The LA ACM/SIGGRAPH 1990 exhibition at EZTV

By Andrea Foenander

Aim; to discuss how the LA ACM/SIGGRAPH 1990 show at EZTV, 18th Street Arts Center, Santa Monica CA, marks the naissance of the term *Computer Artist* and speculate the idleness of this term thereafter.

Method; Analysis of contributing artists within the context of social and economic factors through primary and secondary research.

Significance; Now that censorship grows in rivalry of the open source movement, contemporary art seeks to revive the utopian perception of Computer Art. It is an important time to reflect upon the history of the *Computer Artist*.



[Fig. 1] Above is a still from the website banner produced by Victor Acevedo, member of the *Digi*Lantes¹, used for a retrospective at EZTV gallery in 1997.

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¹ The name *Digi*Lantes was coined by artist Michael Wright to describe a group of artists pioneering digital media. Many of the *Digilantes* organized and exhibited in the LA ACM/SIGGRAPH 1990.



[Fig. 2.] EZTV Gallery (1990). LA 1990 Art Catalogue scan.

Introduction.

Computers use algorithms to formulate decisions. These outcomes are dependent upon the way the algorithms have been written by a programmer or designer. In a similar way, history is often said to have a certain degree of inevitability, with trends forming circuitry patterns. Aesthetic choices or trends are periodically resurrected, with each new form evolving both materially and symbolically. This evolution of aesthetic choices moves in harmony with technology, and although different, each instance of resurrection cannot be emancipated from its previous form.

At the beginning of the nineties a common existential fascination² remains. Existentialism is a very human concern, evidenced throughout recorded history. This fascination, when teamed with a desire to escape from the struggling economy, was further enabled by computer technology. This combination of drives was iconically

²Existentialism; An area excavated profusely from philosophy of the 19th century, from Kierkegaard to Nietsche and Satre.

realized within the art practices relative to the LA ACM/SIGGRAPH 1990 exhibition (LA 1990).

[3] Kamran Moojedi (1990) Pollock.



The 'painting' above is part of a series made using stereolighography³. Artist Kamran Moojedi was — in 1990 — then experimenting with and testing the boundaries of digital post-production. This artwork demonstrates a strong awareness of the importance of classical processes in digital image making. Artists developing alongside the newromantic synth-pop and other decadent fashions of the 1980's were primed for the metaphysical progression of the digital image. The contemporary parameters of the self are fluid. Our digital presence is growing; this process began with pioneering groups such as the *Digi*lantes.

On September $5^{\rm th}$ 1990, EZTV gallery held the opening reception for the LA ACM/SIGGRAPH 1990 exhibition.

³ Stereolithography is a process for building three-dimensional objects layer by layer through application of a liquid polymer that hardens in reaction to a computer controlled laser beam.



[4] Victor Acevedo (1990). Opening night. According to various testimonies, there was an immense feeling of excitement and anticipation at the time of the opening. The current director of EZTV Michael Masucci recalled in an interview with me, in March 2013 that the 'who's who of Hollywood' attended. They were people of great influence upon the art scene of LA, figures that Masucci called 'celebritoids'4 (Masucci, M. 2013. Interviewed by Andrea Foenander). Throughout the promotional video made on the night, artists and other participants also testify that EZTV was pioneering the digital art platform in LA. Artist Rebecca Allen, for instance, said 'EZTV is the only place that's really supporting anything like this.' Via Acevedo, V. (1990) Opening night. Figures like Allen and others speak intuitively and with a refreshing inelegance, abstaining from the technical jargon that is typically associated with technology5-dependent art practices.

The exhibition marked the beginning of a major shift in the way that Computer Artists approach the medium. Initial ventures in to the construction of shapes and later images

⁴ Interview with Michael Massucci (2013) by Andrea Foenander.

⁵ For example, contemporary digital artist/designer Dan Roosegaarde, uses the term 'overfacebookized' in interview; http://www.youtube.com/watch?v=750PduaIEH4

were rooted in science; they were diagrammatic, aspiring towards true-life representation. Once the 'popular computer', leaked in to the Hollywood art scene, this tool was then used to facilitate the work of exceedingly diverse artists.



[5] Nina Rota. (1999). Who Needs Hollywood.

