

The Dome Is Dead, Long Live The Dome!

Peter Higgins, Creative Director of Land Design Studio Ltd, was responsible for designing one of the Millennium Dome's most successful zones, the Play Zone. Here, he recounts the unfolding operational situation that pushed his creative vision towards a digital solution, and explains how this has led to further fruitful adventures in cyberspace.



For the Dome's Play Zone, Land delivered award-winning audio, visual, tactile environments through ground-breaking use of digital technology

Photograph courtesy of Land Design Studio



In the summer of 1998, with three aborted schemes behind us, hounded by inexperienced and shambolic management and pressurised by aggressive potential sponsors BSKyB, my colleagues and I at Land gathered ourselves for what would be the final push for the Play Zone at the Dome. Not long before, we had come extremely close to terminating our involvement with the project once and for all.

Whilst visiting the Lisbon Expo, I had decided with my fellow Directors Shirley and James to pull out of the venture. We toasted our confident decision at the local taverna. The next morning, having slept on the idea, I reasoned with them that maybe we should give it one last go. After all, we were being paid on a daily rate and pulling out would mean parting company with something that would be an extraordinary, seductive, publishable project. It was frustrating to think that all our good work would have been in vain. In the heat of the day, they agreed.

Right from the beginning, our zone was to be interactive – how could the Play Zone be otherwise? In the past we had fulfilled

the mantra of our museum directors to provide such devices. Usually they had been electro-mechanical and had encouraged learning through discovery and engagement. As with any new genre, museum interactivity had celebrated its birth at the San Francisco Exploratorium by merely referencing and rebuilding, without stripping back and redefining the potential and essence of what this new way of learning and inspiring might be. Anne Fahey tells us that 'we remember 90% of what we say and do and only 10% of what we read in a museum environment'.

I never thought that I would ever thank Dome operations guru Ken Robinson for anything, but he did make us think very imaginatively about how we could make an interactive environment of 1,500 square metres work for 5,000 people an hour. Cranky and utterly unachievable as it was, it did focus the mind. In fact, we worked with a realistic figure of 1,000 per hour, for which we provided an operating mechanism that was consistently ignored.

Several fundamental issues emerged. The first was that we would have to commission



installations that would be exceptionally robust, partly because of the relentless hammering that they would get from between 5,000 and 25,000 visitors per day, who would be released into the space in an arbitrary way. We also anticipated, correctly, that low levels of maintenance and staff support would hamper the Zone. Only a third of the agreed number of 20 hosts were provided by the NMEC once the Dome opened. The electromechanical solution was never to be. What about digital? Even with a lower figure of 1,000 visitors per hour, each with a dwell-time of between 30 and 40 minutes, the precise nature of participation, simplicity of interface and level of engagement forced a new definition of interactivity. We needed to construct a narrative and methodology capable of using the fascinating potential of digital technology in a playful way, where the viewers could enjoy the gameplay as much as the avatars / navigators. It was clear that the scale of presentation (4m x 3m screens) and simplicity of the play protocol would be fundamental. The Digital Playground was conceived: the

NMEC were intrigued and BSKyB were unconvinced. After all, how would it help them market digital television?

The curation and development of the installations involved an accelerated journey into the world of new media interactivity. This was supported by Gerfried Stocker and Steve Clark, with whom I undertook a worldwide quest for artists and scientists, working in an unprecedented collaborative way, to blend patterns of mind (art) with patterns of matter (science). The products of this work may be defined as audio, visual, tactile environments, which are enabled through computer processing to deliver unique manifestations in real-time, though our rigorous criteria of inclusivity and simplicity negated pieces involving, for instance, virtual reality. Our observation was that certain artists working in this new genre are committed to creating work that provides transparent technology accessible to all and not just to a gallery elite.

