

Introduction

Etherscapes is a term I have created for my research and art practice. It is an ocean of thought and meaning that exists invisibly, constantly morphing, shifting and rumbling under, above and all around us. It is the ocean of the digital aesthetic. In this research I attempt to capture some of it as part of an exploration into technology and control. More methodically *Etherscapes* comes from the idea of ether, which is a massless elastic space. It is the sky or the heavens above. The history of ether is long and significant representing the human empirical sense and desire to wonder what's beyond the stars. Ether is that unexplainable and invisible substance between things and was first scientifically theorised by Einstein and his counterparts, Lorentz and Maxwell, when discussing his Theory of Relativity. Einstein describes the ether as “an elastic medium filling space and propagating all kinds of electromagnetic waves.”¹ Ether derives its name from the Latin word Aether that is used in greek Mythology as “the poetic personification of the clear upper air breathed by the Olympians.”² From this point and with inspiration from David Toop's book *Ocean of Sound: aether talk, ambient sound and imaginary worlds*, the ether seemed an apt term for my research into the digital aesthetic. It is a place I imagine the Internet, Network space, a computer hard drive, our imaginations and what dreams might look like. *Etherscapes* is the slippery realm in which electronic and new media arts exists, an undefined and unconventional mode of visual culture.

The massless elasticity of contemporary critical theory itself provides a rich source for this exploration. As part of my research I will explore some theorists who fashion this contemporary critical theory and new media thought. I follow the evolution of the Image, speculate how it has become the *Floating Image* and analyse its effect on society and modern thought, technology and control. Such theorists as Gilles Deleuze and Felix Guattari's idea of *Roots and Rhizome* shifting, polymorphic space, the tree of thought and narrative where blurring boundaries provide adequate foundations for this movement. With relation to new directions and future media arts movement I use Gilles Deleuze's *Cinema 2* with its critical discourse of the *time-Image* and the

¹ Kostro, L. (2000) *Einstein and the Ether*, Apeiron, Montreal. P14.

² <http://dictionary.reference.com/search?q=aether>

predictions of the status of the electronic image beyond cinema. I use the works of Lev Manovich *The Language of New Media* as a fundamental new media analysis with early cinema an apt motif. Also Manovich's *Data Visualisation and the Anti-Sublime* provides an abstract view of data flow and visualisation linking screen media and computational or data art within society. I look at non-linear narrative and art forms of new media artists as a speculative discourse into new modes of cinema and the screen. Finally, I use Vivian Sobchack's paper *The Scene of The Screen* to question the electronic image, the screen and technological determinism. The ideas herein become a cathartic discourse that embodies digital aesthetics theory and practice into a body of new speculative thought on technology's organic progression and questions levels of control.

French theorist Michel Foucault explored the criminal justice system in *Discipline and Punish* and discovered that there is not only a hierarchical structure operating within organisations, institutions and the state but with this structure comes a power through knowledge, as control is maintained. This is the panoptic that has become common thought regarding network space, the Internet and the digital ether today. "It's a 'physics' or an 'anatomy' of power, a "technology" that creates "a sort of social 'quarantine,' to indefinitely generalizable mechanism of 'panopticism.'"³ It is this bubble of power that electronic and new media art attempts to burst with its non-hierarchic structure. As part of my dissertation I will explore this power/control relation through technology and the panoptic that is the media Image.

With today's society becoming increasingly dependent on technology and media driven, the question I pose is does technology control us or do we control technology? More precisely within the *Etherscape* of the digital, how can we control something that is massless and elastic (and vice versa) and do we even need to? Is technology driving us, or are we driving technology? Is there technological determinism or is humanity and technology simply an organic symbiosis fighting for equilibrium? Has the speed and amount of technology and control that governs society today and pushes us into tomorrow, exploded and become a runaway freight train?

³ Foucault, M. (1984a) *The Foucault Reader*, Pantheon, New York., p121.

Alternatively, has our dependence on technology and media become so huge that we cannot even see it anymore?

With such huge questions there cannot be one particular answer and as such my aim is to create speculative thought, critique and explore discussion of the topic for hope of enlightenment. For it is Enlightenment that Foucault saw as “the moment when humanity is going to put its own reason to use, without subjecting itself to any authority... the Enlightenment is the age of the critique.”⁴ The way I hope to achieve this is through the exploration into practicing new media artists, cinema, and my own studio art practice. I will be using new media artworks by Luc Courchesne, Garry Hill, Lev Manovich, Toni Dove, and the *Unmovie* project to explore the way New Media influence the Image. I also look at Ann Marie Schliner, John Simons and *Rez* as examples of digital and network art. As a study of the origin of electronic art and the ideas embedded I use Steina and Woody Vasulka’s pioneering video and televisual artworks of the 70s and compare it to developments in new media today.

Today the Image and visual culture greatly influences us through Television, film, video, the Internet and media in general. What my work attempts to do is explore and deconstruct the system of the Image and visual culture as we know it, destabilising control and force us to critique the Image and visual culture. My interest lies in the question where does control exist within technology and society. This interest pivots on the idea of Technological determinism, which is where technological developments determine or shape the world.⁵ This is an important part of modern society and when considering *Etherscapes*, a massless elastic environment, it is hard to decide if there is control of technology and society or alternatively if technology influences or controls society and the Image instead. How can there be control in a massless elastic space, an *Etherscape*? However, technological determinism can be both beneficial and damaging to humanity but in what ways? We question and we learn. As Heidegger in *The Question Concerning Technology* states, “the essence of technology is nothing technological,” he reminds us that our fundamental interest in technology remains to be ourself and we ask ourselves does technology need us or do

⁴ Foucault, M. (1984b) In *What is Enlightenment?*(Ed, Rainbow, P.) Pantheon, New York., p38.

⁵ For more information on Technological Determinism see Sobchack, V. (2000) In *Theories of New Media: A Historical Perspective*(Ed, Caldwell, J. T.) The Athlon Press, London. or Bullock, A. and Trombley, S. (Eds.) (2000) *The New Fontana Dictionary of Modern Thought*, Harper Collins, London.

we need technology.⁶ This questioning helps us remain critical and by doing so we maintain a level of control.

⁶ Heidegger, M. (1977) In *The Question Concerning Technology and Other Essays* Harper and Row, New York., p317.

Chapter 1

Electronic and New Media Art and The Floating Image or the Evolution of the Image

Firstly this research paper considers electronic and new media art as an important element when questioning technology and control within society today. Therefore, it is necessary to define electronic and new media art. Electronic art typically is any art involved with the experimentation or employment of the electronic aesthetic or media. The term aesthetics is used here with relation to Kantian theory of the art object that exists purely for its appearance. That is an art object that is without function other than being that of an art object. Or, to clarify, aesthetics is “a style of perception concerned neither with factual information gained from things perceived, nor with practical uses, but rather with the immediate qualities of the contemplative experience itself.”⁷ The term media, or medium is also used here to define the means of transferring information.⁸ It can be traced back to the ancient Greek *medi*, which means to mould or remould, as a sculptor would do with clay. Consequently, electronic art is any art that uses electronic device(s) or media such as Television, video, computers, electronics or other such as its medium. *Ars Electronica* (www.aec.at) and the International Symposium of Electronic Arts (www.isea2004.net) are major electronic arts festivals that play an integral part in defining this medium’s movements and currents (Image 1).⁹ New media is a strand of electronic art that it is focused on new, innovative and developing technologies and concepts within that electronic medium.¹⁰ My enquiry of *Etherscapes* is specific to

⁷ Quinton, A. L. (2000) In *The New Fontana Dictionary of Modern Thought*(Eds, Bullock, A. and Trombley, S.) Harper Collins, London., p12.

⁸ For more information on theories of media and the medium see *Remediation: Understanding New Media*, (1999) Cambridge, Masschuetts:MIT.

⁹ There are many more electronica arts festival but these two are the most well known internationally. For more see the links section in the appendix.

¹⁰ This brief definition is adequate for the small space available in this paper. For more information on defining New Media see Manovich, L. (2001) *The Language on New Media*, The MIT Press, Cambridge. There are obvious discretions with relation to defining new media that are raised by Manovich, such as the idea that if there is a new media this instantly connotes the idea of old media eluding to the notion that it is dead, which I disagree with. This paper is focused on new media as new concepts and theories through the electronic medium as stated.

new media although it can be applied to all electronic art. For the purpose of simplification from herein I will refer only to new media art.

By exploring emerging technologies and media forms, new media art has a great influence on our view of the world. It forces us to (re)consider the way we perceive the world today and our place in it. Through this existential experience a liberation of thought occurs that causes a kind of development of human consciousness. “I think therefore I am,” Rene Descartes’ concept of the recognition of human consciousness separating us from that of animal or other, remains as, perhaps even more relevant today as it was back in the 17th century. For an understanding of this phenomenon it is necessary to examine the Image. This is not to consider the literal meaning of ‘image’ as in a picture but rather the Image as investigation of visual culture today. It is the Image that Roland Barthes explored, that Deleuze develops in Cinema 2 and many modern theorists examine. It is the system of signs and semiotics constituting contemporary visual culture.

The Image has been around since the ancient times of cave painting. Like today’s Image, they are an impression of reality. The caveman painted his hand to represent himself. He then painted a bison as the first symbol of what he saw. These two ideas in the cave millions of years ago were the start of a simple visual code and system of symbols used to tell a story that today is known as semiotics. Semiotics is the system that governs modern communication, language and the transfer of information and in turn shapes our society. The visual code found everywhere today, from what we read in the paper or see on billboards to the Internet and the Televisual, cinema or video, or what’s known as Mass Media, is interpreted and processed millions of times a second as part of our understanding of the world. The same idea that occurred in the cave occurs today, but now billions of times a second. As contemporary society consumes, willingly or unwillingly, the Image through these Mass Media outlets, the simple visual code has become saturated and continues to intensify as the Image economy explodes. This can be seen in the area of Japan called Shibuya known as the *Bit Strip* that is over saturated by the Image (Image 2).



Image 1.



Image 2.

Everyday new ideas and forms of information technologies emerge, such as mobile phones being able to now send video and sound. This exponential growth is both exciting and daunting. Just as quickly as the new information technology is being created and then being consumed, new media artists are challenging, questioning and critiquing it. They are pushing the codes and conventions of today's Image. It is easy to let the Image influence you and new media art undermines that element of control liberating the passive process imposed by the Image today. In this way new media art challenges the Image in a search for an alternative way of thinking and identity. It does this by using these emerging technologies aesthetically voiding them of their intended function and forcing us to think differently about them and what they are and in turn what we are existentially and what the Image is.

