define the potential of the Interface in so many ways, seemed to be being described:

> 'And just as one inhabits an apartment, and makes it comfortable, by living in it instead of just using it for sleeping, eating and working, so one inhabits a city by strolling through it without aim or purpose, with one's stay secured by the countless cafes which line the streets and past which the life of the city, the flow of pedestrians, moves along. .... What all other cities seem to permit only reluctantly to the dregs of society – strolling, idling, flaanerie – Paris streets actually invite everyone to do. Thus, the city has been the paradise of all those who need to chase after no livelihood, pursue no career, reach no goal – the paradise then of Bohemians, and not only artists and writers but of all those who have gathered about them because they could not be integrated – either politically, being homeless and stateless, or socially.'[2]

If Paris was Paradise, is the modern paradise the Web? Though somewhat eclipsed by the current fashion for things on the Web, the CD-ROM combines the potential to create complex model worlds with material immutability – its major advantage. At this transitional stage of movement towards multimedia computer networks, the CD-ROM also enables the most sophisticated development of the interface, and, besides affirming aspects of an art-historical tradition, reveals opportunities for extensive research by artists to create interfaces of the future.

[2] Walter Benjamin *Illuminations*: edited with an Introduction by Hannah Arendt, Jonathan Cape 1970

Mike Leggett has been working across the institutions of art, film and television since the mid-1960s. He has film and video work in archives and collections in Europe, Australia, North and South America. Currently he is completing a Masters of Fine Art at the University of New South Wales College of Fine Arts, and practices professionally as an artist, director, producer, editor, photographer, writer, teacher and computer consultant.

Artist Pages

Names of artists or artist groups ar listed in alphabetical order. Each artist or group page includes a statement about the exhibited wor and the circumstances of its production, followed by an artist o group biography.

MAGAZINE PAGES

Entries on three magazines: *Artifi artintact* and *Mediamatic*, follow the artist pages.

INDEX OF NAMES AND TITLES

Many of the exhibited CD-ROMs ar the result of collaborative or team work. The names of the primary collaborators, as well as the artists and CD-ROM titles, are listed in th index on page 108.

WAXWEB 2.0

United States, 1991–1996 (continuing project)

DAVID BLAIR

MosaicMOO software: Tom Meyer
User interface and graphics: Suzanne Hader
Digitising stills and video: Anna Youseffi
Indexing and text management: Melynda Barnhart

I prefer to describe my work as image-processed narrative, in which both the images and the narrative are processed. On the image side, this puts me very much on the side of video makers who insist upon a mediated image, and for whom the process of technique is always foregrounded in the artwork.

David Blair

Waxweb is a network-delivered hypermedia project, based on my electronic film *WAX or the discovery of television among the bees* (1991, 85mins), combining the largest hypermedia narrative document on the Internet with an interface that allows Mosaic or MOO users to make immediate, publicly visible hypermedia additions to that document. What we mean by hypermedia: hypertext, pictures, audio, video and virtual reality, all mixed up.
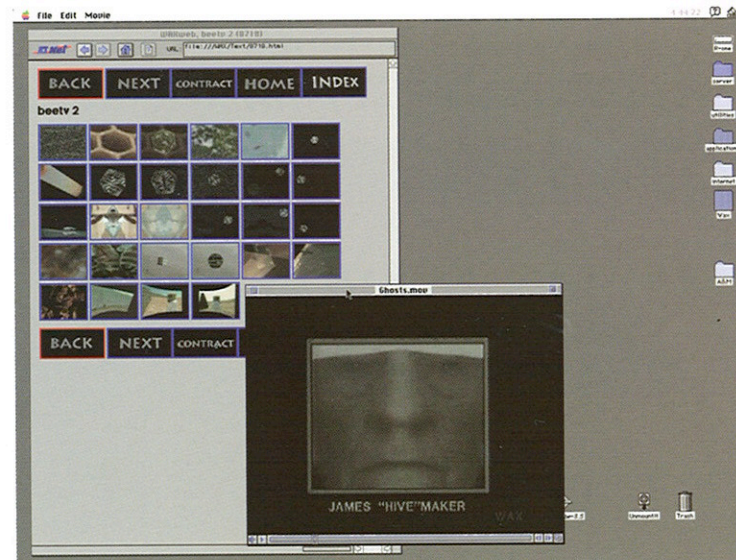
What's a MOO? Essentially, MOOs are tools for computer-supported collaborative works (and play, etc.) which allow real-time intercommunication – they are text-based virtual realities. Using a forms-based interface, users have the ability to make links from any word to any other word, add comments to any page, and also to create their own pages.

