

Netscape: *Virtual Landscapes of the Internet*

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This paper examines a recent example of virtual place making: *acmipark*. Based on the real-world architecture and public spaces of Federation Square, Melbourne, *acmipark* is a three-dimensional virtual environment in which users explore architectural and landscape spaces while interacting and communicating with others online. Exhibited at the Australian Centre of the Moving Image, it allows the architecture and public space of Federation Square to be experienced both locally and globally. Its designers suggest that it represents a new paradigm for public space; this paper investigates that notion.

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VIRTUAL PLACE MAKING

LANDSCAPE ARCHITECTS have been modelling landscapes digitally for over 20 years, largely for visualising and prototyping built landscapes (Ervin and Hasbrouck, 2001). There is, however, emerging potential to create virtual places, that is, digital landscapes never intended to be replicated in the real world. Whyte (2002) defines the three characteristics of virtual reality (VR) as interactive, spatial and real time; today VR does not require specialist equipment as most modern personal computers have powerful graphics processors which enable navigation of increasingly complex three-dimensional, real-time environments. Easily the most popular VR environments are games; ubiquitous connections to the Internet allow them to be multiplayer, the user interacting with others (locally or globally) in realtime. Concurrent advances in networking and hardware have enabled the creation of many new multi-user virtual worlds over the last decade, but until very recently design aspects have been little studied,¹ and these virtual environments have been essentially untheorised.

acmipark

This paper investigates *acmipark* (2004), a cutting-edge, online virtual landscape. Commissioned by the Australian Centre of the Moving Image (ACMI), *acmipark* was designed by a small group of artists and programmers “pushing the boundaries of art and gaming, and in doing so challenging definitions of public space”. Its designers, selectparks,² see the project as a “platform for ‘re-dreaming’ ACMI, and as a public interface for those not able to visit the centre in the real world” (Oliver, 2004). The environment of *acmipark* is based on the architecture and open spaces of Melbourne’s Federation Square,³ but instead of the real-world landscape context of the central business district and the river, an extensive ‘media park’ has been created beyond and beneath the square. In addition to a near-exact representation of Federation Square’s buildings and spaces,⁴ the terrain includes unreal virtual elements such as subterranean spaces, teleports and unique interactive sound installations. The virtual ACMI acts as a gallery space, with users able to view moving images inside the

KEYWORDS

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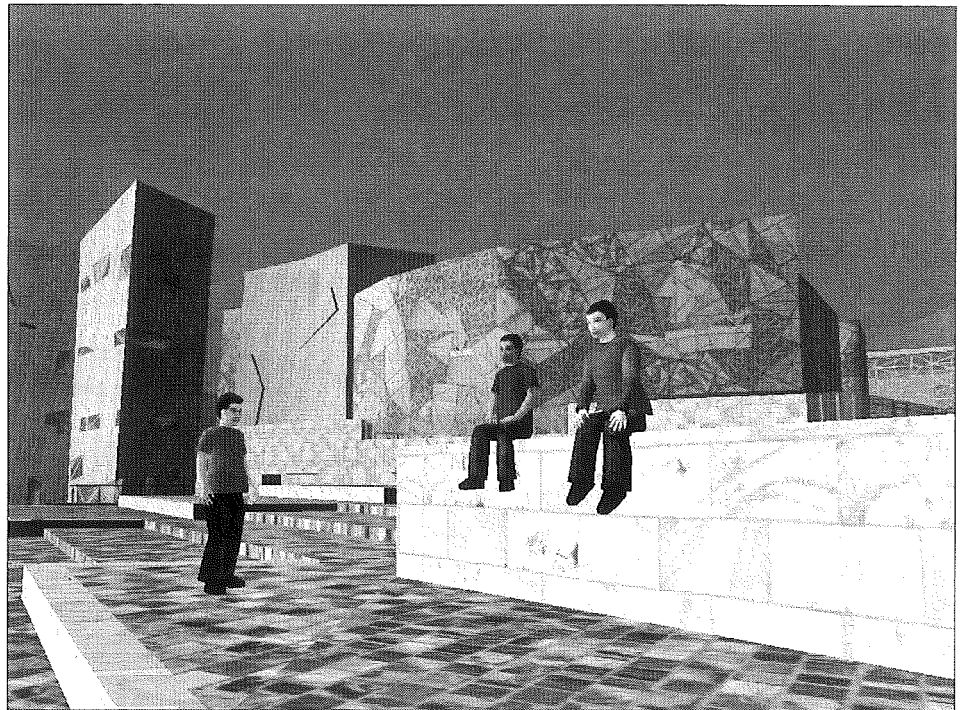