EZTV is an artist-run space created in 1979 by innovative video artist John Dorr (1944-1993). It has long been at the forefront of time-based media, the first gallery to show feature length artist videos then later dedicating one floor of the gallery exclusively to digital art. Dorr, pictured above, is credited within Nina Rota's documentary Who Needs Hollywood? (1999) as being the first artist to make a feature film on a handheld video recorder, entitled Sudzall Does It All (1978).

The ideals by which EZTV was built lay outside of mainstream Hollywood, the organization continued to promote artists who operate outside of conventional means. The gallery space occupied by EZTV, situated on 18th Street Santa Monica California, began showcasing hundreds of screenings, exhibitions and performances. Then in 1991,

EZTV opened a Cyberspace gallery, dedicating one floor of the gallery exclusively to Digital Art. This decision was received with controversy by the local press, which gave such exhibitions little or no coverage. Associates of EZTV had to make the case for their practice. Exhibiting artist Mar Sorell of the LA 1990 show declared 'It's quality art, and the rest of the world has to accept this as art!'. The investment in a complete gallery floor was only the first step: introduction of virtual space was the next.

The community of the *Digilantes*, nurtured under the protection of the EZTV organization, facilitated a certain lifestyle that was essential for exposing the emerging medium. The support-network in turn benefits all contributors; EZTV simulated a sense of collectivity and therefore a collective movement. EZTV enabled artists based in LA to have a base for peer-to-peer exchange, safe from those in the mainstream media whom dismissed their efforts.

The 1990 exhibition was curated by digital art historian Patric Prince and featured twelve artists whose works are catalogued on page 7. Prince stated in an interview for Art Scene (1990) that 'Artists have been using the computer for about thirty years' although Prince continues to explain that computer art works produced in the early sixties were very equipment based. 'Artists collaborated with technicians to produce images line by line, pixel by pixel' noted Prince. The Art Scene interview aforementioned also features LA 1990 Computer Artist David Em, who was widely predicted to be the star of the show. Em follows Prince's statement by adding, 'every medium has different possibilities' computers can be used to quickly draw far more precise vectors than are possible by hand. But this unchartered digital realm required a different method of navigation. This realm, contained within the monitor, is the philosophical space that the artist must inhabit, to become submerged within6.

Catalogue of Artists featured in LA ACM/SIGGRAPH 1990 exhibition.

VICTOR ACEVEDO \\\ One half Spheroid Fiveness Interlink,
1990. Cibachrome print, 16x20 \\\ Metalogue 2, 1990.

⁶ Postproduction Culture as a Screenplay; How Art Reprograms the World. Nicolas Bourriaud. 2002.

Cibachrome print, 16x20. \\\ Victor Acevedo. Ectoplasmic Kitchen1, 1989. Cibachrome print, 16x20.

REBECCA ALLEN \\\ Steady State, 1989. Animation.

MAX ALMY & TERI YARBROW \\\ The Thinker, 1990. Animation.

GLORIA BROWN-SIMMONS \\\ Robots are our Friends, 1985. Photographic print, 11x14. \\\ Cloud Study, 1988. Photographic print, 16x20.

RONALD DAVIS \\\ Upright Glass Massicco, 1989. Ink jet print, 18x24. \\\ Elipsesette, 1989. Ink jet print, 18x24. \\\ Heptagon Dome, 1989. Ink jet print, 18x24. \\\ Pinwheel Tower, 1989. Ink jet print, 18x24.

DAVID EM \\ Michele 2, 1990. Construction, 18x24. \\ Rap, 1990. Construction, 18x24. \\ Union, 1990. Mixed media construction, 24x30.

SHELLY LAKE \\ Poly Gone, 1987. Animation. \\ Iron, 1987. Photographic print, 48x60. \\ Teapot, 1987. Photographic print, 48x60.

TONY LONGSON \\ After Mondrian 2, 1990. Screenprint on plexiglas, 36x36x6. \\ After After Mondrian, 1990. Screenprint on plexiglas, 36x36x6.

STEWART MCSHERRY \\\ Crystal-disp-1, 1990. Photographic print, 18x24. \\\ Disp-swirl-4, 1990. Photographic print, 18x24.

KAMRAN MOOJEDI \\ Pollock 4, 1990. Painting, 40x50. \\ Pollock 2, 1990. Plotter drawing, 25x35. \\ Number Series, 1989. Stereolithograph, 60x12x1

VIBEKE SORENSEN \\ N-LOOPS, 1989. Animation. \\
Reflection Studies, no.6, 1989. Stereo-pair \\ Reflection
Studies, no.11, 1989. Stereo-pair.