Circumstances of production

This project has been made possible by networked associate fellow status generously extended to the members of the Waxweb project by IATH, the Institute for Advance Technology in the Humanities at the University of Virginia, headed by John Unsworth. A detailed account of some of the processes and thinking that led to the establishment of this site, is narrated in the *Mosaic MOO* paper by David Blair. The hypertext for this project was authored on the Storyspace software from Eastgate Systems. Waxweb opened to the Internet on 24 July 1994, coincident with the opening of the Edge at the ACM Siggraph 94 convention in Orlando, Florida.

Artist biography

A major reason for my choice of working method is that video imaging is something that I discovered and learned on my own; unlike many of my peers, I do not have an art school education. I actually began at the public library, where my desire to make plastic-image work was fatally informed by the discovery of works like Ed Emshwiller's *Sunstone* and Nam June Paik's *Suite 212*.

I studied fiction as an undergraduate in college, where I made the uninformed decision to become a director of narrative films. My models since high school had been 'grotesque' fictions. My earliest instructors were the Firesign Theater, an audio-theatre group that distributed their fictions by LP, and Thomas Pynchon, whose book *Gravity's Rainbow* I had the good fortune to accidentally buy when it came first appeared.

FLORA PETRINSULARIS (artintact 1, ZKM Karlsruhe)
France/Germany/Switzerland, April 1993
JEAN-LOUIS BOISSIER
Historical and literary research: Liliane Terrier

Jean-Louis Boissier

This collection is like a diary of my expedition, which makes me set out again with renewed joy, or like an optical device which places them once again before my eyes.

Jean-Jacques Rousseau *Reveries of the solitary walker*

Flora Petrinsularis is composed of two parts – sixteen quotations from *Les Confessions* by Jean-Jacques Rousseau, and a collection of sixteen flowers gathered from the same places where Rousseau practised botany.

The virtual book contains interactive sequences of images and sounds with variable rhythms and movements. For each quotation, there is a video illustration that focuses on a character, in a moment of outburst, from a short love scene selected from *The Confessions*. For each flower, a sequence of images conveys its gathering from a natural setting to its metamorphosis into a still image.

This CD-ROM – based on a literary masterpiece which is always open to fresh interpretation – underlines the passage between traditional and future forms of books or movies. The interactive setting tries to make an interpretation of *The Confessions* that refers only to the text itself, to its secret or revealed motivations as an exemplary self-analysis.

Artist biography

Born in 1945, Jean-Louis Boissier teaches art at Université Paris 8. As teacher, researcher, curator and artist he has been concerned with aesthetic changes occurring with images and the arts in connection with interactivity and virtuality. Boissier has exhibited interactive works in the Venice Biennale (1986); Passages de l'image and Revue virtuelle, Centre Pompidou, Paris (1992); Ars Electronica, Linz (1992) and in Multimediale 3, ZKM Karlsruhe (1993). His solo exhibitions include those at CREDAC, Ivry, Paris, and NTT/ICC Gallery, Tokyo, both in

Flora petrinsularis

4
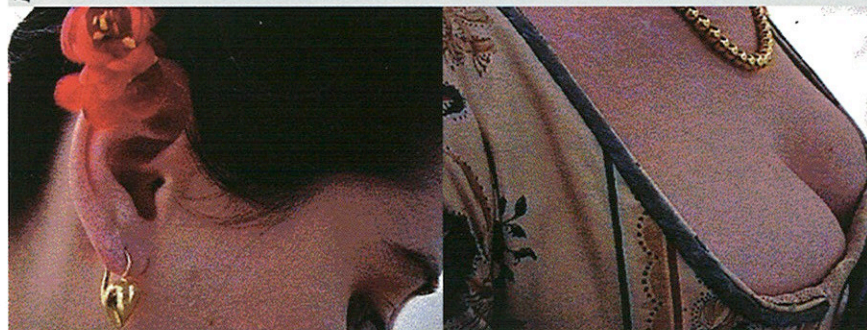
Madame Basile
Turin, 1728

1995. His curatorial projects include Revue virtuelle, Centre Pompidou (1992-1994), Artifices 1 & 2, Saint-Denis (1990/1992) and Machines á communiquer, Cité des sciences, Paris (1991-1992).