Figure 1: Screenshot of *acmipark*.

building as well as on a giant outdoor screen, and includes a 'virtual concert hall' where users are able to experience live concerts in three-dimensional sound streamed directly into *acmipark* over the Internet.

The project was in part motivated by a desire to communicate the potential of first-person gaming software to the field of architecture (Chatterton, 2004). Installed at ACMI for the next three years, *acmipark* allows Federation Square to be accessed either globally or locally.⁵ The 'game' allows users to move within the virtual Federation Square in real time and interact with others, communicating person-to-person via onscreen characters, or avatars. Unlike real-world public spaces, visitors to *acmipark* are not only able to chat locally (that is, with individuals close by), but also globally, with all users logged into the park at the time; essentially, this is a spatial chat room.

Ritual and Interaction

The designers of *acmipark* have attempted to challenge definitions of public space. Let us take one such definition; architectural historian Kostof (1999) defines public space as a "purpose-built stage for ritual and interaction". Taking first the aspect of human interaction through "familiar and chance encounters", and Gehl's (1987) suggestion that public space is driven by a need for contact between individuals, it would seem that *acmipark* does exhibit recognisable characteristics of a public space. Users can arrange to meet others in *acmipark* and communicate one-to-one, or choose to chat with all users, familiar and unfamiliar. Van Schaik (2003) notes of real-world Federation Square, however, that "people throng the space, sit as observers in a wide variety of public spaces", while the overwhelming virtual experience of the spaces in *acmipark* is one of emptiness. The limit of 64 players does not allow the interior or exterior spaces of the game to become populated to anywhere near their capacity, thus

encounters are limited by the fact that there are simply not many people around. (The apparent population is boosted slightly by a handful of non-player characters, essentially animated props that help to populate the space.)

Kostof's second aspect of public-space definition involves ritual: "festivals, riots, and celebrations". In addition to large social gatherings and celebrations, Melbourne's Federation Square has witnessed a protest against the war on Iraq, which brought 150,000 people to the square (*The Age*, 2003). But what form of celebration or protest could take place in *acmipark* with only 64 players? There appears not to be the capacity for significant physical presence or for enduring physical acts to occur in *acmipark*. Although it is a persistent world, there are no activities that leave a lasting impression on the world. For example, the graffiti present in some areas of *acmipark* is essentially fake graffiti, that is, it does not represent the actions of a previous user. Skateboarding is often seen as an act of protest or defiance in public space (Woolley and Johns, 2001). The designers of Federation Square have tried to skate proof the public spaces through the selection of rough surface materials and skate-stopping elements inserted on walls and ledges. In an interview, architect Bates (2003) described the design of Federation Square's public space as "a kind of ongoing relationship between trying to stop some of the activities and new activities emerging that then have to be stopped". While the management of Federation Square attempts to curtail such activities, the virtual world of *acmipark* prohibits even the possibility of such spontaneous expressive acts occurring. The software does not allow users to modify the environment, either through the interface or the source code. But could *acmipark* be hacked into or contaminated with a virus? On downloading the software, *acmipark* (2004) users agree to accept the licence terms, that is, not to modify any part of the *acmipark* client, or servers, not to attempt to interfere with, hack into or decipher any transmissions to or from the servers, and not to exploit any bug in *acmipark*. Thus it would appear that although outlawed, it would be technically possible for a knowledgeable person to alter the code as a form of riot or protest, and in doing so make changes to the environment.

NEW PUBLIC REALM?

The *acmipark* designer, Chatterton (2004), states that "significantly, *acmipark* is conceptually innovative in extending an actual real world place, including its functions, into the public online community", while More (2003) believes *acmipark* "is best thought of as a public space - users are able to chat, learn, explore and jam using a technology that is fast transforming not only the uses for the screen but how we define communities and social spaces".

