

# *ArCade V*

*International Exhibition of Electronic Prints*



**John Curtin Gallery**  
**12 - 30 September 2007**

**CADE 2007**  
**Computers in Art and Design Education**  
**Conference**

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*An international exhibition of electronic prints*

John Curtin Gallery, Curtin University of Technology  
12 - 30 September 2007

Exhibition Curator: Sue Gollifer, University of Brighton, UK  
Catalogue compiled and edited by Sue Gollifer and Suzette Worden.

Catalogue contributions by individual artists.  
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**The West Australian**



This exhibition is part of BEAP (Biennale of Electronic Arts Perth) and CADE 2007 (Computers in Art and Design Education) Conference

# *ArCade V*

## *An international exhibition of electronic prints*

John Curtin Gallery, Curtin University of Technology

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It is now twelve years since I conceived the first '*ArCade*', this being an exhibition of original, limited edition, and artists' prints, all of which, at some stage in their production, had involved the use of computers to generate and manipulate the imagery. My intention was to use the exhibition to demonstrate (to art and design academics and students) opportunities for using emerging technologies to create a new print medium on the one hand, and a hybrid link between old and new technology on the other.

*ArCade V*, the Fifth Open International Exhibition of Electronic Prints, continues to document these concerns and presents a selection of print works that bridge both traditional and digital worlds, providing a synthesis between new digital technological tools and traditional printmaking such as etching, lithography, relief printing and screen-printing.

Some of the prints are further enhanced by the addition of drawing, paint, collage, serving to heighten their expressiveness and repudiate the flatness of the digital output. Such works provoke earlier debates between 'original' and 'reproductive' prints, opening up new artistic paradigms for the Fine Art Printmaker by moving away from the physicality of the print process (and the authentic gesture of the hand) to 'computer prints' that can be completely produced through the use of sophisticated hardware and software, using devices such as digital cameras and scanners. The artist's hand may have had no other intervention than to manipulate the keyboard, mouse and scanner, or to finally signing the work. The final print production is also mechanically driven, never hand-pulled, thus opening up the possibility of generating 'radically new' physical and aesthetic frameworks.

The artists represented in *ArCade V* include independent, academic and research-active new media artists. The works encompass a rich diversity of styles and imagery from scientific, to the generative, ecological and autobiographical. *ArCade V* also incorporates a number of screen-based works that explore the interrelationship between image and sound.

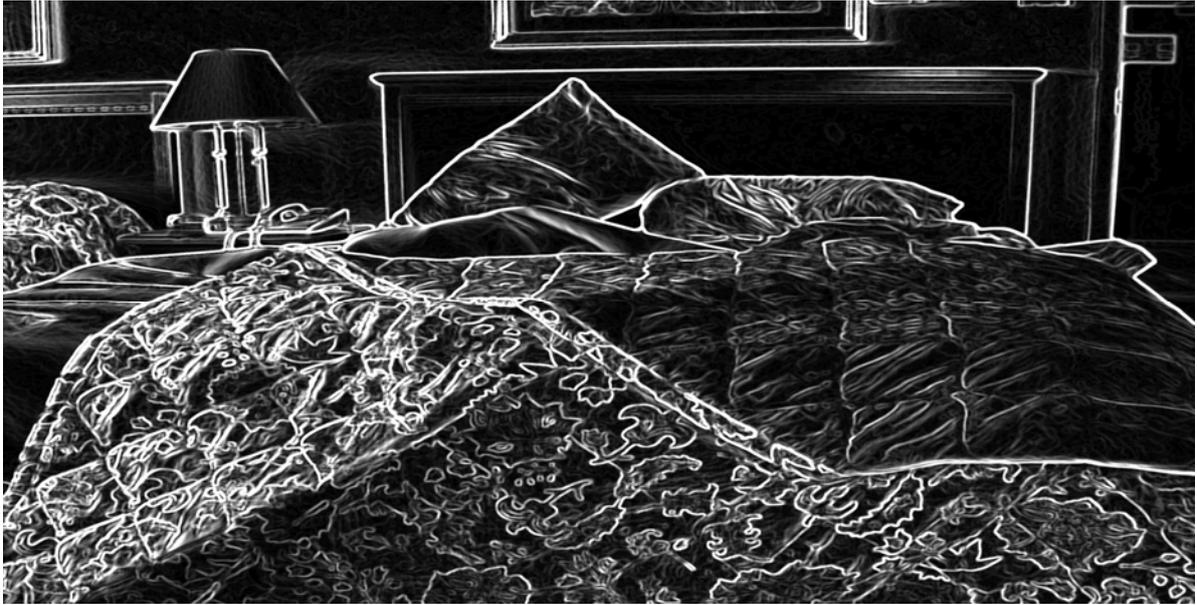
Sue Gollifer, *ArCade* curator.  
University of Brighton, UK.

