

Drawing the Thread

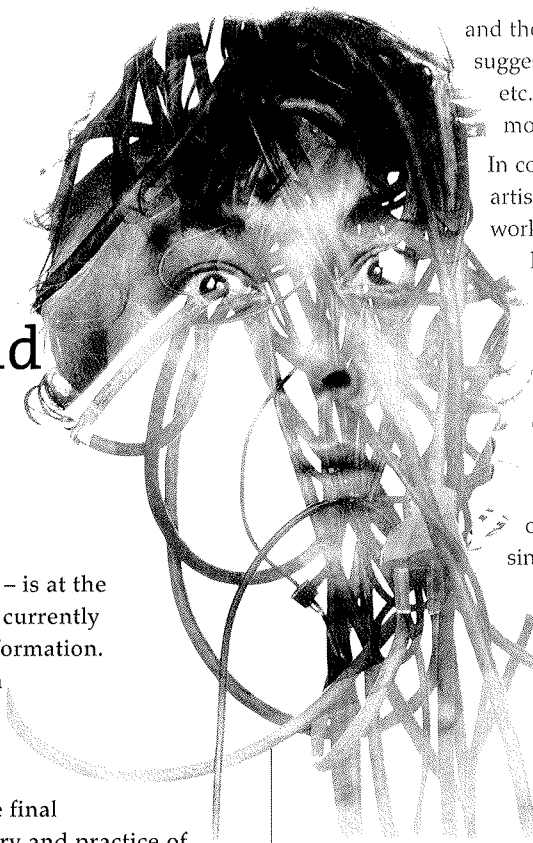
Mike Leggett

Drawing – the use of line and tone – is at the other end of a technology timeline currently unravelling in the digital age of information. Drawing – an economy of means in the elaboration of purpose – is currently practiced as a process by artists working in many mediums that prepares for, or completes, the final outcome, a visual artifact. The theory and practice of drawing ranges from a tool for honing perceptual disciplines to one that permits the free-flow of the obsessive-compulsive component of our personalities.

In examining the spaces between the pencil and the pixel, there is clearly an element of comparing apples and pears in this far from still life. The dynamics of the rapidly developing communities of interest within digital media, particularly its online culture manifestation, accords the visual dimension only part of the bandwidth that appends our modern perceptual faculties. The babble that is the Internet offers us a network of threads¹ that can be studio and gallery but more importantly, a space without fixed dimensions or contained objects, where if you like, apples and pears are still seeking forms of representation where place, time and flavour are meaningful to connoisseurs as well as surfers and other electronic *flâneurs*.

Of course the very existence of computers, the artist Maria Miranda reminds me, has been dependent on the ancient crafts of first drawing and then etching the copper of their printed circuit cards.

"Draw how the plant grows..." was a memorable phrase from the drawing tutor. It took the pencil into a realm where the eyes and the intellect combined to express visual knowledge. Paul Thomas, the Perth-based artist, encountered the Coldstream tradition in England where, "All the ingredients in the drawing are given the same importance, relevant points are used to construct the image. ...To make the first mark is to sum up the possible distance between the seer



and the seen. That one mark alone is to suggest distance, depth of tone, placement, etc. From that mark, things only become more complex."

In common with many other media artists, Thomas publishes much of his work on website or cd-rom. "My drawing led me to a way of seeing the world with a desire to communicate about my perception of things. Using the camera as a drawing tool assisted me in documenting my ideas, drawing out ideas."

Harriet Birks is a graduate of the new generation: "I have been obsessively compulsively drawing since I was inside the womb... One of the great advantages of human evolution is that we have this thing called a 'precision grip', which is hard to utilise with a mouse.... using a mouse is like drawing with a stick."

The computer is a studio and artists have many options for the form the final work will take – ink-jet or laser print, photograph, website, cd-rom, animation or assembled action on videotape or film. Like a majority of computer-based artists, Birks works instead with the 'drawing/graphics tablet interface'² and has assimilated in a relatively short time a considerable experience with a whole gamut of computer-based tools which value spontaneity over analysis and control and extend "the sheer quantity of colours, texture, image resources – the mess factor – drawing in the computer allows for more artistic freedom... Animation is very much like drawing, spatial drawing. Rather than creating a perspective in a window, I create 3D moving and layered perspectives with vector graphics."

"I have no formal drawing skills, I have always just liked to draw." Alyssa Rothwell has completed several prize-winning interactive cd-roms including *Three Mile Creek*.