JAMES WRINKLE \\\ Hose, 1990. Ink jet print, 8x10. \\\ Well, 1990. Ink jet print, 8x10. \\\ Plunger, 1990. Ink jet print, 8x10. \\\ Vine, 1990. Ink jet print, 8x10.

Breeding Cyborg's: The Terminator.

Although the 1990 show attracted a lot of attention, many of the participants felt the need to defend computer from

its critics. These criticisms were not simply a matter of aesthetics but seemed to raise questions about technology. For a generation that had grown up in the aftermath of the Second World War, technology could never be a neutral matter.

As WWII ended, the Atomic Era began. During the final stages of this war, American airmen dropped bombs on Hiroshima, and Nagasaki. Shock waves from the atomic bombings stung the earth, feeding fear of the power of technology, a force far beyond the control of the individual. The assertion that technology has affected our view of the individual is much discussed at the terminus of the last century. Katherine Hayles, postmodern literary critic and author of How We Became Posthuman (1999) has summarized the development of what she calls 'Three Waves of Cybernetics';

1945-1960 Homeostasis 1960-1980 Reflexivity 1980-2000 Virtuality

Images from the atomic bombings unleashed, according to Hayles, a 'wave of quietism and fear' (1999) in America. Gender boundaries stiffened, racial tensions grew as both leaders and citizens began to 'dread a communist menace.' This stiffening of boundaries worked in tandem with technology and began to blur the boundaries between man and tool, Cyborg Theorist Donna Haraway asked 'Is a blind man's cane a part of his self?' in 1984. Both Haraway and Hayles were noting an evolving relationship between the object (computer) and the user.

But what was the 'communist menace' in regards to LA? It is a method of observation and control, intrinsic to capitalism (and akin to *Skynet*). 'What exactly is the political meaning of doing art with the hand-me-down technology from the defense department?' (Cameron, A. 1991) But by the dawn of the 1990's in Los Angeles, the 'communist menace' discussed by Hayles and Cameron seemed outdated. Consumers of computing technology largely ignored the threat of the *Terminator* (1984) and began to idolize the technologically assisted notion of the self in a new form, the *Avatar*.

⁷ A feeling which peaked more recently during the millennium bug conspiracy climaxing new years eve 1999.

The Internet began as a method of surveillance, but once this resource became available to the public, it offered many freedoms. Freedom to create, discuss and publish to the world in an infinite space, with boundless control.

Somehow, by the 1990's, a metaphor born at the heart of the military research establishment had become an emblem of the sort of personal integrity, individualism and collaborative sociability that so many had claimed the very same establishment was working to destroy.' (Turner, F. 2006.)

A digital presence such as the *Avatar* imprints data from the individual to the virtual, typically an ideology as opposed to a true-representation. It is a caricature of an aspiration; the user is capable of generating another form of them selves helping with our daily obligations spotlighted due to their technology like Shelly Lake's household figure (Fig.6), an animation shown during the *LA 1990* exhibition. The avatar conducts domestic chores whilst exercising telekinetic attributes; levitating letters and sending a pair of vertically mounted domes in circuit of the chest area. *Poly Gone* (below) is a three-minute animation where the heroin navigates her digital environment in an amusingly ironic manner.



However humorous Shelly Lake's intensions are in this video, there is another layer to consider, namely the conquest of a more abstract terrain, that of the internet. Unlike the Terminator, the avatar *Poly Gone* does not seek to overcome her creator, instead she is a missionary figure sent to ease the transition between the real and the digital, past and the future, by exercising gender stereotypes.

The term 'digital' was in 1990, no longer focused upon by many contributing artists. The point of interest when considering the use of the term is historically significant. 'Digital' as with the word 'technology, often appears to be a synonym for 'new'. Technology, from the greek τέχνη, techne, is the use of a craft to solve a problem. But once technologies become integrated in to daily use these terms fall in favor of a brand introduced by the world of marketing. To highlight the use of a computer to produce an art work quickly became benign, at least to the Digilantes, but such classifications provide useful signposts toward the chronological development of Computer Art.

