

# Charmed

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## Introduction

This paper introduces *Charmed*, an interactive media artwork created by Gavin Sade, Priscilla Bracks and Matthew Dwyer, that enables audiences to influence an entire world and all who live within it, whilst simultaneously raising ideas about the exercise of our own free will, and the spaces, relationships and activities that mark our daily life.

Charmed was created with the support of an Experimenta New Visions Commission, and first exhibited in Experimenta Playground: International Biennial of Media Arts, at Melbourne's Arts Centre to an audience of approximately 44,000 people between the 25 August and 23 September 2007.

## Charmed

The work was developed in response to the Experimenta New Visions Commission call for proposals inviting artists to:

“create works that allow the audience to play, and be played upon... The experience for the audience may be surprising, delightful, horrifying, repulsive, funny, challenging, perplexing, uncanny, nostalgic, or disarming.”<sup>1</sup>

These themes inspired us to make an animated adaptation of images from *Refugee from the Human State*<sup>2</sup> — a series of illustrations by Priscilla Bracks. In doing so



A group of people using *Charmed* at Experimenta Playground Melbourne 2007.  
Bracks, Sade & Dwyer, *Charmed* (2007).  
Courtesy of Experimenta. Photo by Andrew Lloyd.

we gave careful consideration to how audiences could explore the ideas captured in the illustrations, through a playful interface that brings the animated scenes to life through interaction and sound.

The original illustrations use a visual aesthetic characterized by simple, white, line drawings on watery, black, painted backgrounds depict scenes from everyday life in large, urban environments and developed landscapes: apartment blocks, traffic jams, open plan office spaces, sprawling suburbia, plantation pine forests, and towering corporate office blocks. The visual aesthetic of the original illustrations has been maintained in the interactive work.

*Charmed* is experienced by way of a uniquely playful, ludic interface that moves away from typical static-screen presentation formats by integrating the interface within movable sculptural objects — three glowing resin pods containing touch-sensitive screens, Light Emitting Diodes - LEDs, and custom electronics.

At a distance, the pods' white, sleek and minimalist design, not only evokes Kubrick's vision of the future in *2001, A Space Odyssey*, but also reflects contemporary 'blobjects' - a portmanteau of 'blobby' and 'object',

which Sterling attributes the fluid curvilinear form of blobjects to the design and manufacturing process.<sup>3</sup> Despite this appearance, closer inspection reveals that the pods are actually handcrafted objects, and not the result of computer controlled design and manufacturing processes. Each pod is slightly different, with variations in the illumination of the surface, differing patterns of air bubbles in the polyurethane around the base, and subtle differences in the shape that can be felt as each pod is touched and held.

Each pod presents different scenes in the virtual world, which are explored by sliding the pods across the opal acrylic surface of a custom-built ply-wood cabinet housing computers, video tracking equipment and peripherals. The video-tracking device monitors the pods' movement, creating seamless transitions through various scenes in the *Charmed* landscape. These scenes consist of haptic visual environments - visual spaces that do not employ linear perspective in a consistent manner — where depth perception and movement through space is coupled to pod movement. One pod — *The City Pod* — contains 3 scenes depicting city high-rise buildings, open plan office spaces and peak-hour traffic. Another — *The Suburbs Pod* — features suburbs, forests, homes and cars. The third pod — *The Apartments* — contains



Detailed image of the Apartment scene. Sade, Bracks & Dwyer, *Charmed* (2007). Photo: Priscilla Bracks.

just one scene, a honeycomb hive-like apartment block extending in every direction the pod can move. In this scene, audiences voyeuristically gaze into the lives of the tiny people who inhabit the virtual world and effect the apartment tenants' behaviour via the touch-screen interfaces.

## The interactive experience

In *Charmed*, audiences are required to physically engage with the pods, by touching the screens and moving the pods around the table. The result is a playful interface that requires the audience to engage in a more physical experience than is usually offered by passive viewing modes. This draws attention to the objects themselves — the pods — which mirror a dominant visual motif — a dome shape — employed throughout the original illustrations and the *Charmed* animations, appearing as cars, apartment windows, and houses.

The focus of the interaction design was on maintaining a sense of revelation, by linking exploration of the virtual world by moving the pods through real space. This approach is similar in nature to augmented reality, where digital objects are registered over a view of the real world. This technique was employed to escape the common trope of hand-held computer games, where the worlds are contained 'within' the object. Instead we aimed to design a work where the virtual world appeared to exist in the empty volume of space around the pods, giving an impression that the pods themselves provide a window through which this world can be seen. This reinforces the idea that the *Charmed* world is not entirely mythical or virtual, but rather exists all around us in the urban spaces we create and the way we live our daily lives.

Beyond movement of the pods, the touch screen in each pod enables simple playful interactions, providing immediate visual and auditory responses. Like giants, users can touch the screens to effect change in each scene, unsettling characters in their apartments, causing cars to crash, exploding computers in an open plan office, cutting down trees, and building suburbs.

The distribution of the scenes between three pods means that in order to explore all of the scenes in the *Charmed* world, users have to touch and move all three of the pods. This may result in a user circumnavigating the table multiple times. This design means *Charmed*

is accessible to both individuals and groups. At any one time, up to three people can interact with the work directly, while a larger number can join in the experience by observing the interaction. When several people are using the work, they very often engage with each other to exchange pods, to move around each other as they explore each scene, or even touch the same screen.

## Conclusion

*Charmed* demonstrates that it is possible to create playful interactive experiences that diverge from the established tropes of entertainment media, and still successfully engage with a wide audience. Likewise, it confirms that it is possible to create custom objects and interfaces that are highly tactile, engaging and robust, and suitable for large-scale media arts exhibitions.

Finally, *Charmed* requires one to place both hands on one of the pods, feeling the texture and warmth of the surface, while sliding the pod across the surface of the table and bumping into another audience member as you make your way around the table exploring each of the scenes. It is the unexpected and serendipitous interactions that occur when interacting with *Charmed* that make it a unique work that is playful yet, at the same time opens space for contemplation about the worlds (real and imaginary) in which we dwell.

## Production credits

*Charmed* was produced by the following people:

- Gavin Sade (Original concept, sound design, technical direction, programming)
- Priscilla Bracks (Original concept, animation, and visual design)
- Matt Dwyer (Concept development and sculpting)
- Matt Petoe (Electronics design and engineering)
- Glenn Wetherall (Programming, animation sequencing and media wrangling)
- Richard Vaughan (Cabinetry)

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1 Extract from Experiementa Media Arts New Visions Commission call for proposals 2006.

2 *The Refugee from the Human State* series of images can be viewed at [http://priscillabracks.com/refugee\\_from\\_the\\_human\\_state/](http://priscillabracks.com/refugee_from_the_human_state/)

3 Sterling, B. 2004. Viridian Note 00422: The Spime." Retrieved 17/01/05, 2005, from [http://www.viridiandesign.org/notes/401-450/00422\\_the\\_spime.html](http://www.viridiandesign.org/notes/401-450/00422_the_spime.html).