THE SWEAR CLUB
Australia, September – November 1994
MICHAEL BUCKLEY
Prime collaborator: Jeremy Parker

M i c h a e l   B u c k l e y

I have always been interested in exploring new fields of visual communication and language. *The Swear Club* is an extension of my work as a experimental film maker over the last twenty years and also as a member for the last ten years of 'Arf Arf', a sound poetry and performance group. Arf Arf has frequently 'undressed' the notions of language; *The Swear Club* continues my exploration of disruptive narration.

The title for my interactive comes from my five-year-old son, who in his first year at primary school started up a secret society in the school yard, 'The Swear Club', where members could be, to use his words: 'as naughty as possible!' My son's school yard expressions are peppered throughout the piece. The viewer can chase his shadow through *The Swear Club*. Untraceable/unchaseable 'joy' haunts its emotional and visual landscape.

Circumstances of production
The Swear Club was made while I was a student at the Swinburne University Animation Interactive Multimedia Centre (AIM) in Melbourne in 1994. Jeremy Parker, a lecturer at the centre, assisted me with the development of the silhouettes and programming for *The Swear Club*. It was made on an Apple MacIntosh computer using Macromind Director software, over a three-month period from September to November 1994. Approximately fifteen friends performed as silhouettes and ten friends contributed the voices for the audio material. I wrote, filmed, animated and scored most of the material for it.

Artist biography
What are valued observations? Remembrance of things lost? I've become fatter, I don't travel so light. I feel like a snail from carrying too many books. I wipe my glasses before I go to the cinema. I grew up in the working class suburb of Springvale in Melbourne. I studied film making and became an experimental and documentary film maker.

After 20 years I have made the transition from film making to interactive media in 1994 through doing a course at the Animation Interactive Media Centre which at the time was based at Swinburne University of Technology in Melbourne. I have in part transfered techniques, theoretical and creative concerns of my film and performance work into my interactives.

30 WORDS FOR THE CITY

Australia, October 1983 – December 1994

JOHN COLETTE

Sound: Andrew Lancaster

John Colette

This piece explores the relationship between Subjectivity and Cities. It is based on an imaginary city which is a combination of Sydney, my home, and Tokyo, which for me is a city that allows both total immersion in its environment and the distance to see things freshly.

With so much attention in critical theory focussed on the 'acceleration' of culture and the homogenisation of subjectivity in media-saturated environments, there is also room for the exploration of new aesthetic pleasures which evolve in these contexts. The explosion of signification in contemporary urban space is often seen as a nihilistic maelstrom – of fleeting attempts at meaning, where the proliferation of messages, fashions, systems and styles leads to a fragmented, baseless and 'unauthentic' mode of consciousness. This is usually contrasted to an idea of a mode of (lost?) consciousness, which allowed discourse to attach itself to discrete elements of the real world and where the production of meaning progressed in an 'authentic' manner. If this is true or not is irrelevant; there is still a role for subjectivity to play in the interaction between individuals and the culture around them. There are moments of insight, motivations and meanings to all of the eccentrically conformist ghettos of urban culture (fashion, business people, bodybuilding, techno-fetishism,) even Otaku, all operate within a system of desire and with specific notions of transcendence. It is from this viewpoint that *30 Words* is made, between Sydney as (familiar) home and Tokyo as the global symbol of a city existing from instant to instant in an explosion of information, stories, symbols and surfaces.