When analysing modernisation of the Image, Walter Benjamin wrote in *The Work of Art in the Age of Mechanical Reproduction* that an original or true artwork has an 'Aura,' a presence or existence in time and space that is lost with mechanical reproduction through such mediums as photography and film. Benjamin writes that "even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be... The presence of the original is the concept of authenticity."¹¹ This is true in the sense that reproduction where the artwork exists in real time and real space like a painting and is then reproduced mechanically where its aura is lost.¹² Art made with photography, film or by electronic or new media exists only in virtual time and space and under Benjamin's theory must have no aura. To clarify, the virtual is anything "existing in essence or effect though not in actual fact."¹³ That is the virtual drawing its definition from the hyperreal or simulation Jean Baudrillard writes about in *Simulacra and Simulations*, where "simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyperreal."¹⁴ This could be the space of the celluloid, digital or the

¹¹ Benjamin, W. (1973) In *Illuminations* Fontana, London., p222.

¹² An alternative angle on this could also be taken where the digital or mechanically reproduction is used to educate people who were previously unable to experience such a thing through the Internet and the Computer. It might be true that the Aura is lost but what is worth more, the spreading of ideas and growth of Humanity or the preservation of an exclusive hierarchical level of respect or High Art? True the power of an original painting outweighs that of a digital image of the painting but what use is it if no one knows about it?

¹³ <http://dictionary.reference.com/search?q=virtual>

¹⁴ http://www.stanford.edu/dept/HPS/Baudrillard/Baudrillard_Simulacra.html

imagination. It's a simulation of the real. If, as Benjamin states, the unique existence and presence in time and space, it's being of actual fact or form, validates an artworks authenticity and aura, the virtual artwork itself cannot have aura. So if the artwork itself cannot have aura perhaps its aura must exist in the technology, the machine or perhaps within the idea itself creating the simulation, which is where the authenticity is. In the case of new media the artwork is reproduced millions of times and in some cases is the sole purpose of the artwork. John Simons' net.art piece, titled "Every Icon," (Image 3 & 4) is a web application that is 32 x 32 pixel icon that begins blank and then generates every possible outcome. It is an ongoing piece that requires the page to be open for a large amount of time. It never repeats in that there is no end to repeat at. The piece uses not only the virtual as a means but comments on its innate ability to reproduce as a self-referential work. When describing the work in an interview with <nettime> Simons said that he made the work because of "conceptual limitations."¹⁵ He explains why he creates net.art.

I consider them all part of my creative output. Then again: using an artwork to create more artworks - I don't know. (laughs). I guess, one thing is revealing the other. When you run the programme you are demonstrating the writing of the programme.

The artwork can be found at <http://www.numeral.com/appletsoftware/eicon.html> and the idea that the piece is available on the Internet typifies the decentralised nature of network space. That is to say that the Internet has no hierarchy of control such that was typical in museums and High Art, anyone can view the work any time with a computer eliminating a central or directional experience. Every Icon utilises this concept as a key concept of the piece. The work can only exist in network space as a machine that reveals infinite outcomes. No beginning, no end, yet universal and therefore decentralised. The Internet is the opposite of what Benjamin was saying, that is, reproduction lacks Aura. However, it was Benjamin's idea that the actual mechanical reproduction loses the Aura or did he mean that the machine had no Aura at all? If the latter is so, then the technology is only seen as the means of telling a story or an idea and has no feeling. A film Auteur uses the camera just as a painter

¹⁵ Baumgaertel, T. (1999), Vol. 2004 <http://www.nettime.org/Lists-Archives/nettime-l-9907/msg00067.html>.

would use a brush. The same passion, effort and creativity used by a painter to create a painting is used by a Photographer, an Auteur, an Electronic or a New Media Artist to create their own artwork and so contains the same amount of value. This value is the realisation of an idea or communication through whatever means available, technologically or otherwise. The tools or technology should be excluded from this equation and the energy and value be the main concern. The tools and the technology in fact cannot have an Aura rather it is the value that which Benjamin referred to as the original, the idea that contains the aura. But what if the idea is embedded in the technology like that of “Every Icon”? Where does this leave Aura? New media art is focused on new ideas or new ways of representing ideas with new technological means like the way Simons ‘Every Icon’ represents the idea of the infinite equation with a program. This mode of the Image real or virtual contains the same value regardless of being mechanical or reproduced. They have the same value, however, they are structured in a different way. Or as Bruce Mau puts it:

Contrary to Benjamin’s prediction, made in 1930s, that mechanical reproduction would drain the work of art of its aura, the circulated image has not stolen the aura from the original; it has borrowed and reinvested it.¹⁶

The image today reproduced in virtual space has become a major part of everyday life. For Mau it “acts as an enormous and unwitting advertisement for the real,” supporting the original through the virtual while generating want and desire for the actual thing, a theory quite opposite to that of Benjamin’s.¹⁷ The virtual Image has enabled new media art to be a powerful influence on visual culture with many artworks using the virtual as a channel commenting on social and political aspects such as *Velvet Strike*. *Velvet Strike* is an anti-war hack for the popular network PC game Counter Strike or CS for short (Image 5). The artists, Open Sorcery, describe their work as “Counter-Military Graffiti for CS” where you can download the patch from <http://www.opensorcery.net/velvet-strike> and enter any CS network. By hacking the CS engine Velvet-Strike lets users spray anti-war graffiti on the walls and surfaces. Anyone can submit artwork to spray in the game and there are some videos

¹⁶ Mau, B. (2000) *Life Style*, Phaidon, New York., p81

¹⁷ *Ibid.*, p82.



Image 3.

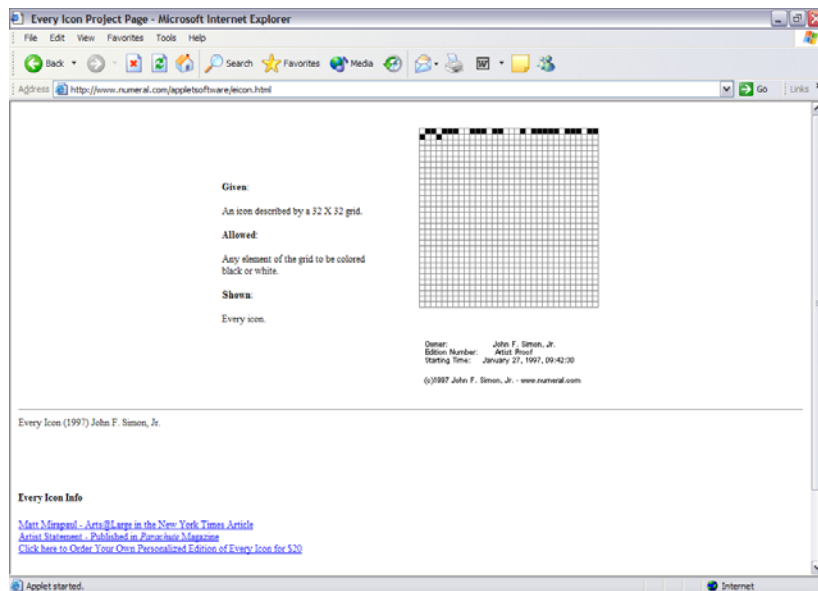


Image 4.

and screen shots available on the website to view. One spray paint called “Heart” by A.M.S is a piece that uses the CS icon of a sniper/special forces op repeated in the shape of a heart (Image 6 & 7). The hack art explores the open network space and architecture of PC game culture and subverts it with a political and social statement against war and current terrorist handlings. For the artist, Ann-Marie Schliner, the news of the search for Bin Laden in Afghanistan dramatically changed her perception of her interest in network gaming and first person shooters from playful gaming into a response to reality. She explains: “what I once approached with playful macho geek irony was transformed into uncanny echoes of real life violence.”¹⁸ Wired journal published an article on *Velvet Strike* stating that it was a “way for players to make their voices heard and influence the virtual world they have paid to inhabit.”¹⁹ This and other subculture activities, hacktivism and alternative image channels within the virtual realm are making their mark in modern history. In this case it is a surge of anti-war protest in hope of recognition. Here control through a technological architecture is destabilised, breached and even violated by hacking as a protest against inhuman war acts.

Through the virtual and its alternative ideologies like that of *Velvet Strike* and *Every Icon*, the Image has begun to morph beyond its own recognition into something I am calling the *Floating Image*. The element of control has been destabilised and instead of having a defined architecture of information where power and control can be exerted, there is a breakdown of operators. Where there was once a definitive global information or Image directed by the media, there is now alternative channels and modes or operators and power is shifted from a unidirectional to a more independent and destabilised flow. The power and control of media has become weightless and is morphing into a *Floating Image*. Some of these operators can be seen in new media art. The many directions new media art is pushing visual culture and what is known as the Image beyond boundaries into the *Floating Image*, is creating Dynamic fluxes of ideas and concepts that are perhaps offering some kind of enlightenment or alternative way of thinking. It is creating networks of these new ways of thinking. Such as the *Every Icon* piece representing the infinite space of the digital and the ether or *Velvet Strike* empowering the individual through online gaming, voicing

¹⁸ <http://www.opensorcery.net/velvet-strike/about.html>

¹⁹ King, B. (2002), Vol. 2004 <http://www.wired.com/news/business/0,1367,52894,00.html>.

political anti-war slogans. New ways of seeing the world as the Internet being an alternative to mainstream media outlets with relation to the Iraq war as the Al Jazeera online newspaper (www.aljazeera.com) presented during the war. Consider the ease of creating and publishing ideas through the Internet or in Exhibitions such as Space Odysseys at Australian Centre for the Moving Image. You just have to look at online net.art communities such as Rhizome.org, ctheory.net, nettime.org, shift.jp.org or res.com to see this. As the Image evolves we are learning that we as new media artists are creating and critiquing these new ways of perceiving and new ways of being perceived, or in essence social control.

To further understand the idea of control through the Image, the Image, the technology of the Image and technology itself must be defined. To explain the Image and the paradigm shift into the *Floating* Image, I have created three levels or tiers to explain this. The *Classical* Image, the *Modern* Image and the *Floating* Image. Manovich talks about a similar idea but with relation to the Image as the Screen. Manovich breaks down the screen's genealogy into the *classical* Screen and the *dynamic* Screen. I believe this to be inadequate for my research but have used Manovich's 'A Screen Genealogy' as a springboard. When defining the screen Manovich writes:

*The visual culture of the modern period, from painting to cinema, is characterised by an intriguing phenomenon – the existence of another virtual space, another three-dimensional world enclosed by a frame and situated inside our normal space. The frame separates two absolutely different spaces that somehow co-exist. This phenomenon is what defines the screen in the most general sense, or, as I will call it, the “classical screen.”*²⁰

Manovich's definition of the *classical* screen, defined as modern visual culture or the Image explores the phenomenon of the shift of perception. The *classical* perception of the frame provides an alternative space the viewer may enter, a virtual world. But this frame space then changes and becomes the modern screen. This other space

²⁰ Manovich, L. (2001) *The Language on New Media*, The MIT Press, Cambridge., 95.



