Workshop Introduction

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We are delighted to host the international workshop *Re-Thinking Technology in Museums*, made possible by the generous support of *Convivio*, the EU-sponsored Network for People-Centred Interactive Design. Over the past few years work at the Interaction Design Centre has dealt with a number of issues regarding the complex relationship between museums and galleries and interactive technologies. Whereas museums are one of the domains where the proliferation of multimedia applications has been most evident in the recent past, we felt that a number of significant issues regarding how to approach the design of museum interactives in the museum context are still open to debate and discussion. For example, how do we develop an understanding of the museum and its visitors in order to inform the design of interactives? How do we evaluate their impact? How do we ensure that the technology does not distract visitors from exploring the artefacts themselves?

The primary motivation for organising this event lies in the work that our research group has conducted in the past years regarding the design and evaluation of museum interactives and technologically-enhanced exhibits.

We have conducted feasibility studies and heuristic evaluations of more traditional museum interactives such as websites and touch-screen kiosks, showing how these latter installations can become a cause for visitor distraction when placed around exhibitis without an analysis of the spatial layout (Hertzum, 1998; Ciolfi, Bannon and Fernström, 2001).

More recently we have been involved in a major EU-funded project, SHAPE, devoted to designing and developing assemblies of hybrid, mixed-reality artefacts in museums and exploratoria\(^1\). Our centre coordinated work leading to a major interactive exhibition, “Re-Tracing the Past”, which took place at the Hunt Museum in Limerick during June 2003 (Ferris et al, 2004).

In this context we conducted in-depth studies of the behaviour and practices of both museum staff and visitors in the Hunt Museum (Ciolfi and Bannon, 2002). On the basis of our findings, we developed a series of design sensitivities to inform the development of design scenarios (Ciolfi and Bannon, 2003).

\(^{1}\) SHAPE (2001-2003) was funded by the EU IST-FET “Disappearing Computer” initiative. Partners in the SHAPE consortium were: the Royal Institute of Technology-KTH (Stockholm, Sweden), the University of Nottingham (UK), King’s College London (UK) and the University of Limerick (Ireland). For more information see: http://www.shape-dc.org.
We focused particularly on analysing aspects related to the educational impact of hands-on, interactive activities within the museum in order to design the educational content of “Re-Tracing the Past” appropriately (Hall et al. 2002; 2005).

Fig 1. “Re-Tracing the Past” at the Hunt Museum

Another major concern was understanding the qualities of the museum as a place, thus gaining insights on how the activities of visitors and staff were associated with different areas of the museum and specifically of our exhibition (Ciolfi and Bannon, 2004; 2005).

Our aim in designing “Re-Tracing the Past” was to augment, rather than replace, the ethos and existing features of the Hunt Museum, so that technology would support visitors’ experiences of the physical museum space rather than replace it with a virtual experience. The work on this particular project was also inspired by more theoretical reflections on how to understand the design for human experience being developed by other IDC members (Cooke and McCarthy, 2002; McCarthy, Wright and Cooke, 2004).

In this context, we have developed the main themes of the workshop which we are hoping to discuss during the two days.

**Workshop Themes**

This workshop will focus on a specific domain of application for the introduction of interactive technologies: museums and art galleries. Existing research discussing the role and impact of interactive technologies within this domain is mainly focused on the design of information systems that provides museum visitors with large amounts of information regarding certain museum artefacts and exhibits. The technologies that have been employed for this purpose range from touch-screen kiosks, to portable digital assistants (Abowd et al, 1997; Gabrielli, Marti and Petroni, 1999; Woodruff et al, 2002), and “ambient” technologies (Sparacino, 2002). However, this approach to designing interactive installations for museums has certain limitations. These installations can undermine people’s appreciation of the exhibits, as they are often intrusive and distracting. Also, the social interaction between visitors is not supported adequately as most of these installations support single-user interaction, and these technologies might isolate people (for example in the case of audio-guides). Finally, these installations tend to replace existing informational resources such as human guides, museum docents,
guidebooks and paper labels, although these “traditional” forms of visitor support are
informative, engaging and unobtrusive.
As we mentioned, our experience within the SHAPE Project made us focus on how to
enhance and augment, rather than replace, existing aspects of museums and exploratoria,
through the design of room-sized exhibitions that incorporate ambient and ubiquitous
technologies. SHAPE exhibitions such as “Re-Tracing the Past” had the goal of engaging
visitors in a meaningful and rewarding experience, rather than submerging them with
information and distracting them from the existing museum holdings. The overall
unifying activity that characterised the exhibition had the goal of making visitors actively
engage with the Hunt Museum in Limerick, encouraging them to reflect on aspects such
as historical interpretation and classification of museum artefacts, without replacing any
of the existing resources the museum offers. Our design process focused on
understanding experiential qualities of the museum –rather than simply visitors’ activities
or behaviours- such as the visitors’ relationships with others, with the place and the
artefacts they were invited to explore, and the museum staff and Docents’ attitudes
towards the exhibition policies, the museum holdings etc.
An increasing number of research projects dealing with the design and evaluation of
interactive museum installations is being conducted with an experiential approach in
mind (see for example Barrass, 2001; Heath at al., 2002; Rubegni, 2004). Existing
museum education literature is also focusing on the experiential nature of the museum
visit in order to provide recommendations for exhibit and workshop design (Falk and
Dierking, 1992). In this workshop we hope to discuss in further detail how the design of
interactive, non-desktop technologies can be aided by studying in depth a variety of
issues related to visitors and staff’s experience of the museum. Installations of this sort
would augment specific features of the museum in order to provide engaging and
educational activities for visitors. The workshop would be beneficial for discussing
different approaches to studying the experiential qualities of museum visits (such as
social interaction, development of a sense of place, learning and critical reflection), both
in terms of conceptual and methodological tools.
The participants will discuss novel ways of conceptually approaching the problem of
designing interactive installations within this domain, as well as examining current
methodologies adopted for the study of people’s experience of museums within several
disciplines. Practitioners and academic researchers participating in the workshop bring
together a variety of perspectives and sensibilities regarding this domain. We feel the
domain of museums and art galleries is an important one when studying how novel
technologies could impact on people’s appreciation of and engagement with cultural
heritage and material culture. From our past experience in international research projects
on this topic, we feel there is a strong need for extending current approaches to the design
of museum interactives, both from a conceptual and a methodological point of view. The
papers presented at the workshop discuss the new directions that research in this area will
take in the near future.

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**References**


