

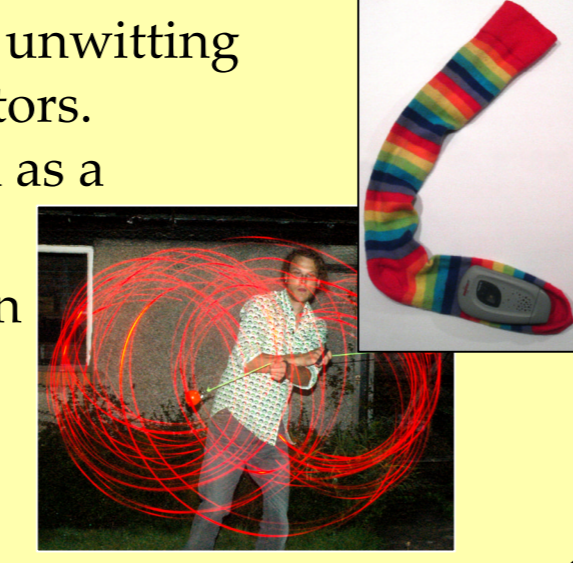
PUBLIC PERFORMANCE

Schizophrenic Cyborg



- Involves a performer with a wearable display at a social event.
- A hidden orchestrator watches, listens and modifies the display.
- Bystanders are unwitting (unaware) of the source of the activity.
- The display becomes a 'magical' way for the orchestrator to engage with the audience.

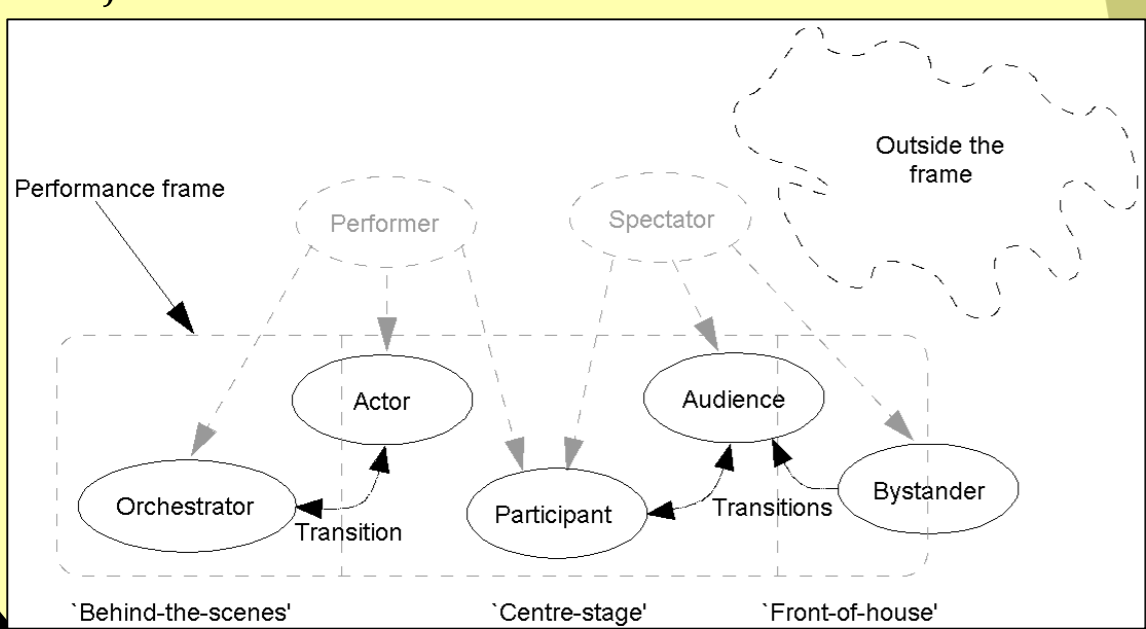
iPoi: Augmented poi



- Explores witting and unwitting interaction with spectators.
- Employs acceleration as a medium.
- Realtime visualisation and sonification.
- Multiple and mobile performers.