Image 5.



Image 6.



Image 7.

co-exists with the exterior of the frame or ‘normal space’ and establishes the foundations of the modern image. The idea of an alternative space remains today in different forms such as film, sound, and the Internet. This is a sufficient starting point for the description of the movement into the *Floating Image*.

As I have found with Manovich’s definition of the screen and with my own writing, there are always problems when pigeonholing. There will always be crossovers and elements of indiscretion. Therefore, this definition is more a guide or manifesto for development rather than set criteria for analysis. Also this theory translates into the definition of the screen and media as part of visual culture, which is the focus of the next tier of this paper. But firstly the Image fundamentals must be established.

The *Classical Image* of Drawing, Painting, and Photography are primarily hierarchical where the viewer or audience view the work and there is no direct feedback or influence upon the work. This excludes the feedback of the viewer’s interpretations of the artwork, as this does not affect the artwork itself instantly or directly such as that in live Television or an interactive artwork. The interpretations affect the experience of the artwork but not the artwork itself. Therefore there the work is static and primarily uni-directional or hierarchical. Michael Foucault in *Discipline and Punish* undertook a study of the criminal and justice system of the early 1900s. His studies found an interesting hierarchic architecture of control and power interlaced within the Bantam panoptic penal colony correctional facility. In the panoptic the guard was situated in a tower above the cells and looked 360 degrees around the complex. The idea was that the prisoners would submit to the power of the guard enabling them to maintain control. The panoptic is a uni-directional power/control hierarchy that can be used to explain the infrastructure of the *Classical Image*. This is the static and unilateral mode of traditional media forms or that, which is not new media and visual culture. Fragments of its architecture remain today but have changed through the evolution of Image.

The next tier of the Image involves the *Modern Image*. This includes Film, and Television as well as all of the classical elements.²¹ Within the *Modern Image* there is a loosening up of the hierarchical modes of the *Classical Image* through new technological means. There is a certain decentralisation that occurs which liberates the viewer from the panoptic, to a certain extent. There is still a predominantly uni-directional mode of communication, however, there is an element of feedback present. For example cinema is an indirect reflection of the audience and the audience indirectly reflects cinema. But this dialogue is not direct or instantaneous and can also be argued to exist in the *Classical Image*. Additional to this, the main difference from the *Classical Image* is that the *Modern Image* is temporal. The history of the *Modern Image* is a logical development where photography is a product of Modernism and the whole industrialisation of society. As a further development, film is the photographic image over time. Both these dramatic changes in the Image created a whole new way of seeing. Society began to question itself, the Image and what was known as representation and inevitably life. Barthes writes “the image is representation, which is to say ultimately resurrection, and, as we know, the intelligible is reputed antiseptic to lived experience.”²² The next major change came with Television as electronics were developed as an extension of radio. As a phenomenon Television was the first medium to maintain a dialogue with the viewer as far as it is a live and instantaneous representation of reality. In this sense the *Modern Image* is the dynamic, bilateral mode of visual culture where a dialogue exists between the viewer and the Image. Manovich explains this as the ‘dynamic screen’ that maintains “all the properties of a ‘classical screen’ while adding something new: It can display an image changing over time.”²³ The *Modern Image* adds a temporal dimension to the image and this created a more direct bilateral dialogue.

Steina and Woody Vasulka are video artists who were involved in exploring these new dimensions. They created artworks, mainly installations that used the television and other electronic devices. Their works focused on the electronic image and sound including synthesis, feedback loops, manipulating video signal, interpolating photographic images over video signals and noise, surrealist video tape recordings

²¹ Video, the Internet and the Digital can be included here because they are temporal but truly belong in the next level of the Image.

²² Barthes, R. (1977) In *Image Music Text*(Ed, Heath, S.) Fontana Press, London., p32.

²³ Manovich, L. (2001) *The Language on New Media*, The MIT Press, Cambridge., p96.

and other experiments with perception (Images 8, 9, 10 & 11). Their art was concerned with this new medium and method or modes of perception rather than the content of the medium. Their work has been involved in the exploration of the medium and more about learning during the programming process. It is “a dialogue between the tool and the image.”²⁴ When describing their work Robert A. Haller emphasises that the Vasulkas are exposing hidden elements of perception. He writes:

One comes away from it with an enhanced recognition of how much we do not see, and how much effort must be expended to gain a wider vision.

Back then pioneers in the electronic art realm - today the Vasulkas are still concerned with the practice of the processed image and ways of using electronic devices as a channel for this exploration.

The last level of the evolution of the Image brings us to where we are today. This I have called the *Floating Image*. This is the Image that floats in the ether of a new language system and semiotics of visual culture seen today that is even freer of a hierarchy although it does remain it is made aware of by the new modes of communication such as the Internet and independent Film and TV. Again this level involves all the elements of the former levels of the Image but in addition to this it is dynamic with direct feedback from the audience. It is a morphing and newness co-existent between spaces. Deleuze calls this the ‘movement-image,’ ‘time-image,’ where a new language or ‘automatism’ that is “bringing about a mutational form... The electronic image, that is, the tele and video image, the numerical image coming into being, either had to transform cinema or to replace it, to mark its death.”²⁵

The *Floating Image* drifts without time or special boundaries and contains no structure, remaining massless and elastic. Because it is the merging of the *Classical Image* and the *Modern Image* it is also the death of it into the new Image. For Deleuze this ‘new image’ is decentralised through the telivisual, electronic and video and now digital.

²⁴ Vasulka, Woody cited in Haller, A. R. (1981) In *Future Cinema: The Cinematic Image after Film* The MIT Press, Cambridge, Massachusetts., p162.

²⁵ Deleuze, G. (1989) *Cinema 2: The Time-Image*, Athlone, London., p264.

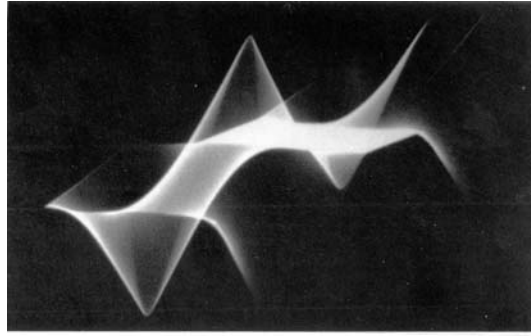


Image 8.

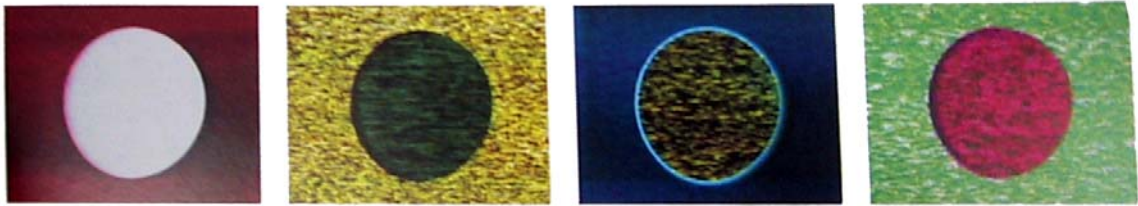


Image 9.

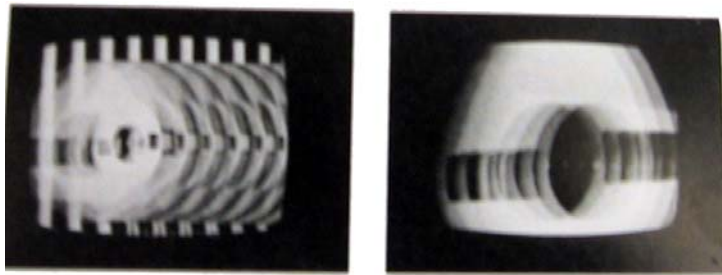


Image 10.



Image 11.

*The new images no longer have any outside (out-of-field), any more than they are internalised in a whole; rather they have a right side and a reverse, reversible and non-superimposed, like power to turn back on themselves. They are the object of perpetual reorganisation, in which a new image can arise from any point whatever of the proceeding image. The organisation of space here loses its privileged directions, and first of all the privilege of the vertical which the position of the screen still displays, in favour of an omni-directional space which constantly varies its angles and co-ordinates, to exchange the vertical and the horizontal.*²⁶

Deleuze goes on to explain that this new image creates a “new psychological automata,” or new language system and semiotics automation driven by the Image.²⁷ A question of control also arises here but will be explored in the next chapter on technology and control. The new image or for Deleuze the ‘new regime of images’ is primarily a man/machine hybrid occurrence but there is an element of natural human cognition in the phenomena.

Further examining the image environment in contemporary society, prolific designer, image engineer and theorist, Bruce Mau, in his book *Life Styles* envisages this new image infrastructure as a mode of social control. We live stylised lives driven by a hunger for the ‘new image infrastructure.’

*What do the components of the new image infrastructure have in common? Attention. It's all designed for capturing, tracking, quantifying, manipulating, holding, buying, selling, and controlling attention. If the digital age is a revolution, it is sadly also opposite – a totalising, predatory regime, an infrastructure built to channel our own desires and ambitions, to articulate and further extend its own reach.*²⁸

²⁶ Ibid., 265.

²⁷ Ibid., 266.

²⁸ Mau, B. (2000) *Life Style*, Phaidon, New York., p 57.

The hunger for the image has grown into a mode of social control shaping our desires by tapping into our desires. The fact that the image is constantly present makes this process more viable. Like REM the images fluttering across our eyes as if we were in deep sleep dreaming. This Mau describes as the digital revolution as having an opposing agenda, that of social control. Even though the digital aesthetic never actually occurs in reality as an object, the need for it grows with our desire to consume. The digital isn't grounded and yet dominates contemporary society. Is this the ocean of ideas and narrative that floats in the ether and has done so for many years? Is it just that now through this new image infrastructure that the ether is being realised and controlled or at least seemingly controlled?

To answer this, let's go back to the cave theory. I have spoken of the two representation motifs used by the cave man in the cave, but there is another. Plato was the first to speak of this. It involves the cave man gathering around the fire and projecting on the cave wall a shadow or representation of himself. The *Floating Image* is this dynamic yet intangible representation of humanity and life. That is to say the cave man's images on the wall, his drawings and his shadow are of the same nature as modern painting or film or Internet art. They are from the same origin. They are all from our creative cognitive consciousness. It is this, the *Floating Image*, that shapes who we are. We maintain as much or as little control now as we did back then regardless of technological advancements.