Circumstances of production

30 Words was produced on a mid-range Macintosh desktop system, with an attached flatbed scanner. Additional video input was done on an early model Raster Ops 364 video capture card. In the studio process, a database of imagery was compiled from photographs taken in Tokyo and Sydney. This was sorted into thematic groupings according to the part of the project being produced. Each of the eighty or so modules in the project was produced and imaged as a piece, one at a time, from process notes and text compiled on paper. Scanning, sequencing and animation was completed for each module before the next was begun.

Funding assistance was received from the Australian Network for Art and Technology for mass storage to initiate collection of the project material, and production funding was received from the Australian Film Commission.

Artist biography

John Colette is a digital media artist whose work includes video, digital image collage and multimedia delivery technologies such as CD-ROM. With a long background in film and video production, Colette has concentrated exclusively on digital processes for the last six years. Originally working with still images, he has developed work as new technologies have emerged for desktop systems, especially in video editing and compositing. Colette currently heads the new media program at the Australian Film, Television and Radio School in Sydney, and previously was both a lecturer at the University of NSW College of Fine Arts, and a member of the design team at the Museum of Sydney.

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PORTRAIT ONE (*artintact 2, ZKM Karlsruhe*)
Canada/Germany, 1990 – 1995
LUC COURCHESNE

Luc Courchesne

Portrait One affords an intimate on-screen discussion between the (real) observer and a 'slyly amicable girl'. Courchesne's interaction dialogue is fictional. Questions, answers, topics and viewpoints have been specified by the artist. The limits of interaction are defined by the pre-determined connection between the various possible discussion modes that can be selected by the viewer. The encounter in *Portrait One* with a virtual personality, Marie, a woman in her thirties from Montreal, engages you in playful conversation. By pointing at sentences on the screen: Do you know what time it is? Are you looking at me? or a simple Who are you? the visitor engages in conversation the outcome of which is determined by his own curiosity and the mood Marie is in.

Artist biography

Born in 1952 in Saint-Léonard d'Aston, Quebec, Luc Courchesne obtained a Bachelor of Design in Communication in 1974 (Nova Scotia College of Art and Design, Halifax), and a Master of Science in Visual Studies in 1984 (MIT, Cambridge). Courchesne has been involved in interactive video since 1984, when he produced *Elastic Movies*, one of the first videos of its kind, in collaboration with a group of people from MIT. He has realised a number of video installations, including *Encyclopedia Chiaroscuro* (1987), *Portrait One* (1990), *Family Portrait* (1993) and *Room of Shadows* (1996). His work has been shown in a dozen countries and he also had a one-man exhibition in the Museum of Modern Art in New York. Since 1986 he has been a professor at the School for Industrial Design at the University of Montreal, and artist-in-residence at the Center for Art and Technology, ZKM Karlsruhe, Germany.

»Excusez-moi...«

»Excuse me...«

»Verzeihung...«

»Au revoir«
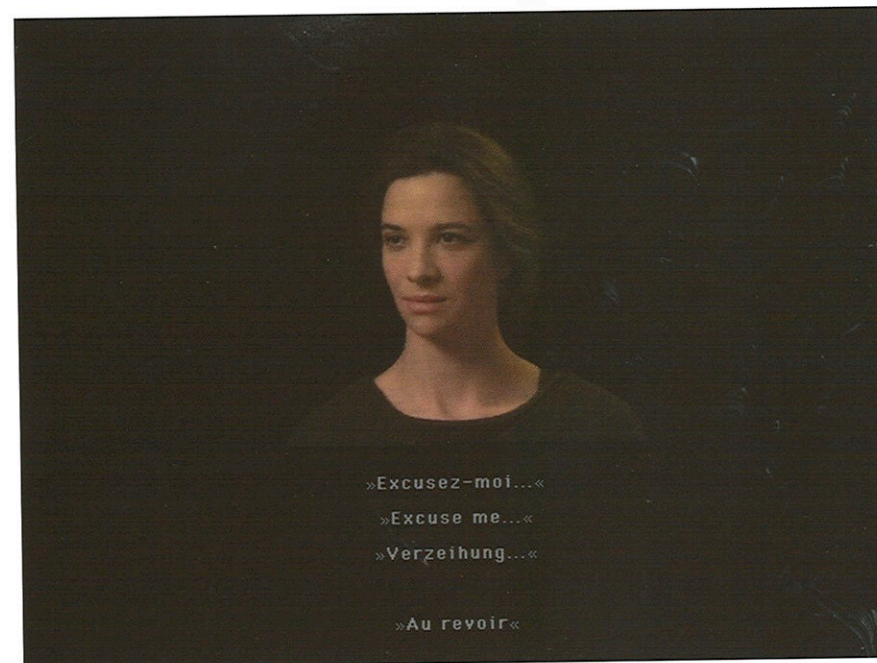
REFLECTION, ABSTRACTIONS AND MEMORY STRUCTURES ... RAMs
Australia, January-December 1994
PETER DE LORENZO