Victor Acevedo and David Em, two of the artists from the LA 1990 exhibition, are examples of classically trained painters whose digital methodology exemplifies a painterly approach to the medium. In fig.8, Acevedo's uses vectors to create marks that make up the image; building layers which reference photography and geometry in an attempt to bridge the 'real world' image and the image making capabilities of the computer. Each of the works exhibited in LA 1990 had an element of digital processing but varied in their presentation. Digital prints, animations presented on screens or in the case of David Em, three-dimensional geometric objects using mixed media. The methodological commonality existed not just within the use of the personal computer but with the use Computer Aided Design programs and scanners to both create and import material

The open-source movement is both an informal and formal strategy promoting the view that software is at its highest standard when it is being created and published for free,

the most poignant examples being Linux8, Apache9 and BIND10. Offering these services for free not only benefits those unwilling to pay but also most importantly, contributed to the freedoms envisaged by the vision of a global network. Sharing information, educational or otherwise, would accelerate the development of science, medicine and technology and with them, art and the humanities. The sense of awe that once surrounded an object of laborious craftsmanship could be published online. Once the reward for ones efforts is quantified in the passing of knowledge, production is forced to accelerate. This may be the point at which the competitive pursuit of technology for use within art is at its most aggressive. This aggression is a bi-product of ego. Once a practice becomes reliant upon the latest advances in technology it is subservient to those technologies and must fight to keep ahead of the mass market in order to retain a certain degree of mysticism as perceived by the audience. In which case, is the object produced 'art' for the context in which it is displayed or, for the unavoidable 'originality' the object inherits? This perhaps, is not an issue often considered when approaching 'traditional' media such as painting, as the creation of a painting may not necessarily require a mark-making ability above that of the novice. An abstract painter for example, may focus on the gesture of mark making instead of the meticulous nature of photorealistic mark making.

To consider the work of an abstract painter as intuitive is to suggest that an ability to make marks with a brush is inherent in most members of contemporary society. One the use of a computer program become integrated in to every day use, it may facilitate the same degree of intuition in order to create images. 'Cybernetics suggested that digital processes might lead to a malevolent automation of human and biological processes.' Wiener, N. (1954) The Cyborg of science fiction or Terminator, as mentioned previously, is traceable beyond Wiener, perhaps even beyond Mary Shelley's Frankenstein. Wherever there exist advocates of technology

⁸Linux- based upon Unix, this operating system was first released in 1991 and continues to be available for free.

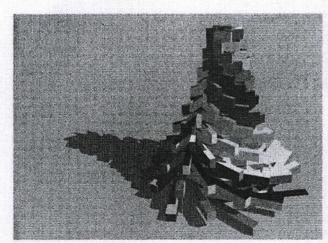
 $^{^{9}\,\}mathrm{Apache-}$ The Apache HTTP Server- the software currently serves more than 50% of websites.

¹⁰ BIND- the most widely used DNS software on the internet, it is a program that supports the Domain Name Service to locate Webpages.

their counter-parts exist too, skeptics who fear acceptance.

As we accelerate into the new millennium, questions about the posthuman become increasingly urgent. Nowhere are these questions explored more passionately than in contemporary science fiction. (Hayles, K. 1999)

Natasha Vita More, founder of the *Transhumanist Arts and Culture World Centre* and close friend of EZTV, developed the term *H+* to describe the augmented human, often using the human body as a work of art. Vita More centers her discussions around thoughts on gender and objects, placing humanity in the category of post-virtual existence. A process that Vita-More catalyzed in 1980 LA that has reverberated since.



Pinwheel Tower, 1990 Ink jet print

In 1963 Ron Davis began to paint in a hard edge, geometric, optical style. Between 1968 and 1969 he produced his first series of dodecagon resin paintings. Ronald Davis is concerned with traditional problems of painting: Renaissance perspective, space, scale, illusions and color relationships, which he relates to his interest in Hi-tech craft and its relationship with industrial materials. Central to Davis' work, is how to reconcile the artifact produced

RON DAVIS

[7] Ron Davis. (1990) Pinwheel Tower

Artist Ron Davis, another participant in the *LA 1990* exhibition, has been making digital work since the sixties and by 1990 he dismissed any interest in pioneering the medium. Curator Patric Prince describes Davis' as being concerned with traditional problems of painting;

Central to Davis' work, is how to reconcile the artifact produced with the latest technology to a transcendental metaphor. (Prince, P. 1990)

Davis had been working with computers for longer than any of the other LA 1990 artists, but the *post-virtual* agenda was not prevalent. The *post-virtual* only becomes possible when *virtual* becomes every-day. Today, in 2013, social networking websites such as Facebook struggle against the dual-personality facilitated by anonymity of exchanges published online. To transcend what was once human became a choice in 1990, to push against convention or transplant tradition to new media. For many of the earliest Computer Artists, the computer was a vessel for tradition.