*This is the first time that an ArCade exhibition has been shown in Australia, being presented exclusively by the CADE 2007 (Computers in Art and Design Education) Conference and BEAP(Biennale of Electronic Arts Perth) 2007.*

# Artists and works represented in *ArCade V*

Derek Besant (Canada)	<i>15 Restless Nights</i> , 2006	Digital print
Paul Brown (Australia)	<i>4 ^ 16</i> , 2006	Screen based
Vlatko Ceric (Croatia)	<i>Unclassified_objects-3</i> , 2007	Digital print
Lesley Loraine Cullan (UK)	<i>Roses</i> , 2007	Digital print
Brian Evans (USA)	<i>zigs (grillin')</i> , 2006	Digital print
James Faure Walker (UK)	<i>Lose Eight</i> , 2007	Digital print
Sue Gollifer (UK)	<i>Untitled BX2</i> , 2007	Digital print
Ian Gwilt (Australia)	<i>foldersx120</i> , 2007	Digital print
Bill Hart (Australia)	<i>I think therefore I am not sure if I am....</i> , 2001	Digital print
Dorothy Simpson Krause (USA)	<i>Ascending</i> , 2005	Digital print
Vladimir Martynoff (Russia)	<i>Gold Totem</i> , 2007	Digital print
Bonnie Mitchell (USA)	<i>Into the Obscure</i> , 2007	Digital print
Michael O'Rourke (USA)	<i>Woman</i> , 2006	Digital print
Cynthia Beth Rubin (USA)	<i>Sand and Grasses in the Desert</i> , 2006	Digital print
Semiconductor (UK)	<i>The Sound of Microclimates</i> , 2004	Screen based
Squidsoup (UK)	<i>Altzero 5</i> , 2002	Screen based
Marty St.James (UK)	<i>Oneiric</i> , 2001	Screen based
Philip Wetton (USA)	<i>Sail</i> , 2007	Digital print

## Derek Michael Besant (Canada)



*15 Restless Nights*, 2006, 47 cm x 91 cm. Digital print, thermal ink on veil scrim.

### Artist' Statement

Time is the constant. The place is variable. In *Fifteen Restless Nights*, I look to the same 20 minute interval, while the places differ only by way of different time zones which refer to geographic designations. I would take the opportunity to digitally photograph the unmade beds and disarray like a crime scene. This stolen moment became the basis for reconstructing my image source material as metaphoric landscapes that also map out the distances of intimacy between us. The 'other' geography of what a bed might signify. The photographic image is deconstructed into a cinegraphic scene where there is room for interpretation. There is room for mistakes and a kind of voyeuristic view enforced by the soundtrack and text elements.

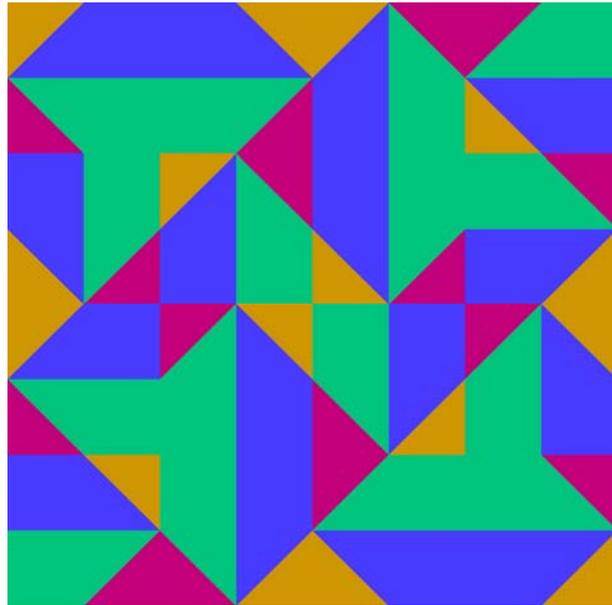
I like the notion that across the country there could be the same moment only broken up into the different cities which have motels. It's part of the Canadian psyche to measure everything in distances as we travel.

There is a purposeful implied narrative to be considered in looking at the veils as objects that contain collective contemporary content. The graphic translations are very black and white, like smoke, they hang like curtains; but they are like (geographical) topography or physical territory.

Peter Goddard, wrote about this work in "Tangled and abandoned: Besant's *Fifteen Restless Nights*" an interview article for *The Toronto Star*, Sept. 14, 2006 and observed: "We have all been there, alone and lost in some shady motel this side of nowhere on a rainy night, even if it is only in our imagination. Feeling as if we're starring in a noir movie, we start thinking about taking up smoking again. Well move over."

Considering this work, Goddard wrote that: "Like the characters in the narrative, Besant has travelled across the country while staying in strange motels. Using a camera designed for scientific microscopic photographic technology, the image of the sheets eventually loomed as spacious and rugged as a photograph of the Canadian prairies as if taken from outer space. All of this makes for the new Canadian landscape as invented by Besant, with its night car rides and empty motel beds."

## Paul Brown (Australia)



*4<sup>16</sup>*, 2006, kinetic painting, made with Processing.

### Artist's Statement

This work continues my 40-year interest in art and technology. A computational artificial lifeform is used to drive the work and ensure that its long-term behaviour is both interesting and non-repetitive. In choosing to describe this work as kinetic painting I am acknowledging my roots in the European kinetic, conceptual and systems movements while paying homage to the US/French artist, Frank Malina, who first used the term to describe his electro-mechanical works in the mid 1950s.

In my artwork I attempt to create 'venues' that encourage the participant to engage with the work. Because my work emerges (in the computational sense) from game-like processes I include elements of play in order to capture and sustain the participant's attention.

Rather than being constructed or designed, this work 'evolves'. I look forward to a future where computational processes will make artworks autonomously without the need for humans.