The actual artwork, like that of a painting and the virtual artwork like that of a CDROM, are equal with respect to their Aura and value of ideas. They are both part of the Image. This raises the question whether it is with new media art that the Image has shifted from the actual into the virtual and become the *Floating Image*? Or has the Image always been floating? It could be argued that the *Floating Image* has always been there and technology as a tool or extension of our self has simply been used to realise it. Be it the technology of fire back in the cave, a painter's brush during the renaissance, or a computer aiding a new media artist in a Net Art web application, the Image had to come from somewhere to start with. It is through new media art practice that we are able to perceive this and understand the concept of the *Floating Image*.

So the *Floating Image* is the dynamic representation of reality. It is visual culture and semiotics of contemporary society, but can be argued to have always existed as *a priori*. The *Floating Image* is that part of the ether that we see as it sees us. It is our reflection as well as our projection. This folding back on itself is like the dialogue that occurs in Rhizomes for Deleuze and Guattari in *A Thousand Plateaus*. For Deleuze and Guattari “the Rhizome is an acentered, nonhierarchical, nonsignifying system” and embodies a new mode of thought.²⁹ Beyond the temporal element of the *Modern Image* within the domain of the *Classical Image*, the *Floating Image* simply exists as “a rhizome has no beginning or end; it is always in the middle, between things, interbeing, intermezzo.”³⁰ This is best described by the construct of and hypertextual mode of the Internet and new media. Deleuze writes “the rhizome connects any point to any other point, and it’s traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states.”³¹ In the Etherscape, the ether-real ocean of the *Floating Image* a dialogue occurs between it and us. It is rhizomic in this nature and we are living in symbiosis with the *Floating Image*.

The evolution of the Image, the new Image or the *Floating Image* involves all the elements of its former modes and yet can be seen to exist now as well as as far back as before man. However, it is only through technology that we are able to see this. As more and more technologies arrive we are becoming increasingly aware of ourselves and a truth is exposed. With A.M.S. subverting technology and John Simons like the Vasulkas with their interest solely in the process and experimentation of technology and the electronic medium, new media art breaks away from the mould of media as deceiving and we are able to truly perceive. Perhaps a truth is exposed in the moulding and morphing of the ether, a truth that can only be realised through the fact that technology is a form of control.

²⁹Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus: Capitalism and Schizophrenia*, University of Minnesota Press, Minneapolis., 21.

³⁰ Ibid., 25.

³¹ Ibid., 21.

Chapter 2

Technology and Control: The Screen and the Computer

In the short history of technology and new media art both the computer and screen have played an important role in innovative art. A quick history of the screen and the computer is relevant when understanding new media screen movements, the computer and its future directions.

Rather than retread the ground of the previous chapter of the Image and *Floating Image* I will differentiate between the screen and the Image. Where the Image involves the development of all visual culture, from print to the Cinema, the Television and Internet, the screen maintains its limitation to the 'frame.' It is important to understand the significance of the history of the frame as a device through which a window into or out of worlds is created. The aim of the frame, and in turn the screen, is to create "illusion and visual plenitude, while the viewer is asked to suspend disbelief and identify with the image."³² It is this 'illusion' of another space where the computer stops becoming an analytical machine and starts becoming a powerful means of accessing other spaces, ideas, realities and truths.

The computer today does the same thing the frame of a painting or classical media continues to do. That is it presents an artist's idea. However, in addition, it is capable of much more. The computer surpasses the 2 Dimensional static limitations of painting, photography, and film and enters the pixel thus becoming dynamic. Through the screen the computer is a window into the virtual world of the digital and network space. Even without the screen the computer allows the artist and the audience to enter an alternate reality through sound and touch.³³ Sound art such as that of Finland's Vladislav Delay's epic minimalist techno sound scape performance

³² Manovich, L. (2001) *The Language on New Media*, The MIT Press, Cambridge., 95.

³³ There is another sense which is being developed as a medium through the computer. That is the sense of touch. There is now a mouse that has a motor inside it that can be triggered to react when certain parts of the screen are rolled over. For more information on tactile and force feedback technologies go to <http://www.ifeelpixel.com/>

Anema exemplify this. The piece was performed live with a number of samplers and midi driven sound programs (Image 15). As Delay's sound scape fluctuates between the minimal electro beats, inaudible noise, resonance and contemporary signifiers such as conversational dialogue and humming resonance, we find ourselves slipping in and out of an entrancing ocean of thought and ideas. We experience to the Etherscape just as Murray Schaffer explored the 'soundscape.' He explains the soundscape is experienced as a "huge unshaped sympathy, which is taking shape around us constantly and (we) ask the question do we want to become its composers deliberately forming and regulating it."³⁴ The digital aesthetic transcends limitations and boundaries of pre-existing frame conventions and creates its own morphing paradigm. For Susan Dinkla it is this 'open-ended' network enabled through the computer that sets new media apart from other art forms binding the artist and the user/viewer into an intrinsic relation.

*Dynamic and fluctuating narrative material, which organises itself in a non-linear way, is not created by the process of narration by the author, but only in the interaction with the reader, who changes from implicit reader to user. An interactive media work is not only potentially open-ended, it does not exist unless there is interaction.*³⁵

In such an open-ended space where does the control exist? Is it in both the ether of *Floating Image* as well as our consciousness or awareness? And how does control effect our perception of our world? How can there be control in a rhizome? Through technology are we in control or not? Or is the truth we are beginning to learn that technology *is* simply control?

In *Cinema 2: The Time Image* Deleuze analyses the visual language system, the system of signs and signifiers or semiotics that is expressed through the visual image over time, that is Cinema. He writes that the human machine relationship is both automaton and natural or *a priori*.

³⁴ http://www.kunstradio.at/BREGENZ/IS/RADIO/is-27_7.html

³⁵ Dinkla, S. (2002) In *New Screen Media: Cinema/Art/Narrative*(Ed, Zapp, A.) British Film Institute, London, pp. 27 - 41.

*And machines can take hold so fully on man that it awakens the most ancient powers, and the moving machine becomes one with the psychological automaton pure and simple, at the service of a frightening new order.*³⁶

Here Deleuze is talking about a new order of things where the image, in particular the mechanical image, technology, takes a hold of or gains control over humanity and all that can be done is a reversion to our primordial instincts or ‘ancient powers.’ The machine becomes part of the human consciousness. Through cinema and more importantly through theory and critique of cinema we realise this. We realise a shift of control and of thought through the time-image. It is a new order of things where the image is in control. This is ‘frightening’ as the human/machine embryo is born (for Deleuze) the ‘robot.’ Although it is a robot running on ‘ancient powers’ “at service of a frightening new order.”³⁷ This new relationship is undefined but because our primordial instincts are awakened there is a rise of natural order and our psychological powers are left in control. There is a realisation of fundamental truth as an existential moment of being. To simplify, when we go to the cinema, for Deleuze, we willingly and soulfully give up our fundamental element of control and experience something new. We experience the phenomenon of existence, existentialism. For a brief moment in our insignificant lives we realise that we are not in complete control, something else is, the image.

Cinema’s hierarchical mode of control is instated predominantly as an omni-directional machine. This destabilising of control and ‘awakening,’ although “at the service of a frightening new order,” exposes a truth with its “atomization of the masses.”³⁸ However, it is a truth of cognitive thought. This new order Deleuze calls a “new regime of images” here I have called it the *Floating Image*. Both terms are concerned with a questioning of control in visual culture.

Deleuze speculates a shift of control through technology, in this case cinema, the ‘time-image.’ However, it is necessary to clarify what technology and control is before understanding how it can lead to this. Technology is any extension of the

³⁶ Deleuze, G. (1989) *Cinema 2: The Time-Image*, Athlone, London., p. 263.

³⁷ *Ibid.*, p. 263.

³⁸ *Ibid.*, p. 264.

human, a tool or aiding device. In *The Question Concerning Technology* when Heidegger wrote, “the essence of technology is nothing technological” he was the first to state that technology is never simply technology it is a whole architecture of components and factors. Technology as a common or scientific exploitation for Heidegger “is a means to an end... (or) Technology is a human activity,”³⁹ and is relevant today. However, spiritually technology is much more complex. There is a struggle to ‘master’ technology, as “the will to mastery becomes all the more urgent the more technology threatens to slip from human control.”⁴⁰ The desire for this control extends from a desire to understand to gain knowledge. Control is regulation or for Foucault it is a governing execution of power and a power found through interrelated knowledge.

*Knowledge and Power are integrated with one another... It is not possible for power to be exerted without knowledge, it is impossible for knowledge not to engender power.*⁴¹

Foucault’s power/knowledge interrelation is fundamental in understanding technology and its relation to control. When considering the panoptic Foucault discovers that control is obtained through the execution of knowledge (of the prisoners) and in turn power is exerted. Through this framework, Foucault, theorises that there is the exposure of truth. The power/knowledge/control pyramid is integral to understanding technology. How can this structure operate when technology network space and digital aesthetics is a massless elastic Etherscape? How can there be complete control when full knowledge cannot be obtained? Etherscapes decentralises the panoptica.

Within mass media the audience and the author have an indirect dialogue of control. This has opened a desire for feedback from both the audience and the author. Since the Television, then the VCR with the remote control and now the computer, viewer interaction has occurred and turns the traditional cinematic viewer into a viewer/user having control and direction of the image. With the television the control was limited

³⁹ Heidegger, M. (1977) In *The Question Concerning Technology and Other Essays* Harper and Row, New York., p288.

⁴⁰ Ibid., p288.

⁴¹ Foucault, M. (1986) *Power/Knowledge: Selected Interviews and Other Writings 1972 - 1977*, The Harvester Press Limited, Sussex., p52.

to on, off, channel and volume. Artists like Nam June Paik, the Fluxus movement and the aforementioned Vasulkas pushed new ideas and explored other ways of using the television creating a revolution in art. With the VCR the amount of control is increased to allow the manipulation of time and again artists, such as Brian Eno and again Paik and the Vasulkas, pushed these boundaries. They created open circuit loop artworks that used viewers' participation as well as their presence in the image. The gallery-goer became part of the artwork and with a decentralising effect breaks down the traditional gallery hierarchy of the velvet rope.