Military hard and software will continue to trickle down into the marketplace. Copyright Laws will continue to rumble on, inconclusively. The industrial walls which separate photography, graphics, illustration and publishing seem bound to tumble down. (Hope, K. 1991)

Hope expresses a certain anarchical anticipation for the freedom of the internet, whilst reminding the reader of the frightening necessity to credit the US military as the main benefactor for the World Wide Web, beginning with ARPA¹¹ in 1957. Developing alongside the apocalyptic weaponry that devastated Hiroshima and Nagasaki. In a similar way to the arms race, computer technology began a capitalist war, connecting each device to a World Wide network presented a new port to invade, abuse and conflict. It was a new society that needed policing, perhaps by a Web Version 2.0 Cyborg Cop¹².

 $^{^{11}\,\}mathrm{ARPA-}$ a Top-Level Domain (TLD) used exclusively for technical infrastructure purposes.

 $^{^{12}}$ Cyborg Cop (I-III) is a movie series from the 1990s wherein an ex DEA agent has to track down his brother who was been turned in to a Cyborg.

SIGGRAPH: E-Commerce.

The 1990 LA ACM/SIGGRAPH exhibition was held within a volatile economy. In the 1980's Great Britain and The United States had been pushed toward privatization under the governance of neo-liberalists Margaret Thatcher and Ronald Reagan¹³. Then in 1987 an event known as Black Monday changed everything. Major indexes of market valuation dropped more than thirty percent over just three days. The dramatic stock market crash marked the end of a five-year period of explosive growth.

At times of economic decline, consumers demand relief or rather, escape. Computer Art offered an enormous freedom, seducing the creative mind. Juxtaposing militant development with an intuitive approach, only navigable (as has been stated) by an immersive acceptance of the virtual, to embody the *Cyborg*. Computers are not weapons, or even mere tools; they are the most prized objects of contemporary culture. And those who were willing to convert from skepticism to acceptance would have been at the forefront of a new age.

Perhaps an epistemological shift occurred following the release of the personal computer. Once a wider range of

 $^{^{13}}$ Prior to presidency, Reagan was the $33^{\rm rd}$ governor of California. Interestingly, the $38^{\rm th}$ was Arnold Schwarzenegger, star of *Terminator*.

users could have a tactile relationship with the computer, it became less of an enigma. But the temporal occupation of the mind required users to become increasingly dependent on computer-tools whilst becoming less conscious of their physicality.

The SIGGRAPH conferences, like many large-scale events relied upon substantial sponsorship. The EZTV exhibition catalogue credits support from Alias America Corporation, Lyon Lamb Video Animation Systems Inc, Thompson Digital Image America Inc and Wavefront technologies Inc. But does sponsorship necessarily mean an attempt by capital to conquer art or, in this case, computer-art? Or are sponsors a commonplace aspect of art practices reliant upon emergent technologies? It is almost certain, that without sponsorship, there are many artists who would not have been granted access to software and hardware prototypes throughout history.

The transition from older crafts to computer assisted ones was made easier using certain marketing tactics. Katherine Hayles stated; 'At SIGGRAPH, the annual computer trade show where dealers come to hawk their wares, hard and soft, there are almost as many skeuomorphs as morphs.'(1999) This meant that the innovation of each object became a debate between form and function. Reproducing or upgrading existing objects so as not to present anything too alien to the consumer. When referred to Hayles' statement, DigiLante and EZTV director Michael Masucci said there are a 'whole bunch of people who would take tremendous offence to that', (Masucci, M. 2012. Interviewed by Andrea Foenander.)
Masucci insisted that it was primarily an art show that 'paid its way' by having a trade show.



[8] Victor Acevedo (1988-90) Ectoplasmic Kitchen v.1.

