

Architectures of Play: The Will to Act

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From the hidden spaces of 16th century garden grottos and follies to the 1970s' temporary event structures, the architectures of play have been designed to engage novel phenomenological and social experiences. The uncertainty of play allows us to probe new behaviours, to poke the boundaries of our subjectivity and to interact with people, things and systems in unusual and new ways. How can digital technology support these playful purposes? The Fun Palace was an early attempt to use cybernetics in order to encourage visitors to challenge their habitual behaviours. It raised a number of issues related to the design of computer-enhanced playful environments. This essay explores how contemporary projects have addressed the same problems and goals.

Playground as social toy

Theatrical director Joan Littlewood imagined the Fun Palace as a public space for critical exploration of everyday life through play. She invited architect Cedric Price to design an architecture that would encourage playful activities. His proposal had no fixed form or plan. It was a flexible frame with movable modules. Rooms, walls and walkways were to be automatically re-arranged and resources such as sound, light and humidity allocated to create different spaces and atmospheres based on visitors' desires.

Such spatial transformations were to have been enabled by a cybernetic system designed by Gordon Pask whose task was to program an environment "capable of adapting to meet the changeable needs of a human population and of encouraging human participation" (Littlewood 1968). The retrieval of information about visitors' needs was based on the incessant tracking of their activities. Visitors could perform inquiries through the Pillar of Information, the only directly addressable interface, which was proposed by artist Roy Ascott. Based on gathered information, the cybernetic system would compare people arriving to those leaving the building causing it to change its shape.

The Fun Palace, described by Price as a short-term exploratory social toy, was supposed to raise visitors' awareness about ways in which traditional architecture shapes their activities and to enable them to participate in transformation of their surroundings. By contrast, its architectural changes were based on automaticity and surveillance, allowing for minimal direct interaction from the side of the visitors. By preventing voluntary action, design choices conflicted Littlewoods original goal of fostering participation and transformative behaviour.

Voluntary action?

As in the Fun Palace, contemporary interactive environments often capture visitors' actions without their will. For example, simply stepping into the installations by Camille Utterbach triggers changes of video image (Utterbach 2007). Visitors do not take a decision to act, as their every movement activates the response of the environment. This is partially due to the difficulty of recognizing participants' will to act from the side of computer. Intention is often oversimplified as the quantity of movement: if people move more, their will to act is inferred to be stronger. This limits the potential and complexity of participants' interaction with the environment and people in it.

To allow for such complexity, Foam collective has, in its work, combined software evolution models with distributed interfaces that are embedded into visitor's garments and their surroundings. Such physical interfaces require less attention than a video screen as they distribute the loci of activity throughout the space and matter. Participants in the installations such as txOom (Foam 2002) were enabled to focus on interacting with each other and on ways in which they affect the atmosphere, through shaping the sound, tangling in textiles, swinging in the air, etc. Nonetheless, immersed in rich sonic and luminous dynamics, they sometimes had difficulties identifying the results of their

own actions. One of the participants said: "...never was I aware of altering the environment by my own actions, which was a pity" (Boxer 2002).

While oversimplified mappings between activity and spatial behaviour allow for an easy understanding of the effects of ones actions, complex systems risk confusing visitors, who may not be able to perceive a response to their actions in the myriad of environmental changes. The latter are often interpreted as automatic behaviour of the system, as they cannot be understood as linked to other activity. In this way, participants do not feel responsible for the transformations of their surroundings; rather they are mesmerized by its evolution.

Tangibility

How can we design for participants' awareness of their influence on their surroundings? In the Hinge Dimension project (Franinovic, Wilson 2007), our goal was to enable citizens to voluntarily change a physical architecture of a public location. A church was filled with large screens that could be moved around a pole acting as a hinge. Participants could arrange their surroundings in labyrinthic and chaotic fashion, or organize it in clusters or corridors. Physical changes influenced spatialized sonic and light composition that reflected the changing potential for flow in the location (clustered, directional, diagonal, etc).

The Hinge Dimension environment responded only when visitors physically grasped its architectural elements. Without their intention to transform the spatial structure, nothing happened. The direct link between visitors' actions upon the architectural elements and the resulting changes in sonic and luminous atmospheres facilitated the understanding of the interaction. Having a clear sense of their actions, some participants did not explore the atmospheric transformations over long time periods, but focused on the immediate sonic and luminous response. However, in no case was the awareness of relations between oneself, the space and others in it lost.

I would like to conclude by suggesting that the participants' awareness can be facilitated through tangible interaction. When visitors engage with physical objects they have made a decision to reach into the world and act upon it. Their responsibility increases with tangibility: Throwing a digital image of a glass has a very different effect on the world from throwing a physical glass. By raising awareness of ones action, the responsibility shifts from the automatic system to the participants. Indeed, one visitor to Hinge Dimension described the sensation of "architectural politeness" caused by large-scale interfaces that made her more attentive to the environment and others in it.

The transparent relation between action and spatial response allows us to consciously act and it might be a step towards the self-critique of individual and collective action that Littlewood was aiming for. If our goal is that of providing context for transformative social behaviour, such clarity has to be an essential part of interactive experience.

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