Interfaces for public performance

- A framework describing how a performance is 'framed' through conduct and physical objects.



- Performers construct the frame for spectators who interpret it.
- The frames subdivides, e.g., hidden behind-the-scenes work, and induction of bystanders at front-of-house.
- Moves beyond performer and spectator roles: considers bystanders, orchestrators and participants.
- Transitions between these roles.

Demonstration experiences

Thrill: Fairground Laboratory



A wireless telemetry system uses wearable technologies to capture live video, audio, heart-rate and acceleration data from riders.

The data was then streamed to large public displays and was also recorded. The technology was embedded into a live theatrical event at which riders were selected from a watching audience and their captured data was subsequently presented back to this audience and discussed by experts in medical monitoring, psychology and ride design as part of a 'Thrill evening.'



A collaboration between Brendan Walker, Equator (UCL, Nottingham and Bristol) and Health-Smart.

The MAGNA Science Adventure Centre is a massive ex-steel mill.



Enlighten at MAGNA

Six specially constructed searchlights are mounted on the railings of a large steel gantry that runs through the building, enabling visitors to point to disused steel-making machinery far away. The interface is both engaging to use but also engages spectators, attracting them to it, enabling them to learn how to operate it by watching each other.



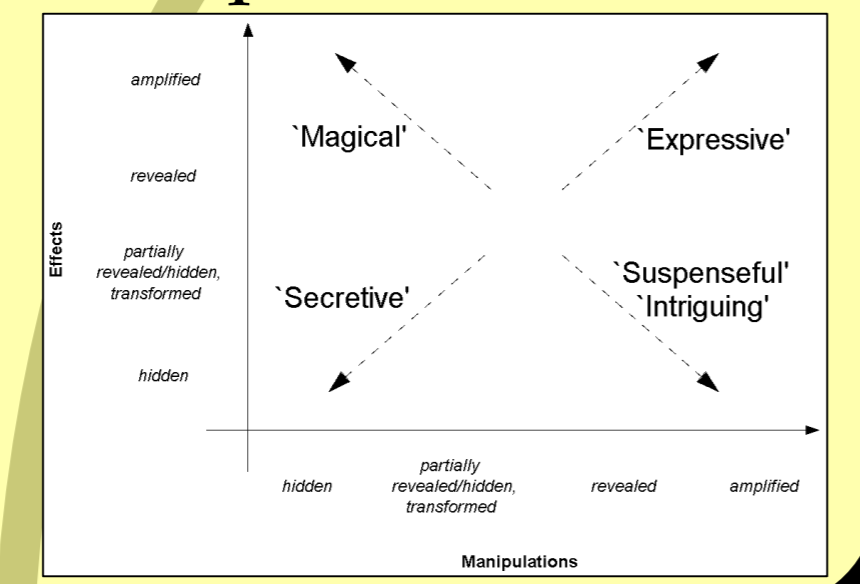
A collaboration between Equator and the MAGNA Science Adventure Centre at Rotherham with additional funding from NESTA. Enlighten at MAGNA opened to the public in November 2006.



Video cameras mounted above these installations capture images of the flashlight beams which are then processed by our software which triggers various forms of output, including audio and video displays and also special effects including a smoke machine. The project revisits the interactive flashlights technology from the Equator Devices challenge.