Despite the 'public' and 'community' rhetoric, however, the fact remains that before entering *acmipark* users are asked to accept a list of rules which are far more restrictive than those in force when visiting the real Federation Square. While the designers are motivated by a duty and desire to ensure activity within *acmipark* is safe and fun, *acmipark*'s management as a supposedly public space could seriously restrict individuals' freedom of expression. Yes, *acmipark* does represent a social, public space where people can meet, communicate and explore, but the design and management

of the environment is not truly analogous with public realm. With the high levels of behavioural policing, it resembles a semi-public, real-world environment like many that are currently being created around the globe. Current notions of the public realm are evolving because of social, cultural and technical changes; for example, increasing use of the Internet is changing the way physical space is used (Mitchell, 2003). There would appear to be similar forces at work concerning restriction and management in both physical and digital public realms. While the technology of *acmipark* is designed to encourage individual exploration and communication, there are limits; general social conduct and the content of chat conversations are monitored by ACMI to prevent offensive behaviour. Failure to play by the rules, for example, harassment, stalking, racism or advertising can result in the termination of the session. (Although these controls are in place, further research will be necessary to determine if they are actually monitored or implemented.)

But *acmipark* does represent an exciting and significant new way of looking at the public realm. Based on interaction and communication within a three-dimensional environment, it offers radical new possibilities for education and practice in landscape architecture to engage with the design of virtual public spaces. But experiencing *acmipark* is like taking a walk though the city on a Sunday night – most buildings are closed and there are very few people around. For it to work as a public space the experience perhaps needs to be more like a Saturday lunchtime, with activity, people, choice and vibrancy. In other words *acmipark* could accommodate more people and more ‘content’. In his book *Designing Virtual Worlds*, Bartle (2004) explains “content is that which the world provides to hold players interest” and means “giving people things to do, places to do it and things to do to it”. Currently, the world of *acmipark* belongs to the designers, not the users, and thus it is in many ways yet to prove itself as a public space; it is still a ‘local space’ waiting to be transformed by its users into a ‘global place’.

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GLOSSARY

<i>Avatar</i>	Among the virtual reality and cyberspace community, an avatar is an icon or representation of a user in a shared virtual reality. In the examples in this paper, avatars are three-dimensional humanoid characters.
<i>Chat</i>	Multi-person communication; unlike email, chat is instantaneous and live.
<i>Chat room</i>	An online forum where people can “talk” by broadcasting messages to others on the same forum in real time.
<i>Cyberspace</i>	The impression of space and community formed by computers, computer networks and their users; the virtual world that Internet users inhabit when they are online.
<i>First-person gaming</i>	Computer-mediated environment where the player’s on-screen view of the game world simulates that of the character.
<i>Game engine</i>	The core software component of a computer game. It typically handles rendering and may handle additional tasks, such as collision detection between objects, and so forth.
<i>Massively multi-player online game</i>	(MMOG) is a type of computer game that enables hundreds or thousands of players to interact simultaneously in a game world they are connected to via the Internet.
<i>Online</i>	Being connected to the Internet.
<i>Persistent world</i>	The virtual environment continues to exist and develop (to some degree) even when no one is interacting with it.
<i>Real time</i>	A real-time system responds in a rapid and predictable way to unpredictable external stimuli.
<i>Teleportation</i>	The process of instantaneously moving from one place to another without passing any point in between.
<i>Virtual reality</i>	Describes an environment that is simulated by a computer.

NOTES

¹ *Designing Virtual Worlds* by Bartle (2004) spans the literary, economic, sociological, psychological, physical, technological and ethical underpinnings of virtual world design.

² selectparks is a media laboratory currently based in Melbourne, Australia, and Gotland, Sweden, and was established in 1998 by Julian Oliver. It now includes three other key members, Chad Chatterton, Andrea Blundell and Rebecca Cannon.

³ Designed by Lab Architects, UK and Karres en Brands Landscape Architects, Holland.

⁴ Complete with a full-height ‘shard’ as the architects intended (but which was controversially shortened in the real-world Federation Square).

⁵ To visit *acmipark*, users first need to download the free application, which runs the game locally on an Internet-connected personal computer.