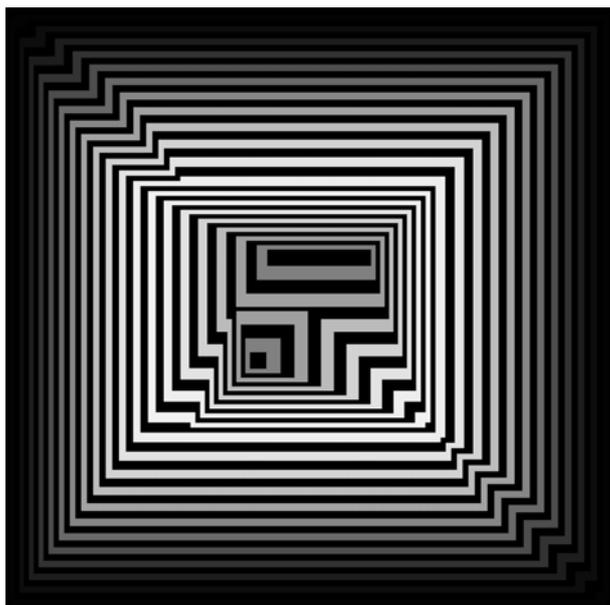
An in depth description of my working methods is contained in my chapter 'Stepping Stones in the Mist' in the book *Creative Evolutionary Systems* edited by Peter J. Bentley and David W. Corne, Morgan Kaufman, August 2001, and which is also on my website: <http://www.paul-brown.com/WORDS/STEPPING.HTM>

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Paul Brown is currently (2005-08) visiting professor and artist-in-residence in the Dept. of Informatics at the University of Sussex where he is working on a project to evolve robots that can draw. Examples of his artwork and publications are available on his website at:

<http://www.paul-brown.com>

## Vlatko Ceric (Croatia)



*Unclassified\_objects-3*, 2007, 50 cm x 59 cm. Digital manipulation for archival print.

### Technical Notes

Unclassified objects cycle presented as deterministic geometrical structures in gray tones, intended to illustrate some unknown objects. Technically this cycle is based on a relatively simple idea of an iterative computational process successively covering a plane with rectangles of varying positions, dimensions and level of gray. Both positions of rectangles in the plane, their sizes and level of gray applied to them are governed by mathematical models based on periodic functions. Careful selection of initial and final iteration number is required in order to produce a clean and closed image.

### Artist's Statement

My work belongs to computer generated abstract art, or more specifically to algorithmic art where images are generated using algorithms, i.e. precise procedures coded in some programming language. An algorithm contains rules written in mathematical and computational form that describes how an image will look like and how it is to be generated. I am creating my own software that transforms my ideas into images. For that purpose I have developed an abstract visual grammar based on the use of either elementary geometrical objects (like lines, squares or triangles) integrated into diverse spatial arrangements, lines that curves under the influence of mathematical 'force', or continuous areas formed by different algorithms.

I believe that computer art has to find its own character and form, rather than copy traditional art styles. In my work I am looking for my own content and style through extensive experimentation with form and the manipulation of colours. For that purpose I use the computer as a powerful tool and a partner in the creative process. I use several methods in my work: a constructivist approach, mathematical modelling approach, and digital manipulation of photographs. The constructivist approach is based on preconceived structures being described by algorithms. Programs developed on the basis of these algorithms enable fairly fast analysis of numerous image variations as well as the generation of extremely precise images. Mathematical models represent internal forces that keep together geometrical objects in specific spatial patterns. The mathematical modelling approach starts from a rough idea of how the image could look, and requires intensive experimentation in order to find an appropriate mathematical model that gives an interesting visual result. Images created in this manner range from the geometric to structures liberated of rigorous form.

I don't use mathematical modelling in order to visualize mathematical objects but rather to obtain interesting images by an intuitive approach. Because of the enormous richness of the colour spectrum and structures of the world surrounding us, a richness that surpasses almost anything that can be created artificially, the images obtained in such a way can be very complex and interesting. This approach demonstrates that there is no fixed boundary between the figurative and abstract world.

## Lesley Loraine Cullan (UK)



*Roses*, 2007, Print size unframed, 137 cm x 137 cm. Digital photograph manipulated in Photoshop.

### Artist's Statement

Lesley Cullan is a practising artist who lives and works in the North East of Scotland. Her digital artwork has been a fundamental development tool within her wider range of artistic activities. Qualifying with an Honours Degree and as a Post Graduate in Textile Design and Stained Glass, she went on to work as a graphic designer and manager of the software development company Aldus Europe Ltd. While there she was involved in the experimentation and development of artworks to publicise creative artwork using computers and software in the late 1980's.

*Roses* explores the relationship of applying digital processes to her traditionally produced paintings. This digital print is part of a series of 10 that have been produced based around a body of original acrylics.

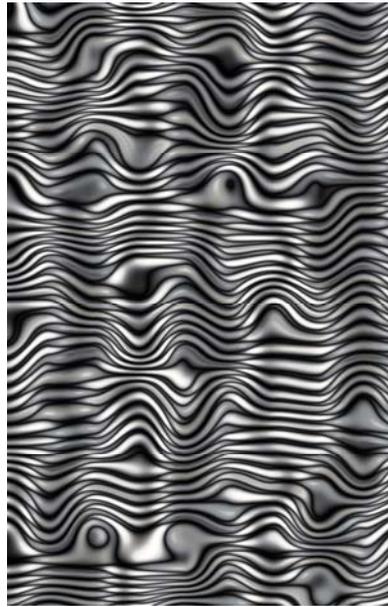
The images are transposed into the digital arena by applying one single command - transforming the image into an electronic perspective version of its original form. This is a two step process; (1) taking a digital photograph of the painting, and then (2) the application of a digital filter within Photoshop.

This line of enquiry completely mirrors any previous digital investigation. Earlier digital work involved the production of artworks that had been completely evolved within the computer software using the screen, mouse, and software commands from beginning to end. Attempting to create an 'artistry' paying attention to detail of mark making and drawn linear qualities.

Over the years she has been interested in looking at the crossovers between the digital and the traditional. With her latest series of prints the investigative process has been turned on its head, with the digital element being the last final piece of the process, but indisputably having the largest impact on the overall final image.