Designing the spectator experience

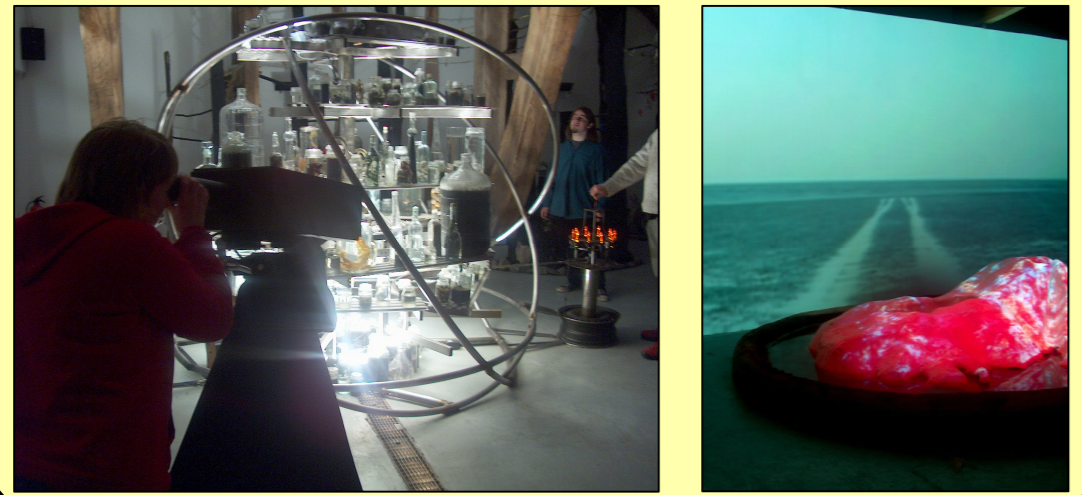
- A framework for considering a performer's interaction from the spectators' perspective.
- Manipulations of the interface and the effects of those manipulations.
- Design strategies for hiding, revealing and augmenting these manipulations and effects to the spectator.



Demonstration experiences

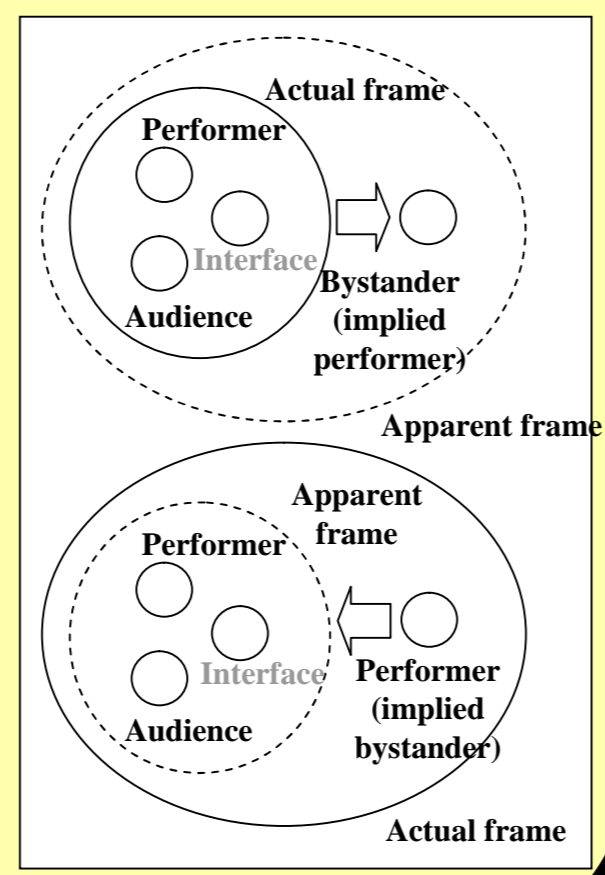
One Rock

- Augmented reality device overlays zoomable video data on large bottles.
- Transitions between bystanders and participants.
- Negotiating handover the technology.