The Human Computer Interface (HCI) has only just become a comfortable part of everyday life in the last 10 years. This has been eased because of the use of the metaphors like the Desktop and the use of icons like folders and trash cans. However, the computer's growth and development is suppressed and limited by the PC monopoly. Linux is the only open source Operating System allowing users to modify the construct of the OS. While on the other hand closed traditional and mainstream Operating Systems offer their consumer a safe and simple solution but limits one's individuality and expression. The Linux environment is completely open and allows the user to more specifically customise their OS, which generates a collective intelligence network culture and online community offering alternatives to the consumer products involving refined concepts. Linux and the whole open-source phenomenon is a new way of thinking. However, with the popular Operating Systems we have come to know the computer as a generic digital interface through the GUI (Graphic User Interface). The computer can be so much more! Third-party freeware and shareware programs, patches for programs and other experimental developments in computing exemplifies the desire to break away from the packaged computer solutions, such as that of my work *Video Stereo* which uses a patch for a developed shareware midi processing environment MAX/MSP/Jitter changing the computer into a vinyl/video interface.⁴² Another example, Toni Dove's *Artificial Changelings*, is an interactive responsive narrative artwork that does utilise the computer to its true potential while considering the user (Image 12 & 13). The piece is an interactive

⁴² MAX/MSP used to be a freeware program but was sold out by and now the program must be bought for US\$500, which is still rather cheap, but there is a freeware alternative to MAX/MSP called Pd that was created by the original MAX programmer named Miller Puckette. For a brief history go to http://freesoftware.ircam.fr/article.php3?id_article=5.



Image 12.



Image 13.

video installation telling the old story of Arathusa who is a kleptomaniac from the 19th century restricted by the constraints of the Victorian era.

The piece uses an alternative interface to tell her story and revealing her self-destructive behaviours. The interaction of the viewer with the movie creates a fragmented narrative of the story as they move around the space. The non-linear format is used to reflect Arathusa's conflicting urges and desires experienced within the industrial revolution and social change of the time. Dove analyses her interactive environment in a paper titled *The Space Between* and uses the idea that the combination of the interface and the codes of cinema create an illusion or "transparency" where the audience become aware of their body in the space and interacts with the movie through a virtual tactile connection. The interaction becomes a playful or experimental experience of narrative for the audience.

The combination of interface and narrative architecture amplifies the voyeurism of film through the sensory apparatus of the body. This amplified voyeurism provides an exploratory space in which to experience a story. More like an instrument than a game, the combination of motion and/or vocal engagement with an unfolding narrative environment create a heightened awareness that operates almost like a trance – a receptive state.⁴³

Dove's work creates a hybrid interactive/cinema artwork that engages the audience in a playful and challenging way. The computer and the interface become invisible as the audience become aware of themselves and their connection or extension into the virtual world. The mode of control is shifted from the traditional hierarchy of cinema to the omnidirectional mode of network space within the hypertextual, where any one point or node can be linked to any other. It is a new order of control or power where a decentralisation occurs, a submission of power and openness as an alternative way of thinking. This is the true beauty of the computer.

Dove and other new media artists explore this phenomenon offering alternative interfaces and concepts that generate new and interesting thought and critique of

⁴³ Dove, T. (2002) In *New Screen Media: Cinema/Art/Narrative*(Eds, Rieser, M. and Zapp, A.) British Film Institute, London, pp. 27 - 41.

contemporary computational modes. This is also the premise of my work *Etherscapes*.

Sean Cubitt speculates that as an expansion upon the idea of communication through the digital there is an uncanny connection between machines. Through this connection of the digital there is a new form of communication. In his paper *Spreadsheets, Sitemaps and Search Engines* he writes that machines, with relation to narrative, create a turning point in the evolution of media. He writes:

*Digital media is the first new form of communication... to propose that mediation might imply not representation but communication and that it might demand communication not despite or via our machines, but communication with them.*⁴⁴

Cubitt explains this phenomenon excluding the fact that digital media was created for “imperialist, bureaucratic and capitalist (Virilio would add endo-colonial and militaristic) interests.” Meaning simply that this digital revolution owes itself to ‘contemporary capital’ society. It is also society that suppresses true digital media innovation. In effect it is shooting itself in the foot. Here that new media art searches for alternative modes of the Human Computer Interfaces (Image 14) as a form of cultural production going against the grain and altering established perspectives and traditions with new ideas and concepts of newness. If we become so comfortable in the capitalist constructed HCI then we lose our individuality and expressionism, especially when the digital has become such a huge part of society today. This is what Cubitt means when the digital demands communication within digital media. Interfaces such as Operating Systems, Hardware and game console design are examples of this comfort and control. However digital art that explores new ideas and concepts within these confines is able to break away from this homogenisation and communicate back.

One such artwork evading this homogenisation, created by United Game Artist’s Tetsuya Mizuguchi (Japan) and titled *Rez* (Image 16) exhibited in *Playthings* at the

⁴⁴ Cubitt, S. Ibid.(Eds, Reiser, M. and Zapp, A.), pp. 3 - 13.

Firstdraft Gallery Sydney 2003, is a computer game for the Playstation 2 where you become a body navigating through space within a music score you create and interact with. The game's innovative new concept became very popular in Japan, as it was the only game of its type. It explores the idea of synaesthesia where one sense is triggered by another sense. In the sphere of *Rez*, movement through space using the Playstation controller generates sound and visual on the screen, entrancing and exciting. *Rez* satisfies a traditional gaming environment or construct involving levels, stages and goals to achieve creating a progressive movement and engaging the gamer where as new media gamer art may choose to avoid this such as Mary Flanagan's *Halls of Text Artwork* also a part of the *Playthings* exhibition, which was a gaming engine reused to represent the artists thoughts and memories with text. *Rez* not only liberates the console gamer but also symbolises a unity between corporations and artists with similar interest as a milestone for digital media evolution. So with commercial corporations and artists collaborating a shift in direction occurs. It is a shift away from the regimented western philosophy and a unity between the artist and business. This transpiring in hope for perpetual gains on both the artist and the corporation's part seems beneficial for both parties. However, it may be argued that true art aesthetics and artistic integrity is lost or sacrificed and where a medium ground is met at the cost of capitalist driven business. Some may say *Rez* and games like it are not true artworks. Nonetheless, the outcome is for the game industry to have a much more expressive product more like the music industry and the audience enjoys this. This can be seen as a loosening up of the level of control within the game industry and the corporate domination or panoptic is overcome.

This loosening of the panoptic or the Foucaultian knowledge, power and control triangle, challenges the homogenisation and comfortable society so easily slipped into. However, the Internet has obliterated all levels of this for some time now and can be seen to act as an experimental environment for change and new ideas. It has a shape constantly morphing and direction ever elusive and slippery, where anonymity is unified. However, new media's reception is nowhere near as big as traditional mass media or art movements. Galleries are hesitant to show new media art as they assume the traditional visitor and audience will not understand the concepts. However, one gallery that is doing this, the Whitney Gallery in New York, is focused on new media art and meets a huge audience who have been looking for this type of



Image 14.



Image 15.



Image 16.

gallery. The Whitney Biennale is one particular exhibition where the new media and Internet Art is exhibited in a gallery space as well as online. This is the breaking down of the panoptic knowledge/power relation. There is no longer an overpowering of traditional art, which creates a freedom for knowledge. Media art has the ability to experiment with evolving technologies and expose new ideas and new forms. Pierre Levy considers that mass media and its lack of control of technology from a social aspect leads to muted evolution.

*Mass media are of little use in helping people think as a group and collectively develop solutions to their problems... Now that our societies have felt the critical and deterritorialising powers of conventional media, is there anything preventing them from experimenting with such tools to develop collective intelligence?*⁴⁵

As Heidegger theorised technology and truth are exposed through art, Levy foresees a path with non-negotiation and stresses that expressed interest should be made with the new technologies. Within the chasm of new technologies caution and criticism should be used to test these technologies. “It is essential then we begin to imagine, experiment with and actively promote, with this new communications space, organisational structures and decision-making styles that are orientated toward a deepening of our sense of democracy.”⁴⁶ By using the idea of democracy Levy is imagining the meaning as fairness to all, liberation and not the twisted and corrupted relics that remain today from a structure weathered and warped from the golden era of Caesar. If Caesar were to see democracy as it is today, he would be shocked in light of recent events such as those surrounding September 11, the war on Terrorism and the Iraq war, with the United States of America’s iron clad fist.

As media culture drives dreams, desires and lifestyles, art remains critical seeking a greater truth or alternative way of thinking. This unity between capitalist business and art/design is a step towards this liberation and truth. For new media arts, this truth is what lies behind the experience of the *Floating Image*; the image and sound. Geert Lovink writes that media “practitioners no longer believe that a distance exists

⁴⁵ Levy, P. (1997) In *Collective Intelligence* Plenum, New York, pp. 57 - 89.

⁴⁶ *Ibid.*, p59.

between the subject and the image or sound.” Instead there is a blending and merging of elements, an embodiment. With merging and blending like this we ask the question of where does control exist? New media art exposes and challenges technology and control, it does not define it.

In an interview between Lovink and German Media Theorist Dietmar Kamper, the idea of media’s falseness is raised with relation to the Gulf War and Kamper reminds us that “Paul Virilio and Fredrich Kittler’s hypotheses that the media are offspring of the war” the war machine. In the brief history of new technology and the computer, the military has played an important part in the development of all the modes of contemporary communication and mass media. It seems senseless that the state’s desire for national security and war outweighs any other interest so greatly that it is governing technological and communication advancements. The military connection with the mass media is a self-indulgent hyperactive frenzy that generates a fear and false sense of security by means of broadcasts withholding information and distorting the truth. However this distortion has become known and since taken with caution and critique in light of recent events arising from the War On Iraq lead by the US Super Power where ‘weapons of mass destruction’ being the sole purpose for the war were never found. In some ways the media can be seen as a powerful weapon itself with the ability to control and influence mass populations.

The Image and what has now become the *Floating Image* so heavily influences what we are today. This example of the war demonstrates that Foucault’s theory of the interrelation between knowledge and power is unprecedented when considering control. Knowledge, power and control is exerted through a technology that demands our attention. If there were no space to critique and challenge technology we would succumb to it. With this in mind perhaps it could be said that technology is a mode of control itself. The artworks used here demonstrate that the unknown or new is always present within technology and this may be frightening as well as attractive. And when in such a situation our guard is dropped and we turn to our instincts or ‘ancient powers’ as Deleuze puts it. Technology and control through these works exposes a truth of ourselves. We identify our raw senses or perception in a phenomenological mode in the hope of learning something new.