The final product gave us the opportunity to demonstrate the inside-out approach as a prototype of interpretive architecture,

At the new National Football Museum, Land have created an interactive, thematic gallery that draws down eight themes from the chronological story of the game
Computer images courtesy of Land Design Studio

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Slo-mo action replays of the goals and cameras positioned behind the keeper and at pitch level transform this table football exhibit at the National Football Museum
Photograph courtesy of Land Design Studio

where visitor sequencing, technical and communication needs, visitor experience, scenography and business operations are brought together within a responsive architectural structure. The Play Zone did enjoy some success with general visitor polls, and was popular with school visits, BBC Children's TV and *Tomorrow's World*, and computer and leisure publications. It also managed to link three words never before used in one sentence – 'Dome', 'content' and 'award' – when it received 'Best Entertainment Venue' from *FX* magazine.

Shirley remarks that we talk of our experience on the Dome in the same way that veterans recall World War II, but what it has done is to make us redefine our work in terms of what constitutes a real-time, real-place, real-people, real-object experience. The availability of sophisticated personal ICT and converging media means that we have to move beyond solutions based on dumb touchscreens (no matter how stylish the screen housings are), derivative AVs and clunky electromechanics; we have to avoid sinking our budgets into steel and glass presentation

formats and expensive graphic panels. And it is absolutely clear to me that if we are to find ways of inventing the 'New Museum', then websites, WAP technology and digital archiving must be used in really imaginative and holistic ways in order to capitalise most effectively on the flurry of excitement surrounding these technologies.

Our post-Dome activity has enabled us to investigate the challenge. At the National Football Museum in Preston, we have started to explore the concept of the passive / interactive installation. Responding to a didactic gallery full of elegant reportage-style graphics and real objects, we have contrasted this with an interactive, thematic gallery that draws down eight themes from the chronological story. In one case, we utilise vertical projection to track diagrammatic tactical moves alongside video footage; this may be easily stopped, started and reversed by the 'expert avatar' for the benefit of others. Another themed area enables the player to load real-cased objects onto the pages of a virtual book for closer inspection. A simple, fun piece transforms a table football game

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The Play Zone set the standard for digital exhibits at destinations such as Urbis and Think Tank
 Photograph courtesy of Land Design Studio



with slo-mo top-shot action replays of the goals, along with cameras directly behind the keeper and at pitch level – homage to the passing of *Match of the Day*.

Our plans for The Futures Gallery in Think Tank, at Birmingham Museums of Science and Discovery, have sent a shiver down the spines of our talented team of 3D architects / designers; we determined that we would create the architecture from the software to communicate the narrative (now they are learning C++ instead of downloading Napster). Information and images will be delivered on large screens formatted around the perimeter of the space. The budget will be spent on software rather than steel and glass. It is as if the walls are actually the website, with which the visitor is able to engage – and from which the visitor can download – in real space and time. Intuitive interfaces even encourage uploading onto the ubiquitous screen. The commissioning of the media designers has proved to be a complex process because of the unusual range and needs of the system. The extended hierarchy of information will

rest on the internet website, supporting the inspiration that the visitor may experience in the Gallery. The physical and virtual websites will work in a complementary way, with the latter now not just providing brochureware.

For Urbis, Museum of the Modern City, a Millennium funded project in Manchester, we are investigating entirely different applications. Aspects of social history and city development are being described in active environments, which take over where the Play Zone left off. Operating this time with sensible visitor numbers, we will be able to deliver factual information in a captivating and memorable way. A walk-in timeline and a smart city mapping mechanism are both activated by a participating navigator, who entertains a larger audience. The technology incorporates camera sensing and special dynamic hyperlinks, adapted in Macromedia Director, for a 3D sensory environmental space, rather than on the domestic 2D screen.

Installations at both Think Tank and Urbis would be able to make imaginative use of any archive data digitally sourced and recorded anywhere in the world. The sharing of this

data, which may be delivered telematically in sensory environments, opens up the prospect of museums becoming unprecedented centres of learning, entertainment and experiencing. They may link mining experiences in South Wales simultaneously with comparative stories in a Johannesburg museum.

If the blending of art and science rests in capable hands and minds, who knows, Lara Croft may ultimately be shelved as a cyberbabe who grossly misappropriated the magic and potential of an emerging technology for the sake of adolescent gratification.