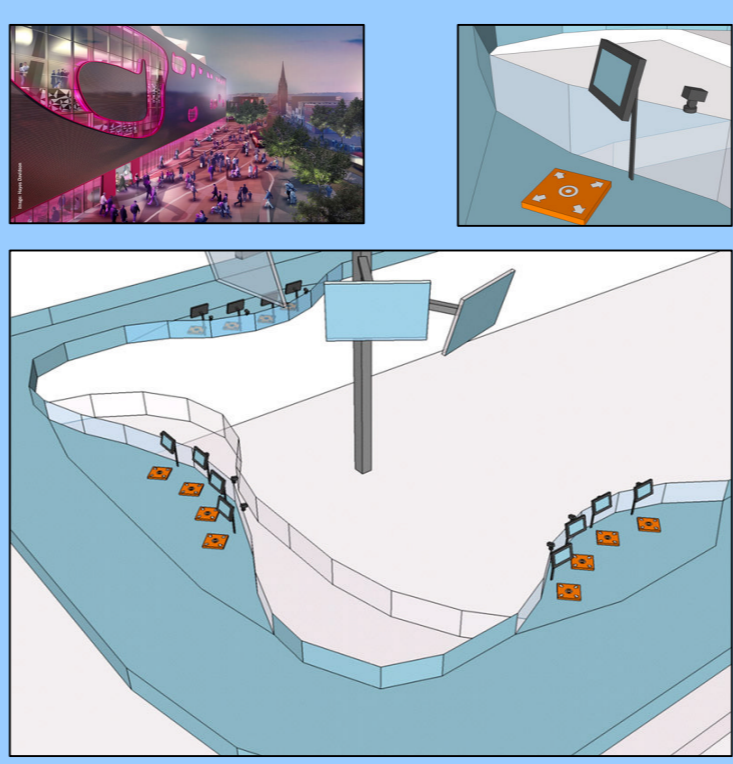


Blurring the frame of mobile experiences

- How a performance is 'framed' through the conduct of performers and use of props.
- Strategies for 'blurring' this frame:
 - Extending the frame: implying bystanders and objects are part of the frame.
 - Shrinking the frame: implying performers and props are outside the frame.



A permanent multi-player augmented reality game installation for a major multi-million pound new arts centre located in West Bromwich.



Flypad

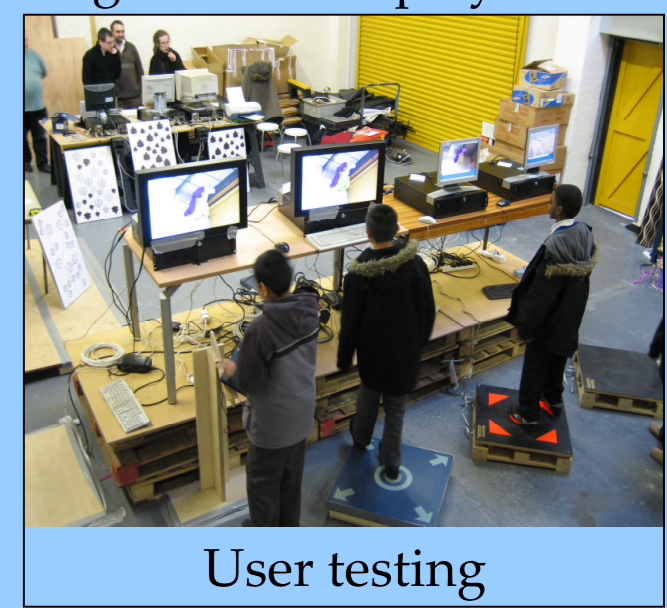


Up to twelve players at a time stand on footpads in front of a mounted screen, behind which is a motorised camera looking out into a large atrium beyond the screen. On the screen they see a video display from the camera which shows them a view into the atrium. Additional large-screen spectator interfaces are mounted high above the atrium to attract and engage spectators.

Players then see their 3D avatar overlaid on this video view in such a way that it appears to be falling through the atrium. By working the footpad, they can steer this avatar, colliding with other players and wrestling with them in mid-air.



A 'priming' interface on each footpad display carefully inducts spectators as they step up to become players. Players' conduct on the footpads is also highly visible to spectators down in the atrium.



This is a collaboration between Equator and the artists group Blast Theory. Flypad is due to open to the public in the first half of 2008.

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