Peter De Lorenzo

The work seeks to establish visual similes between ordinary images and cultural icons by exploring the way informal body language specific to time and place becomes public language encapsulated in cultural icons. *RAMs* is a time-based work made on a computer that brings together elements of painting, video and photography. Each frame has been individually painted. The image and sound fragments are layered and blended to produce a seamless work which seeks to be painterly and evocative. It employs photographic and video images derived from sources as diverse as the electronic media, popular culture as expressed through films of the forties and fifties, and personal video snapshots. The acronym RAM in computer jargon stands for random-access memory.

Circumstances of production
RAMs was produced on a Macintosh 840AV computer with 16mb RAM running Quicktime, Adobe Premiere and Photoshop. Images were digitised from a hi8 camcorder and 35mm transparencies. Production was assisted by the Australian Film Commission. For the CD-ROM version the project was compressed with Cinepac. Image at 240 X 180 pixels; sound 11 KHZ 8 bit stereo. Data rate was set at 90 KB/sec for single speed drives. For the tape version the project was printed to tape via Radius Videovision Studio; image interpolated to 768 X 576 pixels at 25 fps; sound 16 bit stereo. Hi 8 segments were transfered to Betacam SP and edited to master.

Artist biography
Peter De Lorenzo has exhibited work in 1995 at the Ankara International Film Festival, Turkey; No Budget, Hamburg International Film Festival, Germany; Digital Cinema, Melbourne Fringe Festival, Linden Gallery, Melbourne; and at Pixels, Artrage Festival, Perth; in 1994 at Siggraph 94, Orlando, Florida, United States; in 1993 at Paper Concertina, Burnie Street,

Sydney; in 1992 at Loose Threads, Burnie Street, Sydney; and in 1991 at Sequence and Series: Concerning the Instant, Works Gallery, University of NSW; and Fire: A Sense of Space, Coachhouse Gallery. After completing a MFA at the University of NSW in 1991, De Lorenzo was the Chair of Electronic Media Arts for the 7th Australian International Video Festival until 1993. In 1993/94 De Lorenzo received a New Image Research Grant from the Australian Film Commission. Works by De Lorenzo are represented in the collections of the National Gallery of Australia, the National Film and Sound Archive, the Australian Film Commission and Australian Art Bank.

BAR-MIN-SKI: CONSUMER PRODUCT
United States, February 1993 – July 1995
DE-LUX'O: Webster Lewin, Bill Barminski & Jerry Hesketh

De-Lux'o

This CD-ROM was created in an attempt to capture both the work and the personality of Los Angeles artist Bill Barminski. Hopefully, it allows users to go beyond what the standard documentary film or artist's catalogue would deliver and comes close to the experience of actually getting to know the man himself. The program contains numerous video clips, original music and other audio and, of course, a large number of paintings. Each section of this CD-ROM is independent of the others, yet they are each designed to create a desire to seek out more information hidden in other parts of the program. We believe that CD-ROMs represent a powerful new tool for artists. Using this technology artists will begin to have access to mass culture, a place where artists are largely seen as irrelevant. Traditional art institutions such as museums and galleries have a hard time competing, especially for the minds of young people, with television. Multimedia and interactive technologies speak the language of our contemporary world. What is more, they do this in the comfort of home, which for some people is the only place where they can, or will, be exposed to art.