Chapter 3

New Screen Narrative and Data Visualisation

Cinema today has expanded and continues to expand far beyond any original conception of the Image. Cinema today uses immersion by engaging the viewer through new audio and visual modes along with alternative narrative techniques and aesthetics of the screen that have been developed. The Cinema experience has become more than the Image. It has shifted into the *Floating Image* entering the Etherscape and the realm of the digital where the boundary of tradition and innovation meet. Through new media art, cinema has become new screen narrative. The limitless expanses of the digital and data visualisation offer affluent variations on fundamental cinematic and screen concepts while exploring new concepts, forms, modes and systems of the Image. New screen narrative can utilise network space, hypertext, coding/programming, the Internet, databases, Virtual Reality, HCI or interface architecture, synthesis and dynamic systems. With all these possibilities and avenues many questions are raised. What are the new screen narrative future movements? With the move into the digital, is new screen narrative merely becoming data visualisation, discrete and obscure? How is society affected by these developments? Has technology and control become too much of a focus? This new Image, Etherscapes, and the *Floating Image* is perhaps what society today is looking for in such uncertain times. Or perhaps it's as Bruce Mau puts it:

*Cinema will not rest. The moving image is on the move... The moving image is now taking us to places we've never been: intimate, first person, mobile, extreme... At the same moment, cinema is occupying more and more places – more physical real estate, public and private – and tearing holes in the urban fabric.*⁴⁷

Luc Courchesne, Lev Manovich, the *Unmovie* project and other ZKM *Future Cinema* projects are major figures in these movements. Such artworks as Lev Manovich's *Softcinema* (www.manovich.net) and Axel Heide, OnesandZeros, Philip Pocock, and

⁴⁷ Mau, B. (2000) *Life Style*, Phaidon, New York., p73.

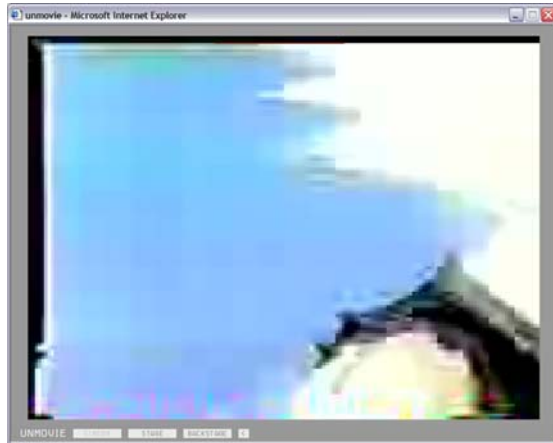


Image 17.

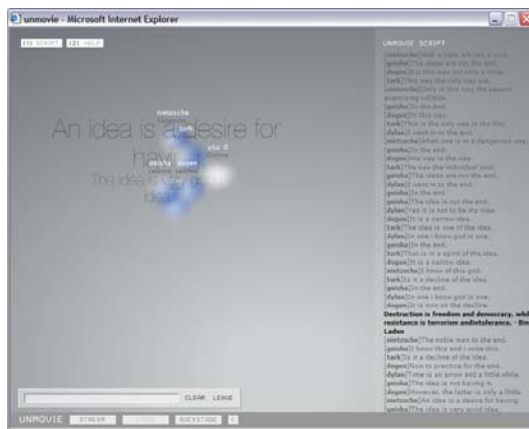


Image 18.



Image 19.

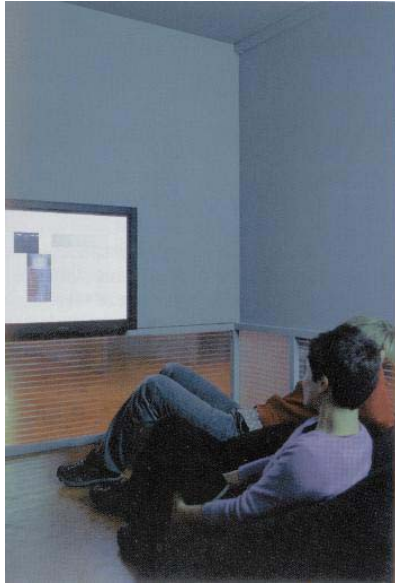


Image 20.

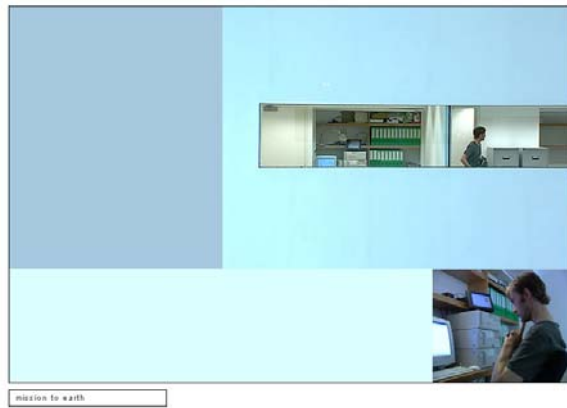


Image 21.

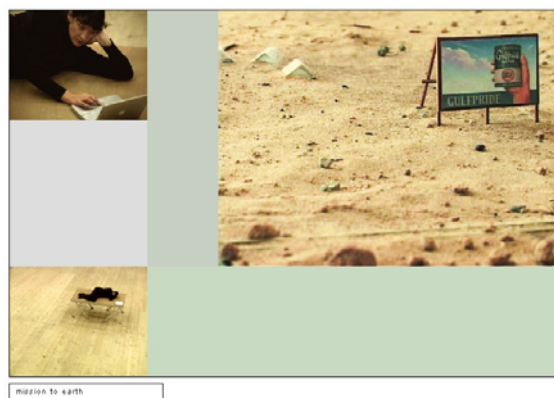


Image 22.

Gregor Stehie's *Unmovie* (www.unmovie.net) explore concepts of database narrative, chaos narrative, interactivity and narrative architecture (Image 17, 18 & 19).

Manovich's *Softcinema* is a database driven new screen narrative artwork with narrative design aesthetics entering a new narrative form (Image 20, 21 & 22). The piece is generative in that it is continually being added to by Manovich and other invited video artists and is continually growing. However, there is no audience interaction. *Unmovie*, also a generative database narrative, on the other hand uses the Internet, user input and movement through the space to determine the movies structure. This creates a more dynamic experience, however not necessarily better, just different. *Unmovie* engages the viewer through user interaction and *Softcinema* engages the viewer through programmed and chaos narrative. Moving away from the multi-user network space, Luc Courchesne's artwork, titled *The Visitor: Living by Number 2001* uses a *Panoscope 360°* viewing technology and was exhibited as part of the *Space Odysseys: Sensation and Immersion* exhibition at the Art Gallery of NSW Sydney in 2001. The piece involves a voice activated narrative system allowing the viewer to navigate the visual network environment. Images 23 and 24 show the artwork with a reflective dome that the user puts their head into and is surrounded by visual and audio. The user can navigate the camera by vocal number triggers, one to twelve, which will play video clips of the selected numbers. The content of the piece is inspired by Pier-Paolo Passolini's 1969 film titled *Theorema* and a dream Courchesne's 10-year-old daughter had. The user explores the Japanese countryside and finds people sitting around a table. The "visitor" communicates with them constructing a narrative that changes each time it is experienced. *The Visitors: Living By Numbers* is successful in achieving an active alternative interface that absorbs the user with language and Image as immersion.⁴⁸

A Disk Jockey or DJ traditionally is someone who uses turntables to blend music creating a live 'mix,' picking and choosing different songs or 'tracks' that all combine to become an original piece through the re-use of a number of artists. The DJ, who emerged out of the radio broadcast industry began to perform as an artist themselves

⁴⁸ For more information go to <http://www.fondation-langlois.org/html/e/page.php?NumPage=129> or http://www.din.umontreal.ca/courchesne/video_interactive_web/vi-v3.html.



Image 23.



Image 24.

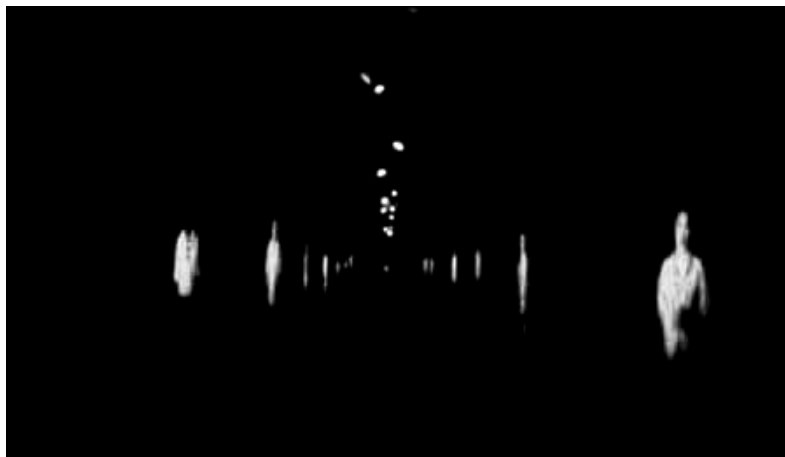


Image 25.

and now the turntablists have reinvented the turntable from an analogue linear playback device into a completely playable musical instrument and narrative device. The first ground breaking change of a record's linear form came from Afro-Americans in the 70's who listened to soul music and stumbled across the effect of touching a record while playing, pausing by holding its playback with the hand and distorting its intended sound.⁴⁹ This became known as 'scratching' and exploded as a technique of DJ's who were constantly looking for ways of furthering the experience. Since then turntablists have created their own language and musical dialogue expanding from soul and rhythm and blues into Hip Hop and experimental, left-field or avant-garde musical genre and art forms. The turntablist language like the cinematic, photography or new media is an expansive system of expressions and signs involving innovative styles and techniques, such as the 'scratch,' are pushing the medium's form.⁵⁰

When these styles and techniques are used together a Turntablist can create a story of their own out of a language of manipulating linear sound. A turntablist creates a musical experience or journey by blending different elements and manipulating them into something else creating a soundscape as a movement from one point in time to another. In essence what traditional Turntablists are doing is constructing narrative within a musical composition and where experimental Turntablists do so within time. One particular Artist/Turntablist who explores the phenomenon of the turntable is Paul D Miller or DJ Spooky (www.djspooky.com). I am interested in the next level of turntablism where the turntable is used to manipulate video. My artwork *Video Stereo* (Image 27 & 28) uses a computer system called Ms Pinky that is under development. It uses a vinyl platter with time signatures every 25th of a millisecond pressed onto it. When applied with the MAX/MSP/Jitter software Maxi-Patch, it allows the user to control Mp3s and QuickTime Movs with their turntables. As the system is so new and still under development there are only amateur experiments being done in this art form.⁵¹ *Video Stereo* uses the Ms Pinky system, a 1200 Technics turntable, an old 1960's stereo cabinet, a computer and some micro narrative. The beefed-up old-fashioned unit becomes an interface for user interaction where the user can manipulate video with vinyl. The idea of 'scratching' or 'looping'

⁴⁹ Pray, D. (2001) In *Scratch* Darkhorse Entertainment, New York.

⁵⁰ Please see appendix for glossary of turntablist techniques.