The title of the artwork *Roses* along with the almost recognisable imagery, leads the viewer to observe and question the hidden composition through colour, and placement of perspective blocked towers which explode from the centre of the image. The image is almost recognisable. There is a strange familiarity, and yet a breaking apart, with sections of the image hidden, or destroyed. A strange blend of traditional and digital process leads to an indisputable digital image which is founded in one of the most traditional of artworks 'flower paintings'.

## Brian Evans (USA)



*zigs (grillin')*. 2006, 51 cm x 76 cm. Digital print.

### Technical Notes

This print is created on an Apple Macintosh using standard applications and custom software written in Processing. Prints are made on an Epson 9600 using Ultrachrome inks and Hahnemuhle archival paper coated for inkjet.

### Artist's Statement

Maps are metaphors. Through metaphors we connect what we experience to what we remember. We create knowledge by connecting the new (the present) to what we know (the past) so we may predict what happens next (the future).

Our desire to predict fuels our desire to live; to survive. Desire is the foundation of narrative. Narrative reduces to desire, action and result—the structure of story. We exist in endless loops of desire— layer upon layer of stories of varying temporalities and shifting priorities—all synchronized to rhythms of breath and heart.

I make maps, in and out of time. I start with raw code—simple numeric models. As all is number in the computer I can map the numbers to the senses—turning them into tangible experience. The maps might loop in time (animation and audio) or freeze in a moment (a still image or print). There is synchrony in the sensory vertical and the temporal horizontal. Image and audio derive from the same numeric source; each maps the other in the moment and through time. It is visual music in a synaesthetic counterpoint.

Musical narrative developed over centuries, moving the listener through time with the Pythagorean struggle of harmonic conflict—dissonance seeking consonance. My little loops and images engage that struggle at various levels. Colour shifts. Composition flows. Image and sound agree, complement, disagree and resolve.

Perhaps it is abstract expressionism, true to its digital materials, founded in musical traditions and modernist formalism. But it is loosened a bit. It is jazz in colour, shape, sound and computation. Relax. Hear the colours. Listen with your eyes.

## James Faure Walker (UK)



*Lose Eight*, 2007, 41 cm x 51 cm. Digital print.

### Technical Notes

One of a series of eight variations on the figure eight, drawn through a Wacom tablet using Painter IX. The underlying motif derives from paintings using Plaka and oil paint. This is the small version (16" x 20") of the 30" x 39". Both are archival Epson prints.

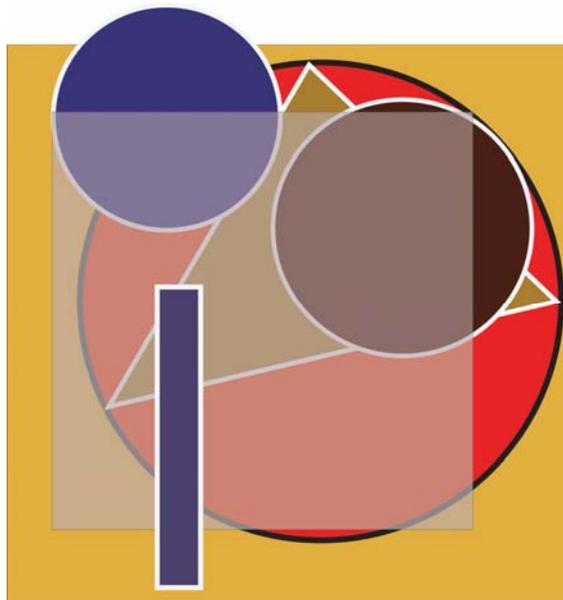
### Artist's Statement

I have several studio routines. I make at least one watercolour a day, I draw, I improvise in paint programs. Sometimes these informal exercises feed into the large-scale paintings I make, and sometimes it is the other way round. I make some pieces as components, or so they can be cut up and reassembled. The more I work with both physical and digital paint – something I have been doing for twenty years now – the less the distinction matters. I don't think of the images I play with on the screen as 'virtual' and I don't think of the forms I paint on canvas as 'physical'. I am interested in how they work as a composition, as colour, light, rhythm, illusion.

In this case I cut up one of the 'component' watercolours in the form of a figure eight, and taped it to a canvas to test out a possible floating accent. This photographed detail (consisting of Plaka on paper and oil paint on canvas) proved more interesting when put back into the paint program. Taking the figure eight as the visual theme, I improvised eight variations. This was the last, where I removed the actual subject, the eight. When some of these were exhibited I was pleased to find that viewers thought the physical motifs were digital, and the digital elements were physical. Not that it would matter.

I elaborated some thoughts on the integration of computer graphics and painting in the book, *Painting the Digital River: How an Artist Learned to Love the Computer*, 2006 (Prentice Hall).

## Sue Gollifer (UK)



*Untitled BX2*, 2007, 48 cm x 48 cm. Digital print on archival Somerset paper.

### Technical Notes

The print *Untitled BX2* was created using several computer applications, both bitmapped and vector based, on an Apple G5 computer. Firstly a series of basic shapes were produced, using Adobe Illustrator, and using the layers options, the images were manipulated and arranged to create the composition. The file was then transferred into Adobe Photoshop, where the image was further manipulated and adjusted. The final version was outputted on to Somerset paper, using a Fine Art Giclee Printer, with pigment inks.