Circumstances of production
Filmmaker Webster Lewin was interested in producing a documentary about his long-time friend and associate Bill Barminski. In 1992, while producing video for the CD-ROM *Total Amazon* (Simon & Schuster), Lewin met Software Designer Jerry Hesketh. Both Hesketh and Lewin were frustrated by the banality of most CD-ROMs and believed that a compelling title could be produced cheaply. Lewin approached Bill Barminski about doing a CD-ROM in February 1993 and the disc was produced over the next year or so, in all three's spare time using whatever equipment they could get their hands on.

Artists' biographies
Producer and director **Webster Lewin** is a film-maker who has been involved with

multimedia since 1991. He has directed a number of short films, music videos and commercials and has written and designed CD-ROM titles for various publishers and museums. **Bill Barminski** began painting after moving to Los Angeles in 1985. He works with enamel paint on canvas, creating vivid deconstructionist images. His paintings juxtapose everyday objects with highly emotional terms or expressions. Co-designer and technical director **Jerry Hesketh** helped develop CD-ROM technology for Apple Computers. He's currently the Director of Studio Operations for Virgin Sound and Vision.

CYBERFLESH GIRLMONSTER
Australia, February 1994 – January 1995
LINDA DEMENT

Linda Dement

The work is a macabre, comic representation of monstrous femininity from a feminist perspective that encompasses revenge, desire and violence. Donated images of body parts collected during the Artists' Week of the Adelaide Festival 1994 have been used to construct a computer-based interactive work. About 30 women participated in the original event by scanning their chosen flesh and digitally recording a sentence or sound. Conglomerate bodies were created from the information donated. These have been animated and made interactive. When a viewer clicks on one of these 'monsters', the words attached to that body part could be heard or seen, another monster may appear, a digital video could play, or a story or medical information about the physical state described by the story may be displayed. The user moves relatively blindly between these. There is no menu system or clear controllable interface.

Circumstances of production
Most of the work for *Cyberflesh Girlmonster* was made on a Power Macintosh 7100/66 with 40 megabytes of RAM. The software used included Photoshop, Director, Infini-D, Premiere, Morph, SoundEdit 16 and Canvas. A number of women donated scanned flesh to the project in an event organised by VNS Matrix. All graphics, animation, text, sound and authoring was by Linda Dement. Invaluable assistance was given by a number of people who are listed in the credits section of the work. This project was assisted by the Art Research & Development Fund of the Australian Network for Art and Technology and was produced in association with the Australian Film Commission.

Artist biography
Linda Dement has a background in fine art photography and has been working with computers since 1987. She holds a Master of Fine Arts degree and has taught courses in digital multimedia and authoring for the University of New South Wales, the Australian Film
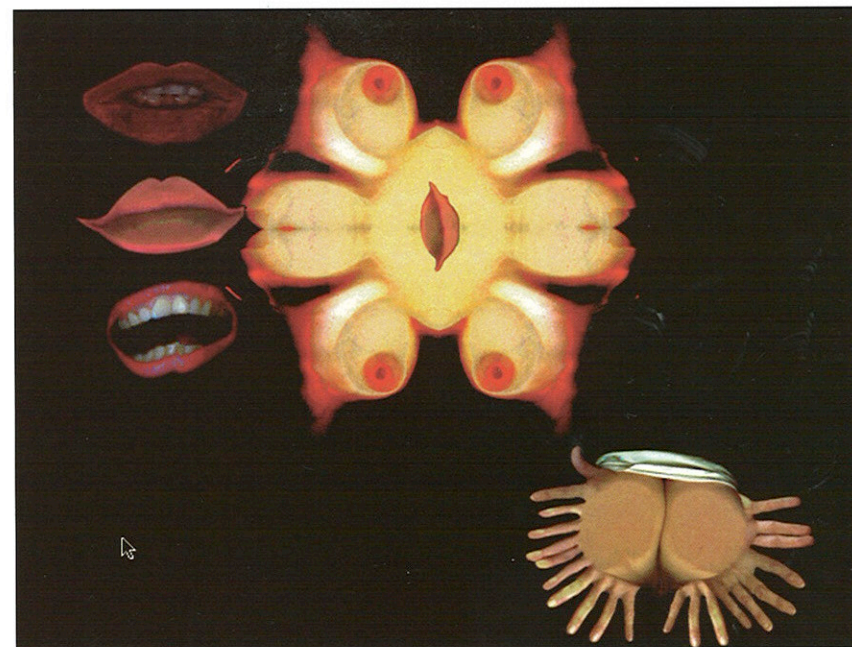
Radio and Television School and the Australian National University. She does freelance digital multimedia production work and software training, and is sole author of two currently available and widely-exhibited CD-ROMs: *Typhoid Mary* 1992 and *Cyberflesh Girlmonster* 1995.