⁵¹ For more information go to www.mspinky.com and visit the "Pets and Friends" section.

video creates a whole new dimension to media art pulling together Turntablist and sound or music motifs with Video Art. It creates a new language by blending and manipulating the visual image and sound in real-time. For Bernard Lang this process is a deconstruction as ‘looping’ and reinvention or cycling and re-cycling of linear narrative, visualising the new ways of thinking present in new media art. When talking about Phil Jecks’ vinyl loops he observes:

The effect of this is a complete new reading of the original narrative, and here everything comes in what Deleuze reflects on the different effects of repetition: Something pathetic becomes ironic, something trivial shows a fascinating complexity, and something quite humorous becomes menacing/obsessive. In this case repetition results in a kind of différance/Verschiebung of the given, a new kind of perception based on a new reading procedure, very similar to the différance of everyday language in a poetic text.⁵²

In the same re-inventing way Video Turntablism can combine techniques of Turntablism with Video art and performance creating something new. It can use Turntablism techniques such as traditional music composition, looping, and rhythm, and non-traditional, experimental or avant-garde Turntablist techniques such as clicks, physical imperfections on the vinyl surface causing loops and other aesthetics, or non-linear and synthesised sound performance such as Phil Jecks, Scanner or John Cage.⁵³ *Video Stereo* uses the turntable as a mode of expression to construct and manipulate narrative and cinematic art form. All these potential techniques can be explored as the piece grows.

Video art and video installation art been a compelling art form itself for over 30 years. The same thing that happened when video first appeared in Galleries is occurring again with digital video. There is a resurgence of Video Art and Video installation due to the desktop now with the power to create digital video. So now the ideas of the original video artist, like the Vasulkas, are resurging and being expanded upon within the digital realm. *Video Stereo* is that. The audience are invited to touch the vinyl on

⁵² http://members.chello.at/bernhard.lang/publikationen/cycling_recycl.htm

⁵³ For more information on looping history go to http://members.chello.at/bernhard.lang/publikationen/cycling_recycl.htm

the turntable. There is a paradigm shift here that has occurred through the generations and break down of the symbolism and tactility of the turntable. Originally when it hit the homes of the world, the turntable was a delicate entertainment machine that played back stored linear sound information and the vinyl surface was definitely not to be touched. Parents especially told their kids not to touch the vinyl as they could damage the valuable and sometimes irreplaceable record. Now with cheaper vinyl costs, less rare records (i.e. reprints), replace able parts for the turntable, special designed needles and turntables for scratching, and perhaps some kind of rebellion from kids against their parents and conformity, the vinyl record and turntable has become an icon for manipulating and deconstructing linear sound information and now digital data. It's beauty is the natural feeling of touching and manipulating the time of sound and narrative. As Lang puts it "the disk shows this inherent dialect between the linear narrative mode and it's deconstruction in a very efficient way... (and) it connects the processing of looping and scratching to body movement making the operations working on the reading process very haptisch, sensual, manual orientated; as with analogue synthesizers and their turning knobs, you get what you move."⁵⁴ With *Miss Pinky* and *Video Stereo*, when the viewer/user realise they are manipulating the video by touching the vinyl they become open-minded and begin to think about the Image and control in relation to narrative, linearity, time and function. With *Video Stereo* what once was simply an old fashioned record player has changed into a sensual interactive artwork changing traditional perception and empowering the user.

An article in *Wired* journal titled '*You're Being watched: Keeping tabs on the private surveillance cams invading public spaces*' was a study on the amount of video surveillance cameras that are actually being used in Manhattan, London, Moscow and Tokyo. The article found that "of the 9000 surveillance cameras in Manhattan, only 5 percent are operated by public agencies. The rest are privately run."⁵⁵ Of those private run cameras most are being used for private security. A concerning factor was highlighted when the amount of cameras in other major cities were counted. It showed that in Manhattan alone there are 396.5 cameras per square mile as opposed to 247.1 in London, 4.9 in Moscow and 0.6 in Tokyo. One major factor here is that

⁵⁴ *ibid.*

⁵⁵ Justo, P. D. (2003) *Wired*.

America led the amount of cameras per mile and can be seen as a reflection of their national insecurity. On the other end of the scale was Tokyo, arguably the most technological advanced country and they only have one camera in the whole of Tokyo. Perhaps all the people in Tokyo have cameras on their phones instead!

My artwork *Tracer* (Image 29) actually uses a web-cam and tracks or traces audience movement around the space and uses it to trigger video and sound on the screen. This work explores interaction through social space as an alternative interface. The beauty of this work is that the user's presence is vital to the piece functioning. The viewer may not even know this and simply enter the room and leave. Even that brief presence influences the narrative in some way. The narrative used follows two people, a male and a female's daily movements through their interior and exterior urban environments. The narrative is sliced up into approximately eight 20-second segments with synthesised electronic music layered over top. The viewer/user enters the room and depending on their location triggers a clip, randomly selected to be played on the screen. If the person is on the left side of the screen the male clips are played and alternatively if the person is to the right the female is played. There is a slight element of defined or prefigured control within the content selection but the majority of the control is random and influenced by the viewer/user, thus generating a chaotic narrative form or chaos narrative. However, the artwork does give an element of power through control to the user even if they are unaware of it. This highlights Foucault's Knowledge/Power relation. If the user has knowledge of the interface they have control, if they are unaware of the system and how to use it the control is not there. This idea can be seen to reflect the current social construct, aware or not of the system of the Image, you are part of it.

Garry Hill's new media installation, *Tall Ships*, is an excellent example of this viewer interaction through movement (Image 25). The artwork used a long dark corridor people could walk down. It took a while for your eyes to adjust as the only light source was very low from figures projected on the wall, but when they did you found yourself no longer in a corridor but in a kind of a vacuum. The static figures on the wall who, when you walked past them, began to move towards you like ghosts or ships at port. The image was left lingering in your mind after you had left haunting you and trying to tell you something.

Data visualisation is a method of gaining data and representing it visually. Anything from weather, personal details, or internet navigation paths to NASA flight trajectories, television and radio transmissions, maps, video and surveillance can be a form of data visualisation to simple key input or midi (music interface data input). Such an idea opens a huge expanse of input data that can be used to drive new media artworks. A paper by Lev Manovich titled *Data-Visualisation and the Anti-Sublime* seeks to solidify new theories as a discourse and learn from theorising Data-Visualisation within numerous examples of Data Visualisation art forms. Manovich points out the fact that there is far too great an amount of such information that it becomes anti-sublime. To clarify data visualisation in art renders unrecognisable phenomenon as art and every day. This is parallel to the process of Romantic painting where the artist attempts to transcend one toward something beyond the human senses, the sublime. Data visualisation on the other hand attempts to map such information as part of everyday new language and therefore is anti-sublime. That is to say that as data visualisation attempts to realise an unachievable ideal and represents it in the context of everyday visual language. Data visualisation is where everyday abstract data that would seem overwhelming and pointless is in fact actualised and represented, as an image from what would otherwise be invisible information floating in the ether. The *Floating Image* is itself an abstracted distorted representation of reality and somehow is always there a priori. Data visualisation seeks to capture or mediate the real deconstructing life and representing it. New media art is more than that. It is the communication demanded by technology and critiqued by the artist and audience in light of self-identity or representation.

After all this demand for representation, does the future of cinema leave a feeling of nostalgia, drifting like echoes in the hall of technology? As more and more complex systems of narrative, anti-narrative, chaos narrative, the rhizome, and crass aesthetics emerge, are we forgetting our roots - our history - or has this always been the case? And is there a longing for the old cinema? More importantly is there a death of the old cinema? Or on the contrary it could be seen in the reverse where because there is an explosion of newness, the old is momentarily forgotten and made rare or valuable again and when experienced again it creates a whole new sensation, a re-birth. Baudrillard would call this “the desert of the real.” The pure has become so distant

that even digitalisation of film and the digital image on film (Star Wars, The Matrix and other special effects movies) has morphed into a new form. It is this reformation of cinema, art and inevitable culture happening through technology that controls our future.

Vivian Sobchack in a paper titled *'The Scene of the Screen: Envisioning Cinematic and Electronic "Presence"'* explores the idea that technological determinism exists in contemporary society and it influences our 'presence' and self being to a great extent. She makes associations between photography, cinema and the electronic image and the major social change and movements. Sobchack believes the electronic "trivialises the body."⁵⁶ She reaches this statement by analysing the phenomenology of photograph and cinema. In this photography is a mummification, or transcendental image that "functions to fix a being-that-has-been." Where "cinema's animated presentation of representation constitutes its 'presence' as always presently engaged in the experimental process of signifying and coming-into-being."⁵⁷ Further more Sobchack sees cinema as an accumulation or 'presence,' where as the electronic is contrary to this.

*The new electronic sense of presence is intimately bound up in a centreless, network-like structure of instant stimulation and desire rather than in a nostalgia for the past or anticipation of a future.*⁵⁸

Sobchack's definition of the electronic image visualises the rhizomic, discrete and dynamic nature of the *Floating Image* as a "being-in-itself" and is accurate. However, it can be argued that this description, the *Floating Image* is very similar to the way we think and the way our brain works. It must therefore have more relevance to the human 'presence' than former modes of the Image. Sobchack claims that the electronic image is separate to the Image system itself, which is impossible. Elements of the cinema and photographic are always present and influence the *Floating Image* and therefore connected. Sobchack's main point is that the absolute and utopian ideals of the electronic disembodied 'presence' rather than what cinema is as a "visible

⁵⁶ Sobchack, V. (2000) In *Theories of New Media: A Historical Perspective*(Ed, Caldwell, J. T.) The Athlon Press, London., p152.

⁵⁷ Ibid., p147.

⁵⁸ Ibid., p149.

performance of the perceptive and expressive structure of lived-body experience.”⁵⁹

This is true to some extent. The nature of the *Floating Image* possesses some kind of attraction or ‘presence’ intriguing and self-reflective that perhaps offers a truth of self.

The *Floating Image* is simply a new way of thinking. We are constantly looking for something different, something to push our senses and thinking, otherwise we become bored and we lose interest, becoming stale and cease to develop. In such uncertain times as now, it is easy to see how distorted images on the screen can quickly make one desensitised to the whole ordeal, leaving only a sense of surreal reality, uneasiness and moral imbalance. September 11 and the war on Iraq typifies this. The media image has desensitised us to war and terror. With the truth now distorted and shrouded in mystery it’s no wonder we have become immune. My work and that of new media art attempts to critique this *Floating Image* to promote and generate individual thought with the hope of discovering some truth. New screen narrative and data visualisation does disembody the viewer but it does so in an attempt to realise some kind of progressive and independent thought and perhaps networked consciousness.