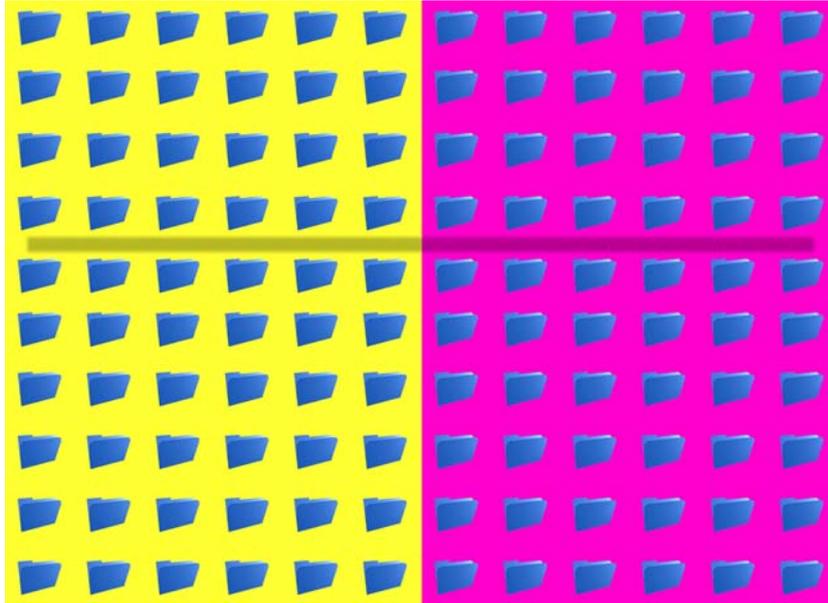
### Artist's Statement

My work has developed in the last thirty years according to a rigorous programme of formal experiment, through which sets of relationships evolved between shapes, colours and tones. At first these relationships were concerned only with the surface of the work: illusions of depth or movement were made explicit by using a systematic grid arrangement and maintaining the symmetry of the overall design. Later, perspective was incorporated into the work, so that the arrangement could be read as a depiction of a space with depth, although never as a 'scene': the space depicted exists solely in the work.

Although much of my work is still concerned with the traditional media of printmaking, I have become increasingly involved with new reprographic technology, using computer-generated imagery and innovative reproductive techniques. These techniques assist me to discover creative and surprising solutions to problems. The memory and speed and the vast network of options allow new thought processes to be explored and discarded painlessly as the ideas take shape, develop and germinate. One attraction of this new technology is the convenience: calculations which once occupied hours, and involved painstaking measurement with ruler and compass can be completed with greater accuracy in seconds, leaving more time for the purely human judgments which remain fundamental to art. Another, as I have suggested above, is the possibility of creative error: a step taken with uncertainty can result in chaos, in which case it can be quickly unmade; or, more rarely, it can produce or suggest an order unforeseen in its complexity. In these cases the device is incorporated into the repertoire of available options, and the process of refinement and discovery continues.

Perhaps even more significant is the possibility offered of detaching the images, or the relationships which determine the images, from their material base. Although ultimately all experience of art derives from the perceptions of artist or viewer in the context of material sensations, computer technology enables the sources of these sensations to be temporarily encoded as streams of digits. In this form they can be modified in scale, directed into a wide range of printing or reproductive media, or almost instantly transmitted over vast distances. In these ways, the specific material form of the image can be made less obsessive. The transaction between artist and viewer becomes less that of considering a negotiable object, but more of a dialogue about perception. When I started to make prints, I was motivated by precisely that possibility: its renewal through new technology continues to motivate my work.

## Ian Gwilt (Australia)



*foldersx120*, 2007, 68 cm x 50 cm. Digital print.

### Technical Notes

This image is created through a combination of 3D Software models manipulated with computer based image processing software and the reprocessing of visual components from various graphical user interfaces.

### Artist's Statement

My artworks explore the use of the Graphical User Interface (GUI) in contemporary art practice - referencing the visual qualities of the GUI to investigate ideas around a computer aesthetic as creative content and challenging the media specificity of the screen based interface. Crossovers between digital / material forms and the relationship between these two spaces provide the spark for the artworks, which include paintings, digital prints, interactive installations and rapid prototype sculptures.

Referencing details from the graphical user interface this digital print combines computer based source material with pattern and colour. Reminiscent of the Pop Art images of the 1960's, the work picks up on ideas around material culture and the commodification of the image, in this case through the reframing of the GUI as artwork.

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Ian Gwilt is a Digital Artist and course Director in Visual Communication at the University of Technology, Sydney (UTS), Australia. He is also the co-director of the Creativity and Cognition Studios in Sydney. Gwilt holds an MA in Interactive Multimedia, conferred by the University of Balears (UIB) Spain, and the Royal College of Art (RCA) London and in the last 10 years has shown interactive art installations and digital print work at a number of international new media events and galleries.

<http://www.iangwilt.com>

## Bill Hart (Australia)



*I think therefore I am not sure if I am....*, 2001, 81 cm x 99 cm. Digital print.

### Technical Notes

The image is constructed by a generative process, based upon a number of simple observations about drawing. The 'marks' are taken sequentially from a text and placed at random at a point on the image surface with reference to the tone and contour of a reference photographic image. Cobbled together pieces of open source software are used and it takes several hours to form the image.

### Artist's Statement

*I think therefore I'm not sure if I am...* is an image constructed from the text of Descartes' meditations. I've always been suspicious of the Barthesian notion that images can be reduced to texts. The same words can be reconfigured to construct quite different meanings. Meaning is a subtle thread that lies outside form.

## Dorothy Simpson Krause (USA)



*Ascending*, 2005, 91 cm x 91 cm. Inkjet print on polyester.