Fellow Digilante Victor Acevedo remarks on the huge diversity of the show saying that it is a place for academic papers, cutting edge computer research and of course, art. (Acevedo, V. 2012. Interviewed by Andrea Foenander.) Examples of academic essays published in the 1990 SIGGRAPH supplement include Rudolph Arnheim's language and the Early Cinema and Richard Wright's Computer Graphics as Allegorical Knowledge. The editors segment of the catalogue states that following the previous ten years of 'early defensiveness'; a fear of mechanized process has gone. Arnheim's Language (1933) is reprinted next, whereby he states 'according to the laws of aesthetics, nothing superfluous may be included in a work of art without detracting from it.' A paintbrush, a chisel, an angle grinder, a tablet: each seem to require a perfuse ordinariness, or rather, such a widespread acceptance to the point of being ignored before they can be used as true media without being a spectacle.

Computer hardware and software developers invited artists to take part, possibly in order to promote computers as a creative tool as opposed to a scientific tool, or possibly to provide consumers with a greater incentive to purchase, reassuring them that the Computer will become integral to modern life. One review of the LA 1990 exhibition which

As computers became cheaper they inherently became more accessible. In comparison to the 1960's, LA 1990 artist David Em states within the Art Scene pt.1 (1990) Interview that it was now possible to get 'a computer for the price of a car'. It is difficult to ascertain how many citizens of LA circa 1990 could afford to make such a purchase, or more importantly, how many were willing to do so, but computers were certainly becoming increasingly available through universities and organizations such as EZTV. They were no longer elite laboratory apparatus; they were a resource within the grasp of the masses.

Interestingly, David Em continues the focus of the Art Scene pt.1 interview by opening discussions on how computers are changing the way we think and consume. Not just products, but images and general information. Marking the beginning the realization that the computer isn't just 'spitting out' images, the artist is actually writing the program¹4, controlling the output as far as the hardware will allow. The previous image [Fig.8] depicts Ectoplasmic Kitchen v.1 By Victor Acevedo, which demonstrates a method of post processing using existing images. It is an attempt to transcend the use of the computer by generating a dialogue between past and present. The Ghost in the Machine¹5.

Near the beginning, Computer art of the 70s UK was either artists who learnt to write programs or, artists who shadowed (worked with) scientists. (Koselleck, R. 1985)

Reinhart Kosselleck, one of Germany's most important historians, specializing in conceptual history and epistemology, continues this discussion by noting how the growth in processing power evolved: 'as greater representative art was required... it was expected to... create a pragmatic structure for the establishment.'

¹⁴ An intimacy which has been eliminated by monotonous image sharing, i.e. *Instragram* and hipsterstakingpicturesoffood.com

¹⁵ The Ghost in the Machine is an animated feature film centring on the ethics of artificial intelligence and the possibility of an artificial soul.

There are several earlier computer art works mentioned in the Art Scene pt.1 interview. Karl Sim whose work like Vibeke Sorensen's [Fig.15] is sensitive to classical media, is almost an animated illustration. Ben F. Laposky and Charles Csuri [Fig.9] are also mentioned. Both of whom explore transitional practices as is evident within the image below, painting on to a digital render. Adding movement to drawings or animating shapes and colors as in Csuri's After Paul Cézanne (1964) these initial experiments in digital mark making give light to an emergent practice of Remixing.

[9] Charles Csuri (1964) Contemplation.



Patric Prince, curator of the 1990 exhibition wrote in the catalogue foreword now more than thirty years ago, that computers were limited to a handful of practitioners, yet interestingly they were now part of 'the contemporary language of art'. This further suggests the impending doom of banality. Prince articulates;

The symbolic use of space in the past did not involve synesthesia as does electronic art. When medieval European artists rubbed gold leaf on the ground of their paintings, everyone understood it to stand for what we call 'otherworldly' representation. (EZTV Gallery. 1990).

Technology evokes an awareness of our age, and it is demanded by developers that artists sooth the social

acceptance of seismic cultural shifts. But what were citizens of 1990 Los Angeles most aware of? To draw evidence from the exhibition under examination, Max Almy and Teri Yarbrow's 'animation' titled *The Thinker* [Fig.10] energetically voices a deep concern with issues preempting the digital awakening, he pinpoints consumption, commerce, capitalism, gender, and many more. All brought together by the universal network connecting each personal computer.

[10] Max Almy & Teri Yarbrow. (1990) The Thinker. 'Charge it!'



