



Elysian Fields - interactive installation

A Stage one investigation into presence and intuitive interaction with mixed reality environments
Creativity and Cognition Studios (CCS) UTS Sydney
<http://www.creativityandcognition.com/>

Developers / research team:

Brigid Costello, Ian Gwilt, Andrew Martin, Dave Burraston

Research question:

"What are the potentials for user presence and intuitive interaction in mixed reality environments"?

Key words:

Co-presence, perceptual user interface, generative audio-scapes, intuitive / gesture interaction, animated spaces, augmented reality.

The concept:

The *Elysian Fields* interactive draws on the story of this mythical space from Greek Mythology. Wondrous, sublime and peaceful, the *Elysian Fields* are a place where virtuous people would go to in the afterlife. According to Homer's *Odyssey* "a dwelling place of mortals made immortal through the favor of the gods".⁽¹⁾

Using the analogy of the *Elysian Fields* we intend to investigate the relationship between physical spaces and computer mediated virtual environments and begin to explore how the two spaces might inform each other to create an enhanced or augmented user experience. We will be looking specifically at issues of presence and interaction in mixed reality.

Description of the installation:

Upon entering the darkened exhibition space the user is presented with a back-projected data image of abstract grasses, covering the far wall. The grasses are animated and appear to be swaying in a virtual breeze – ambient sounds are playing in the background. Moving towards the screen the user becomes aware that their physical action of walking in the 'real' installation space is being translated into the virtual 'on-screen' environment, through the animated parting of the grasses and triggering of sound effects. As the user moves around the grasses bend and part, slowly recovering their original form as they move on. Like the phantasms of the mythological fields the user can wander through the swaying grasses, leaving a tell-tale path of their journey in both realities.⁽²⁾



Images of user interaction, testing movement and responsivity in the virtual space.

Interactive possibilities:

The installation piece begins to explore the possibilities for interaction between physical and virtual spaces and the potential of co-presence, on a number of hierarchical levels.

Level one: **Passive - observational interaction**

The installation allows for a passive experience to be gained by simply watching and listening to the animation and sound-scape of the virtual environment.

Level two: **Ambient interaction (undirected)**

The user can exert a level of control in the virtual space by walking over the 'touch-sensitive' floor panels. The user is rewarded with the results of their interaction manifest in the virtual space – in this instance the grasses part to reveal the pathway taken during the interaction. Additionally audio responses are triggered as the user moves around.

Level three: **Goal orientated interaction**

By introducing a further responsive event – triggered by certain interactions and patterns of movement the users can be encouraged to interact proactively with the piece, in a more structured manner leading to the revealing of an additional level of experience and content.

Notes

1. <http://www.dl.ket.org/latin1/mythology/1deities/underworld/elysian.htm> (10/06/03)
2. Phantasm - apparently seen but having no physical reality; a phantom or an apparition. Also called phantasma. 2. An illusory mental image. Also called phantasma