"A hand-drawn approach seems appropriate for the subjects I explore, those of a rural Australia... the computer provides you with an environment to test and experiment, you have the freedom to scan line drawings and recompose, scale, shift, edit, undo, duplicate etc – the drawing becomes multipurpose and less precious. There is something really special about the simplicity of drawing and using just pencil and paper... it brings a warmth to the process that I have not experienced when drawing and working directly to the screen..."

Mr Snow, a Sydney-based artist similarly describes software "primarily as a set of drawing tools for exploring ideas...", a frequently repeated description by emerging artists who still



include pencil and paper as part of the process:

"...a sketch from a sketch book will prompt some exploration, in a 3D software environment, into how light and shade will fall

over a particular sculpture. This will prompt further sketching or painting, followed by more exploration digitally, perhaps a thumbnail of a movie to understand better its dimensionality and which angles work best."

Snow also uses his skills to 'pre-visualise' ideas and concepts for other artists and their clients, akin to the movie storyboard. Pre-production planning can be augmented with lighting models and virtual walk-throughs, clearly demonstrating notions of scale, of shape and of movement.

Peter Callas went to Sydney College of the Arts between 1978-80. "Drawing was definitely not considered part of the retinue of skills required for contemporary artists. There were, on principle, no life drawing classes at all.

"... Drawing has always been a highly significant activity for me. Drawing over digitised photographs is a form of analysis or concentrated observation of an image...[and] brings you to noticing things in an image which you would otherwise take for granted. Sometimes you are forced to make decisions about what a line or dark shape represents in a photograph - things which are not obvious with a simple glance."

Callas is currently preparing to work on a commissioned animated interpretation of the famous mid-14th century *Triumph of Death* (*Trionfo della Morte*) fresco cycle in the Camposanto in Pisa. "In 1944 the Camposanto was bombed [which] all but destroyed most of the frescos. The four I am working on are amongst the very few that survived. However one surprising discovery was made as a result of the fire. The *sinopie* (underdrawings) were discovered pretty much intact.

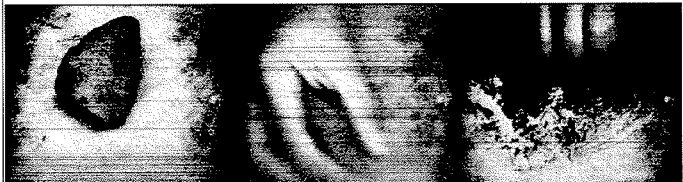
"Having determined what the frescos might have looked like, the phase after that will be to imagine how the figures might be meaningfully altered for the purposes of the animation, and then how they will be animated."

Most artists work with proprietary software, bought off the shelf, in most cases designed by software engineers aided with some market research.³ Machine-made images are nothing new - printing techniques for producing images in serial form have been around for centuries - but providing machines with software containing a set of rules to decide the image's appearance is more recent.

In the late 1960s Harold Cohen, a painter and teacher at the Slade School, spent a year in San Diego and was introduced to computing. Work began on AARON, a software program that he was to evolve over the next thirty years.

"The earliest versions of AARON⁴ could do very little more than to distinguish between figure and ground, closed forms and open forms, and to perform various simple manipulations on those structures. That may not have been enough, however, had AARON not performed, as humans do, in feedback mode. All its decisions about how to proceed with a drawing, from the lowest level of constructing a single line to higher-level issues of composition, were made by considering what it wanted to do in relation to what it had done already."⁵

Expat Simon Biggs, now Research Professor at Sheffield University, in the early 80s whilst at the CSIRO in Sydney, "was working with gesture recognition systems to help create large scale ink on paper drawings. These were made using a very large scale industrial plotting kit as output with video capture, as well as light pens and tablets, as input. What resulted looked a bit like a cross between Pollock and Le Witt. Ironically, this work came directly out of research I was doing into remote sensing systems for interactive installations, but had a temporary use in what were effectively automatic drawing pieces. This research was applied in my installations initially in the mid 80s and then became the core of my practice during the 90s involving public space installations affected by the presence of spectators."



Having had access to research facilities in Australia, Germany and Sweden, part of Horst Kiechle's art practice "explores the introduction of irregular and more sculptural shapes into architecture. ... since 2D plan drawings use the convention of right angles for the floor plans, elevations and cross-sections it is no surprise that architecture is dominated by the right angle." Using stereo projection and liquid crystal glasses the operator sees a truly three-dimensional representation floating in the space above and in front of the two projection tables of the virtual workbench. He predicts that "a more intuitive approach to drawing 3D spaces will become available once immersive virtual reality gets combined with a tool that generates and manipulates surfaces through tracked body movement in space."