### Artist's Statement

I am a painter by training and collage-maker by nature and began my experimental printmaking with reprographic machines. Since being introduced to computers in the late 1960's when working on my doctorate at Penn State, I have combined traditional and digital media. My work includes large-scale mixed media pieces, artist books and book-like objects that bridge between these two forms. It embeds archetypal symbols and fragments of image and text in multiple layers of texture and meaning. It combines the humblest of materials, plaster, tar, wax and pigment, with the latest in technology to evoke the past and herald the future. My art-making is an integrated mode of inquiry that links concept and media in an ongoing dialogue - a visible means of exploring meaning.

This work is part of a series called Reflective Vision to indicate multiple meanings. The subject matter, doors, windows and passageways, are both vision and illusion while the concept behind the series, the 'vision' of the artist, is also reflection, contemplation. Both physically and metaphorically, we do not see without some form of illumination. Without light we are in the dark; with light all becomes clear.

These images of doors, windows and passageways are luminous. Some appear and disappear as if refracted by brilliant sunlight or mirrors. Others softly glow in the surround of shadow.

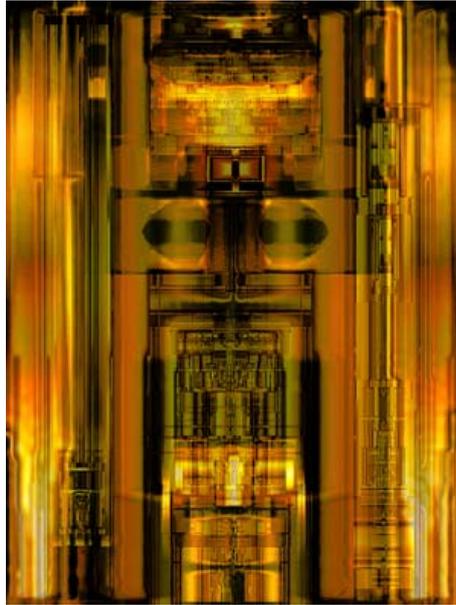
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Dorothy Krause is a painter, collage artist and printmaker who incorporates digital mixed media. Her work is exhibited regularly in galleries and museums and featured in numerous current periodicals and books. She is Professor Emeritus at Massachusetts College of Art where she founded the Computer Arts Center, and a member of Digital Atelier®, artist collaborative.

In 1997, she organized Digital Atelier: A printmaking studio for the 21st century at the Smithsonian American Art Museum. For that work she received a Smithsonian Technology in the Arts Award. That same year, she worked with a group of curators to help them envision the potential of digital printmaking in Media for a New Millennium, a work-tank/ think-shop organized by the Vinalhaven Graphic Arts Foundation. In 2000 Krause received a Kodak Innovator Award and in June 2001, with Digital Atelier, she demonstrated digital printmaking techniques at the opening of the Brooklyn Museum of Art 27th Print National, Digital: Printmaking Now.

Krause is co-author of Digital Art Studio: Techniques for combining inkjet printing with traditional art materials published by Watson-Guption, 2004. The American Print Alliance is travelling an exhibition of work from the book. In December 2005 she was a Visiting Artist at the American Academy in Rome. In the fall of 2007 she will be The Von Hess Visiting Artist in the Borowsky Center at The University of the Arts, Philadelphia.

## Vladimir Martynoff (Russia)



*Gold Totem*, 2007, 102 cm x 76 cm. Digital print.

### Technical Notes

The image is made using Photoshop. It can be printed using any large-scale opportunities found in Russia: paper, canvas, film, plastic and so on.

### Statement for the artist

The Russian art critic Vladimir Levashov has written the following to contextualize the work of Vladimir Martynov: "The key concept connected with the new works of Vladimir Martynov is indefinite variety, with both words carrying emphasis. When you look at any of his works an oriental carpet comes to mind and if you watch them one by one you feel that the carpet comes to life, cinematically changing the colors, pattern, depth, but not the style formed by the metallic gloss of photo-plastic, transforming any image into liquid virtual sight. Such style appears to be very successful; Martynov breaks through the banality of this printing technique to achieve a strange and, following from this, strong beauty of the image. However, such 'beauty as it is' is just an effect. The origin of which is the precise correspondence between the metal plastic style and the indefinite character of the image.

Due to the total ambiguity, one can speak about the image only relatively. The works are as much abstract as objective (like music is both abstract and objective). All the elements here are computer-generated forms which do not depict anything but exist as they are. They also create the illusion of an image and are similar to many things. Being computer graphics it simulates photography, showing an unreal 'non-photographic' pattern-world. Thus the unbelievable combination of presence and imaging, presentation and reflection appears which gives a hallucinatory effect to the artist's works. To look at them is like catching the structure of drawing and remembering that it cannot exist.

Martynov works resist sorting into any art genre or type. Moreover, being created by using multiplying technique they cannot be considered unique - notwithstanding they are precious. Obviously, the elusive nature of these works leads to some difficulties of perception. One likes them and the more he/she looks at them the more so, but they can create perplexity and even stupor. This can be for the 'average spectator' and also for professionals used to being led by settled aesthetic standards more than their own feelings. Such standards rarely include archaically plane aesthetics with multilayer composition and viscous-liquid style connected with new media art technical approaches. Today, in the era of total computerization, such combination of contradictions should be routine-contemporary. However, yesterday's shocking novelty of digital technology does not transform into today's routine since it turns into triviality. It looks like aesthetical new-media opportunities offered by the media are of no interest to anyone. It appears that Vladimir Martynov is too late with his art or has yet waited sufficiently to be evaluated positively. Judging by his confident skill and his arts' contradictory complexity, the second opinion is right."