OMTIPI
Australia, early 1994-1996 (continuing production)
DORIAN DOWSE

Dorian Dowse

Omtipi is an artistic impression of the magic of the land as experienced through living in an American Indian tipi in outback Australia. *Omtipi* utilises the non-linear aspect of the computer medium to give an impressionistic reflection of the random shifting nature of nature. I am particularly interested in the fractal quality of nature. In *Omtipi*, computer-generated fractals are mixed with naturally occurring fractal textures to suggest the inner simplicity and harmony that is often absent from the hard-edged sterility of modern human living environments. The natural textures represent the past, when humankind was more attuned to nature and lived as a part of the fractal environment, rather then trying to dominate it. The computer fractals represent the future, where our understanding of the fractal nature of things allows us to regain our place as a part of the pattern, rather than as attempted rulers of it. The tipi represents the bridge that connects the past with the future.

Circumstances of production
OmTipi was created in Director and Photoshop using scanned images and computer generated fractals. It uses a technique called Random Art. Written in Director 'Lingo', Random Art is a process for non-linear, time-based art that uses a set of random number-based algorithms to combine and display images in a non-linear order. It is a non-interactive painting that constantly changes and never seems to repeat itself. The soundtrack was created on a 4-track recorder using synthesiser and voice. The elements were combined and sampled into the computer. SoundEdit was used to lower the bit depth and create the loop.

Artist biography
After graduating in 1981 with a Diploma of Visual Arts from Darling Downs Institute of Advanced Education, Dowse worked in the music industry producing soundtracks for films and a solo album titled *The Waterdragon*. In 1990 he discovered the Macintosh, Photoshop,

Swivel 3D and Director and has been working in digital media ever since, producing several broadcast video animations and multimedia works. He received two awards at the first Australian Interactive Multimedia Industry Association conference in 1994: 'Best Business Title' for *The Wintergarden Kiosk*, and 'Best Art & Music Title' for *OmTipi*. At the start of 1995 he formed his own company, Unknown Species, which produces quality web and multimedia productions including *Firehorse* webzine.

PASSAGEN
England, July 1993 – February 1995
GRAHAM ELLARD AND STEPHEN JOHNSTONE

Graham Ellard

Stephen Johnstone

Taking as its starting point Walter Benjamin's use of the metaphors of panoramic vision and the labyrinth in his unfinished text 'The Arcades Project' ('Passagen-Werk'), *Passagen* asks the viewer to follow a series of slowly unwinding narrative threads that start on the tourist platform with the ecstasy of aerial vision and end in the depths of the city with the sacrifice of underground travel. Focussing in particular on the topos of 'armchair travel', *Passagen* follows Benjamin's injunction to read the all-too-recent through the experience of the now departed, drawing a comparison between new forms of visual technology (digital media) and obsolescent modes of visual pleasure (the panorama).

Circumstances of production
The work was originally commissioned by Film and Video Umbrella, London, and Watershed Media Centre, Bristol, as an installation to be shown as part of the National Photography Conference in Bristol, England in 1993. This initial production and staging received funding from the Arts Council of England. The work was then invited to be shown as part of 'V-topia-Vision of a Virtual World' at Tramway in Glasgow, and was developed further with financial assistance from Tramway. Technical resources were made available by the School of Art, Publishing and Music at Oxford Brookes University, and Film and Video Umbrella, London. We are also grateful to Richard Land for his assistance.

Artists' biographies
Graham Ellard's work with photography and electronic media has been shown in galleries around the UK and abroad. He lectures in Fine Art and leads the MA in Electronic Media at Oxford Brookes University, England. **Stephen Johnstone** lectures in Art History at Winchester School of Art, England. He is course leader on the MA in Contemporary Art and Theory. They both live in London.