⁵⁹ Ibid., p148.



Image 26.



Image 27.



Image 28. Image 29.

Chapter 4

Etherscapes

My work, *Etherscapes*, explores alternative modes of control of the Image to that of the mass media. It engages this idea by giving the viewer/user/audience an element of control of video and sound. It plays with the idea of control and un-control in the sense of having control and not having control. It raises issues from a media artist perspective of whether there is ever un-control and that perhaps rather there is always an element of prescribed control. There is always an element of programmed control even if it is un-control, chaos or the random rhizomic movement. *Etherscapes* draws upon such themes as decentralisation, the network, rhizomes and anti-narrative. It also explores the idea of knowledge and power of the interface and technology. When people become aware of the interface they gain control of the artwork exemplifying Foucault's knowledge/power interrelation and control of the panoptic. This work is an example of the new directions of screen media.

Etherscapes could be described as that undetermined space hovering somewhere beyond our own sensual and physical capabilities. It is a space smoke screened by today's media Image that retards our vision and ability to think. Through my artwork and this thesis I attempt to visualise *Etherscapes*.

The digital is simply data in binary code and what *Etherscapes* attempts to do is to allow the audience to dive into the ether of the digital through data visualisation and experience a tactical and sensual representation of this like liquid data that melts and slips through your hands and around you. *Etherscapes* is an artwork that morphs. It has no one set form and escapes clarification, stereotype and definition except for that just described. Its elusiveness and continual virginity spawns a new sense of excitement and engagement.

Etherscapes is new media and old media if there is such a thing. Lev Manovich believes that there is such a thing as new media, however he is opposed the common thought that for something to be new there must be an old. Old media or traditional

media is today as and even more popular than ever anticipated and cannot be thought of as old media because it inhibits its presence. An example of this is the resurgence of vinyl records and of the DJ, a real-time procurer and manipulator or co-author in ways of sound and the club/performance experience. The error here is that once a label is created problems such as boundaries appear. Etherscapes essentially elude any provocative definition being liquid, massless and elastic. Etherscape is the experience of new art, art created within the realm of emerging technologies amalgamated with multi-faceted form and function. It eludes itself creating something entirely new, something unique and unexplainable, except for the fact that it is unexplainable.

For many years media has shaped us as we have shaped media. Our lives depend on the image we make of ourselves. New media arts takes this view and flips it to create a new refreshing perspective of this phenomenon and attempts to highlight alternative aspects of media arts, placing itself within contemporary Visual Arts. As media culture drives dreams, desires and lifestyles, art remains critical seeking truth. For new media arts, electronic and temporal arts, net art and the digital arts, this truth is what lies behind the experience of the image and sound. Geert Lovink writes that media “practitioners no longer believe that a distance exists between the subject and the image or sound.” That distance is exposing the falseness within media that Kamper writes about and allows new media artists to critique the media.

Media is a hierarchical mode of control and Etherscapes explores this idea by giving the viewer/user/audience a certain amount of control. It draws upon such themes as decentralisation, the network and rhizomes and anti-narrative like most new media. The Etherscape of *Synaestheisa 1*, *Video Stereo* and *Tracer* are data visualisation artworks in that they digitally sample reality and convert and re-mediate it or re-map it, then allow the viewer to interact with the visualisation. This is a remapping of reality and a narrative of visual culture through the *Floating Image*. Etherscapes is critiquing life and the technologies of perception or phenomenology in light of finding a new way of thinking.

Conclusion

Where technology creates the illusion of control, humans create the illusion of being in control. Technology generally is a means of extending our humanly actions and new media challenges those actions, creating a critique not only of technology but of humanity as well. It forces us to ask what it is to be human, and more importantly what it is not to be human. Through technology we become existential and shift our perception as a phenomenological understanding of world. We ask ourselves what makes up our society and is it good enough? What can we do to make it better?

Etherscapes explores the massless elastic environment of the digital aesthetic as a question of technology and self. My artworks each examine the process of perception and the Image today. *Synaesthesia 1* (Image 26) uses the idea of one sense activated by another as a sound based narrative triggered through touch. *Video Stereo* uses the analogue vinyl aesthetic as an interface for video and non-linear narrative. It also uses the idea of manipulating reality and questions the Image and control. *Tracer* expands on these ideas and places the body in an active space where movement controls the audio and visual Image. It also examines the idea of surveillance and tracking public space. Each of these works through data visualisation is a re-mapping of reality and offers the user an alternative interface of the Image. This initialises a thought process where one considers their place in space, society and the *Floating Image*.

The *Floating Image* is the Image of society and a narrative of society that we perceive and we create. Etherscapes and the works of John Simons, Toni Dove, Lev Manovich, United Game Artists and Tetsuya Mizuguchi, the *Unmovie* collective, Garry Hill and the ZKM Future Cinema projects are effectively critiquing control and the social construct or that narrative of society. These artworks explore chaos narrative, data visualisation, mapping or remapping reality, the process of becoming discrete and abstract or anti-sublime. All these ideas are part of reality and the decentralisation and opening of the Image these and other works presents, generates new systems of the Image that hopefully help us grow and evolve as a connected

society. That is a society, perhaps, where we are able to realise our influence on each other and use it to our advantage as we seek to gain control over technology.

The Image system is a re-presentation of reality using symbols and codes, today holds the same meaning it did back in the cave. The *Floating Image*, a dynamic representation of reality, existed in the cave through the cave man's shadow flickering on the wall cast by the fire. This idea may have existed well before the cave itself. Sobchack believes it to trivialising the body where in fact it has always existed. However, it is only through technology that we can realise this. As the Image is a reflection of ourselves it is easy to see how it influences us. As the Image today saturates contemporary society, we must remain critical of it as for Deleuze states, "machines can take hold so fully on man." As technological determinism exists in modern society we must recognise Foucault here to remain aware. That is power and control is gained with knowledge or an understanding. We can continue to try to understand technology and the machine and we do this through challenging and critiquing it with, writing, thought and new media art. This is what my and other new media artwork attempts to do. However, the question remains, how can one control something that is massless and elastic, that is the Etherscape? One cannot have complete control but the fact of being aware of it is perhaps the simplest element of understanding or knowledge and therefore a mode of control. As you can see all this questioning, and critique is generating new thought processes and ideas of perception and perhaps we are coming to enlightenment or we could be returning to where it all *is*, the Etherscape.

The *Floating Image* has evolved through technology into today's visual culture. This is our access point for information and it creates an illusion of control. In actuality it offers a programmed control where the media prescribe and impose an ideology. The decentralisation that occurs through the *Floating Image* forces us to revert to our natural instincts or "ancient powers," as Deleuze writes. It is this displacement that forces us to think for ourselves and hopefully realise an inner truth of our identity.

As Heidegger said, “the essence of technology may come to presence in the coming-to-pass of truth.”⁶⁰ Technology is a mode of control and it determines society at the same time that society determines technology with its acceptance and consumption of technology. As the *Floating Image* continually shifts beyond our sensors and through our fingers, the Etherscapes of the digital aesthetic may hold a truth of self, wanting to be found.

⁶⁰ Heidegger, M. (1977) In *The Question Concerning Technology and Other Essays* Harper and Row, New York., p317.

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Appendix

Turntablist Glossary and Terminology

Some Turntablist techniques:

1. The *Scratch* involves moving the record back and forth across the needle scratching the sound.
2. The *Transform* is a type of scratch where the cross fader on the mixer is used to turn on and off the sound while a scratch is being performed. This sound originally was described as sounding like a Transformer robot and has since become known as a distortion or transformation of the original sound.
3. The *Scribble* uses a quivering while holding the record technique making the sound sample play forward and backward vigorously. It also can be a wild scratch with no form.
4. The *Crab* is a technique of moving the cross fader on and off using your fingers in a crab like fashion creating a quick stabbing and breaking of the sound.
5. The *Fade* is simply fading the vertical fader while scratching and can be used to create a delay effect.
6. *Beat Juggling* is where you have two of the same beat or break samples and you use two turntables to create a seamless track out of the one break. You are juggling one break with another and maintaining rhythm while adding scratch elements. This technique was originally used in the 70s and 80s for DJ's who liked a particular break in the track they were playing and wanted make it last longer.
7. *Mixing* is blending one or more tracks together.

Website links

www.shift.jp.org - Shift Japanese electronic and new media art magazine

www.res.com - Res American electronic and media art magazine

www.sonar.com - Sonar Spain's electronic art and music festival

www.isea2004.net - ISEA festival

www.aec.at - Ars Electronica festival

www.dlux.org.au - Australian digital media arts organisation

www.tonidove.com.au - Toni Dove's website

www.unmovie.com - *Unmovie* website

www.manovich.net - Lev Manovich's website

www.softcinema.com - Manovich's *Softcinema* website

www.zkm.de - ZKM | Centre for Art and Media Karlsruhe

www.maudesign.com - Bruce Mau website

www.wired.com - Wired technology magazine

www.nettime.org - Nettime critical theory website

www.cttheory.net - Ctheory Arthur and Sue Kroker's critical theory website

www.rhizome.org - Rhizome.org net art website

www.apple.com - Apple Macintosh website

www.numeral.com - John Simons website

www.gettyimages.com - Getty Images photograph database

www.force-inc.com - Force-inc German electronic music and experimental sound label website

List of CDROM Material

The accompanying CDROM contains Images, video and artwork from Etherscapes body of work. This is also available on my website www.rtek.com.au/etherscapes.

Etherscapes01.mpg – *Interview* by Jeong Rae Kim and Clare Milledge 2004.

Etherscapes02.jpg – *Video Stereo* at Phatspace exhibition. 2004.

Etherscapes03.jpg - *Video Stereo* at Phatspace exhibition. 2004.

Etherscapes04.jpg - *Tracer* mock up. 2004.

Etherscapes05.jpg – *Video Stereo* invite 2004.

Etherscapes06.jpg – *Synaestheisa1* invite 2003.

Etherscapes07.jpg – *Video Stereo* still 2004.

Etherscapes08.jpg – *Video Stereo* still 2004.

Etherscapes_ReadMe.txt – CDROM Read Me information

Synaesthesia1.exe – *Synaestheial* PC Application 2004.

Catalogue of Work Exhibited for Examination

Video Stereo

900 x 700 x 450

Interactive video stereo unit, Technics 1200 turntable, modified 1960s stereo cabinet, Pentium4 PC, Maya USB44 DSP, Pre Amp, Ms Pinky with Interdimensional Wrecked System with Maxi-Patch MAX/MSP/Jitter patch.

Tracer

900 x 500 x 550

Interactive video unit, MacG4, webcam, plasma screen, tracking and video database application, stereo cabinet, amplifier.