## Bonnie Mitchell (USA)



*Into the Obscure*, 2007, 84 cm x 61 cm. Digital print.

### Technical Notes

The artwork was developed by creating multiple layers of 3D models and particle systems in Maya. Procedural and photographic textures help to define the 3D forms. The rendered 3D images were composited with the particles and photographic imagery in Photoshop.

### Artist's Statement

*Into the Obscure* explores the relationship between clarity, ambiguity and desire. The green moths metaphorically represent the inner self. The moths represent travel in quest of self-actualization, intellectual fulfilment and emotional stability. They head towards the light, moving out of the desolate past, through the multi-faceted grip of the present and into the unknown future.

As human beings, we are constantly on a journey from the clarity of the past to the obscurity of the future. Along the way we continually encounter obstacles that force us to respond to the present in intellectual, emotional and physical ways. These obstructions, represented by the inorganic red toruses, challenge us to rethink the direction we are heading in life. Although our goals often appear clear at the moment, challenges in life force us to redefine our objectives and move towards the destination with an acute awareness of the surroundings. Without obstacles, the illusion of, and quest towards a seemingly bright future might cause us to miss the complex beauty of the present.

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Bonnie Mitchell is currently an Associate Professor at Bowling Green State University in the School of Art, Digital Arts, in Bowling Green, Ohio, USA. She works with programming, particle systems, 3D modelling, animation, photography, video, experimental music and compositing to create electronic installation art, digital images, experimental animations and Internet art projects. Her works explore experiential relationships between natural elements, psychological states and humanity.



## Cynthia Beth Rubin (USA)



*Sand and Grasses in the Desert*, 2006, 76 cm x 54 cm. Archival digital print.

### Technical Notes

Holly Rushmeier and Bing Wang scanned the seashells with a ShapeGrabber laser range scanner from multiple views, and processed the data into one integrated triangle mesh. Multiple colour images from a variety of views were acquired under different lighting conditions, and processed to remove lighting effects such as highlights and shadows. The mesh was parameterized and the processed colour images automatically associated with the geometry as a texture map atlas, rendering a realistic model of the shell that can be turned and examined within the computer. The artistic manipulations of 3D scans of seashells were done in Cinema 4D. Twisting the forms to give them life, they were also texture-wrapped in Cinema 4D. The textures of the original shells are still present, in a bump-map for the newer texture, adding to the layers of association. The forms were inserted into the Negev landscape in Adobe Photoshop, where further colour and surface manipulations brought the imagery into a coherent whole. Adobe Photoshop and Corel Painter were used to tease out differences in texture, building on the tactile qualities of the original 3D scan. The 2D scan a 40 year-old slide from my Kodak Instamatic camera provides the real world element, but in this case, the photographic pebbles feel less real than the shells.

### Artist's Statement

*Sand and Grasses in the Desert* is the result of one of those unusually fortunate collaborations, when the very different goals of the collaborators come together in a satisfying exchange of skills and ideas. As a digital artist who has longed worked with creating multi-layered references and ambiguous space in two-dimensional space, I was eager to experiment with how I might transfer my experience to three-dimensional digital objects. Holly Rushmeier and Bing Wang, researchers at Yale University, are developing methods for effective 3D scanning of natural and manufactured objects, with an interest in how the resulting models might function as source material in creative applications. They were able to provide wonderfully intricate 3D scans of natural objects (in this case, seashells), which I brought into my fantasy world.

*Sand and Grasses in the Desert* is a still image, fixed print, but it is also a mixed reality work, in that it combines virtual three-dimensional form with flat imagery, and it combines fantasy forms with a real-world photograph. The original shells have been bent and twisted so that they appear to be alive, moving forms, engaged in some sort of interaction between themselves. The forms are wrapped with textures developed from my recent photograph of sand and grasses in the deserts of Senegal, but they are placed in the real world landscape of the Negev Desert as it appeared 40 years ago, in a slide I took with my first Kodak Instamatic camera in the summer of 1966. My work frequently calls on notions of cultural memory and heritage. This series is different, in that it refers to the reality of others, the harsh and exotic reality of the desert, while creating an ambiguity of meaning in the tension between authenticity and fantasy. This is the desert from one part of the world dancing into the desert of another part of the world, as depicted by an artist who does not inhabit either one of them.

## Semiconductor (UK)



*The Sound of Microclimates*, 2004, Surround sound DVD installation (8:20).

### Technical Notes

Filmed and animated between January and March 2004 during a residency at the Centre International D'accueil et D'echanges des Recollets (Paris/France). Filmed on location in Paris, weather patterns were made and composited by using a combination of Boujou, 3DS Max, After Effects and Photoshop. The project was funded by The City of Paris and the Ministry Foreign Affairs, France.

### Artist's Statement

The Sound of Microclimates reveals the sights and sounds of a series of unusual weather patterns in the Paris of today. Here, architecture has become interwoven with the natural processes of the geographical landscape. Set within the un-noticed moments in time, extreme microclimates are presented as the future in city accessories, revealing the unseen urban terrains of tomorrow.

Like the temporary staged events at a World Expo these weather patterns hi-light public spaces and architecture within the City or Paris. They exist as a series of weather observations that animate the evolution of the inanimate urban condition. Each microclimatic intervention has its own audible frequencies, where the sound from each environment animates the movement and reveals each sites unique narrative.

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Since 1999 Semiconductor, comprising Ruth Jarman and Joseph Gerhardt, have exhibited, screened and performed digital animations which reveal our physical world in flux. Their work has been seen extensively, from Tate Britain and ICA London to the San Francisco International Film Festival, Transmediale Berlin and the Venice Biennale. Recent fellowships and residencies have supported site-specific work, including research and experimentation at the NASA Space Sciences Laboratories UC Berkeley, California. Semiconductor are based in Brighton, U.K.