OPPOSITE PAGE: Dave Cubby *Techead#9.1* 1983, silver gelatin print, "...drawing with light' as part of a continuum of technology concerned with animation, replication and simulation..." THIS PAGE, TOP LEFT: Peter Callas *Lost in Translation* 1999, video frame from computer animation work, Karlsruhe/Brazil/Sydney, 6:00 mins, Produced in Association with the Australian Film Commission. ABOVE: Peter Callas *Singing Stone* 1980, three video frames from colouriser work, Sydney, 4:22 mins



This suggests the nexus where mark-making can be interpreted as a trace of the physical body that made the mark – some wall graffiti suggests this besides the better known classical and modern masterworks – in that the weight of the mark indicates, is in correspondence with, the musculature and limb extensions of the drawer. This indexical link, connoting presence of the author, “...a signature which implies the hand..”, as John Colette puts it, or “...part of a more ‘subjective’ tone in my work” as Sally Pryor has described it, is a point of consistent reference for many artists.

Metaphysical research parallels recent applied work in ‘free eye drawing’ by John Tchalenko. Using a computer-based device, he is able to monitor eye movements to determine the gaze point and place a cursor on that point – in effect an ‘eye mouse’. In a series of experiments he found that the drawing trained artist was “capable of slower, steady eye movements” and was much better “when tracing a curve” on the screen using the device.⁶

As cross-media hybrids develop between the visual arts, sound, dance and other performance forms, physical barriers and conventions of perspective continue to break down. Melbourne-based musician and sonic and interactive media artist Damien Everett comments: “Drawing is performance: each line gesturally encapsulates the psycho/physical state of the artist ... the Internet is enabling artists to communicate and collaborate in ways previously unimaginable ... my VRmuse software application seeks to integrate these potentials into a flexible system for realtime web-based

performance.” As one of the generation brought up with computers, Everett has barely paused in picking up the programming skills (alongside an aesthetic sensibility) he feels are necessary for the development of tools for a media environment, such as his online performance space VRmuse.

Collaboration on the Net, the so-called ‘open source movement’, has included the sharing of solutions, perspectives if you will, for compositional aspects most often referred to as architecture within the software community, where ‘libraries’ of ‘objects’ are kept on ‘server’ computers storing re-usable lines of programming code and shared amongst collaborators on often unrelated projects.

The notion of the atelier is the very basis of much of this work, with the more experienced leading and advising the newbies, but with each reserving the right to adapt and innovate the work completed by others. ‘Code-cutting’ like drawing attracts the somewhat obsessive personality, dedicated to long hours of practice, intent upon a perfection, even an elegance. Like the pencil mark on paper, writing computer code can be unforgiving for producing a visually precise outcome that is capable of elaborating its purpose. ☺

Mike Leggett is an artist, writer and curator working in Sydney.

QUOTED ARTISTS’ WEBSITES:

Paul Thomas - <http://sea.curtin.edu.au> + www.visible-space.com

Harriet Napier Birks - www.geocities.com/mrbleem

Alyssa Rothwell - www.FromMyPerch.com

Simon Biggs - www.littlepig.org.uk/

Maria Miranda - www.out-of-sync.com

Mr Snow - <http://laudanum.net>

Harold Cohen - www.kurzweilcyberart.com

Peter Callas - www.anu.edu.au/ITA/CSA/callas

Sally Pryor - www.ozemail.com.au/~spryor/bio.html

Horst Kiechle - www.vislab.usyd.edu.au/staff/horst

Damien Everett - <http://vrmuse.com/>

All unattributed quotes are from email correspondence, May-July 2001.

1 ‘Threads’: an Internet users indexing term referring to topics of collaborative work, including email/forum discussions, production projects, exhibitions, writings etc

2 Instead of controlling the position of the cursor, or drawing point, on the screen using the conventional ‘mouse’, the drawing/graphics tablet interface is a flat plastic, slightly raised surface which responds to the position of the pointer, a pen-shaped device, held onto the surface and producing a corresponding position on the screen.

3 Mike Leggett ‘Thinking Imaging Software’, *Photofile #60*, ACP, Sydney 2000

4 Stanford University, c.1973

5 Harold Cohen ‘The Further Exploits of AARON, painter’ in *Stanford Humanities Review*, UCSD 1995

6 John Tchalenko ‘Free-eye Drawing’ in *Point #11*, Surrey Institute of Art & Design, England 2001

ABOVE: Harold Cohen observes the output of a painting by AARON in 1995. Photo: Becky Cohen. FACING PAGE: Maria Miranda Heart, digital image projected onto silk, from an installation *Dead Centre: the body with organs* at the Performance Space, Sydney, June 1999, Norie Neumark and Maria Miranda with Amanda Stewart and Greg White.