, Adelphi Research Centre, University of Salford, UK

Blackwell, R et al (2001) Consumer Behaviour, Harcourt Publishers, USA

Chase, R (1975) 'Museums as a Learning Environment', Museums News, Sept-Oct pp36-43

Dierking, L (1987) 'Parent-child interactions in a free choice learning setting: an examination of attention-directing behaviours' unpublished PhD thesis, Univ of Florida

Dierking, L (1989) 'What research says to museum educators about the family museum experience' Journal of Museum Education, Spring-Summer, vol 14 (2), pp 9-11

Economu. M (1998) The Evaluation of Museum Multimedia Applications: Lessons from Research, Museum Management and Curatorship, Vol 17, No2 pp173-187

Ettema M (1997) 'Instilling Values: Design and Responsible Cultural Institutions', in Williamson, J (1997) Design and Cultural Responsibility, Cranbrook Academy of Art

Falk, J.H and Dierking, L.D (1995) The Museum Experience, Whaleback, Washington, DC

Family Policies Study Centre (2001) 'Family in Britain Report' (3), p 3

Fyall, A, Garrod, B and Leask, A (2003) Managing Visitor Attractions: New Directions, Butterworth-Heinemann, Oxford

Fladmark, M (1994) Cultural Tourism, Donhead, London

Hawkins, J (2003) in discussion with Woodward, M 2003 (see reference)

Hilke, D and Balling, J (1985) ' The family as a learning system: an observational study of families in museums' unpublished paper, Smithsonian Institution, Washington DC

Lord , G (1999) A Salute to 100 Great Years of Children's Museums, Lord Newsletter, Spring 1999

Rouse, J (2002) Rouse-Designed 'Enginuity' one of 10 Museums Honoured, http://www.jackrouse.com/

Simpson, M (2001) Interactive Art Exhibitions for Families, GEM, Group for Education in Museums, http://www.gem.org.uk

Spear, S (2000) The Changing Nature of Family Life, Unpublished PhD Thesis, Univ of Manchester, UK

Swarbrooke, J (2002) The Development and Management of Visitor Attractions, Reed Educational. Oxford

Uzzell, D and Ballantyne, R (1998) Contemporary Issues in Heritage and Environmental Interpretation, The Stationary Office, London

Velarde, G (1988) Designing Exhibitions, Design Council. London
http://www.childrensmuseums.org

Woodward, M (2003) Towards Quality Communication Design in Interpretive Settings, interpretationaustralia.asn.au