## Squidsoup (UK)



*Altzero 5, 2002.*

### Technical Notes

Altzero 5 is a project by squidsoup with music by Icarus. It was produced using the Altzero Compose software, during a two day event at the Cornerhouse (Manchester), using sounds based entirely on audience interactions with a range of found objects.

### Artist's Statement

Squidsoup was formed in 1997 with the aims of pushing at the boundaries of interactive design, and exploiting the immersive and emotional potential of digital media. The personnel for this project were Anthony Rowe and Gaz Bushell.

Altzero 5 makes a link between games technologies, where navigable soundscapes are now the norm - but not the focus - and musical composition. In a sense, it envisages a gaming environment where everything is stripped out except the sound and the ability to move. The visuals then become a reference for the sounds, another means of deconstructing and understanding the structure of what is being listened to.

The project is an exploration of the creative and emotive possibilities of interactive sound in space. The various aspects of the project have probed issues of authorial control, passive and active experience, collaborative and competitive play through sound.

There have been five iterations of the project, each developing on the last but with its own unique focus. The first incarnation used a shared multiuser space to allow participants to create collaborative online live sound performances. Altzero 2 and 3 focussed on spatial musical composition as an explorable audio freeze frame. Altzero Compose was a freely downloadable tool for creating one's own 3-dimensional navigable sonic environments. It has the ability to easily export a piece for uploading to the web, which can then be experienced by others from within a browser (<http://www.squidsoup.org/altzero/>).

The Altzero project was awarded an International EMMA (Online Art, 2000) and a BAFTA nomination (Interactive Art, 2002). The various incarnations of the project have also been shown as installations at many festivals, events and galleries around the world, including Lab3D (Cornerhouse Manchester), ISEA (Nagoya Japan), SONAR (Barcelona) and SIGGRAPH (LA).

Altzero 5 was commissioned by the Cornerhouse Gallery in Manchester UK, with the support of the New Media Art Projects fund, Arts Council England.

## Marty St.James (UK)



*Oneiric, 2001.*

### Artist's Statement

Oneiric is a continuously playing moving image work complemented by silence or the sounds that are found around its showing. The intention is to place the action or rather lack of action in another space/time frame, following through on my theme of, "existing somewhere between the moving and the static". In this case I wanted the work to be made up of still frames, whilst being aware of the contradiction of the piece being present at 24 frames per second. A sort of challenge to the medium of moving image.

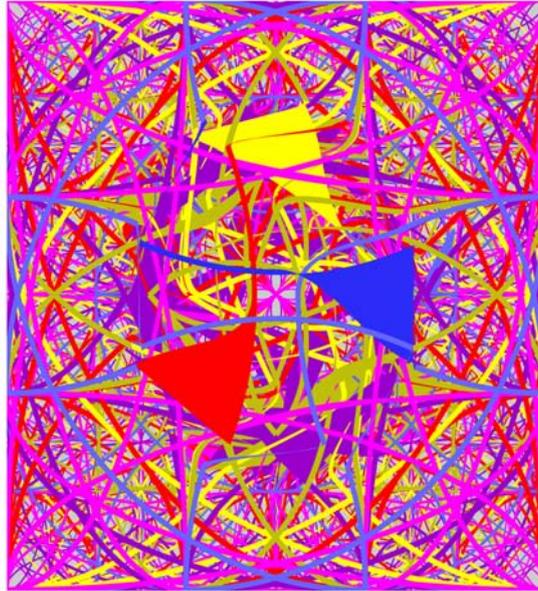
According to Dr Stephen Bury, Head of Modern and North American collections, The British Library, Oneiric is: ... "Amongst other indications there are suggestions that St.James still connects with the world of painting and drawing: and indeed he admires the painters, Arnulf Rainer and Yves Klein....visits to both North America Indian painters (the Navajo) and Australian Aboriginal artists. Their pictorial depictions of historical and physical time were influential on the artist in his exploration of time and freed up the otherwise inevitable time-bound definition of time itself."

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Marty St.James has been an international video / performance artist since the late seventies. His works have been shown on television and performance art tours; in exhibitions and screenings at the Tate, MOMA, and Pompidou Centre. His Electronic Video Portraits are in the National Portrait Gallery collection, London. He describes his work as existing "Somewhere Between the Moving and the Static".

He has represented Britain abroad in a number of exhibitions, performance art events, video screenings and festivals via the British Council and Arts Council, including, Electronically Yours at the Metropolitan Museum of Photography in Tokyo (1998) and Artec Nagoya, Japan (1995). During 2000 his year-long inter-active digital work Picture Yourself showed at the Scottish National Galleries celebrating the millennium with the public able to see themselves projected on the museum walls. In 2000 his Boy / Girl video diptych showed at the National Portrait Gallery in London, Painting the Century, 101 Portrait Masterpieces from the 20th century including Picasso, Freud, Bacon, Warhol, Munch etc. This year (2007) his new work, The Invisible Man, a video triptych installation was exhibited at The Chelsea Art Museum, New York.

## Philip Wetton (USA)



*Sail*. 2007, 23 cm x 25 cm. Digital print.

### Technical Notes

This image was produced using Adobe Illustrator and printed on Somerset Velvet with Ultra Chrome inks.

### Artist's Statement

My imagery is a response to self-imposed stringent constraints. By working this way I find things impossible for me to imagine. There are analogies to poetry, music and games.

Although my prints are often complex, I hope the spectator is rewarded by time spent looking.