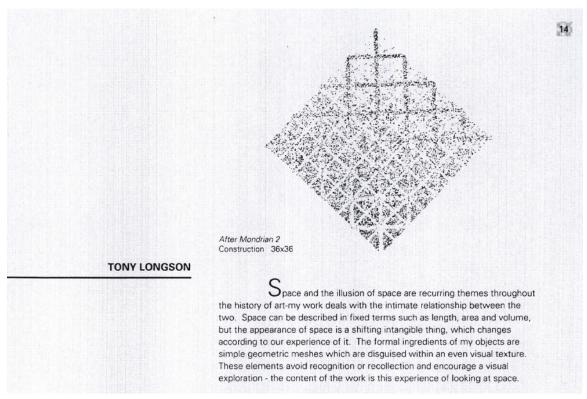
Given the increasingly accessible, global network of resources, outsourcing industry to seemed like a popular solution to cut costs following recession. Workers unions exploded in numbers during the 1980's, workers demand more pay whilst business become hyper competitive. Manufacturing was largely exported to Germany and India at this time, though this move has since moved almost entirely to Asia. The consequences have been catastrophic for thousands of western workers. As well as the huge volume of living memories, monuments to a pre-recession era scar the earth. From theme parks in North America¹⁶ to holiday villages of

¹⁶ Such as the Six Flags theme park in New Orleans which was abandoned in 2005 following Hurricane Katrina.

Spain¹⁷, either half built or half destroyed. Ruins of a utopian economy perhaps serving to remind the beneficiaries of the next economic growth spurt to execute caution before attempting to construct ambitious projects.

Performative Activism.

The ACM/SIGGRAPH LA ART 1990 events operated in association with The LA Open Festival and Fringe festival 18. The concept of a Fringe performance bares similarities the Open-Source movement in that both ideals seek freedom and openness without exclusion. The intrinsic philosophy of EZTV gallery was to give voice to artists who were not being shown anywhere else. 'We wanted to give a home to what is otherwise underground work' (Prince, P. 1990). This lead to an inevitable question; were the artists grouped together solely for the commonality of computers?



[11] Tony Longson. (1990) After Mondrian

¹⁷ http://www.monicadonovan.com/#/place/photographer-burlington-vermontvt-assignment-commercial-photojournalist-monica-donovanplaces-17IMG 3889

¹⁸ The 'fringe' concept denotes a performance that is independently staged outside of or around an official performance. Reportedly originating around the Edinburgh International Festival in 1947.

We are a social species, operating connectively: a Human Swarm19. Democracy is often acclaimed a pillar of civilization. This practice, at its most volatile is considered 'crowd mentality' and is held accountable for fanatical behaviors such as mobs and riots. Carl Jung justified such social mechanisms by stating, 'there exists a second psychic system of a collective, universal and impersonal nature which is identical in all individuals.' (Jung, C.G. 1990) A 'collective' or movement, in terms of artistic practice, is perhaps by its very nature, overpowering the original purpose of recognizing the materiality of its own merit. In LA, those activating Computer Art collectively were the group of digital artists who regularly exhibited at EZTV; the 'DigiLantes'. This paradigm has redefined participation, in the words of Alexenberg;

a new paradigm of participation in which art will begin to redefine itself in terms social relatedness... encouraging the emergence of a more participatory, social interactive framework for art, and supporting the transition from art-for-art's-sake assumptions of late modernism (Alexenberg, M. 2006)

LA has long been famed for performance art. Performers traditionally take an initiative that is dependent upon both organization and an audience presence. For the concept of Fringe Festivals, turning up without permission and showcasing work is an act of rebellion against a parallel institution. Historically, LA has showcased some hard-hitting performances by the likes of Chris Burden and Carolee Schneeman. It is a multicultural storm cloud, an area able to facilitate spectacles that are impossible (due to censorship) in other parts of the world. Though it must be noted, such freedoms come with consequences.

In 1992 the AIDs crisis shook the world and claimed the lives of several affiliates of EZTV including founder John Dorr. It took resilience to fight through the eighties and rebel against economic capitalism and produce something more organic. It was not until the concept of virtual space arrived in the nineties, that the foundations for a new paradigm of interaction were set: primed for an escape in to virtual space.

¹⁹ Channel 4 Documentary (2013) reveals how human behaviour can be accurately predicted on a national scale using data trails.

Rebecca Allen's 'steady state' [Fig. 12] is a film shown in the LA 1990 show that merges a live recording of a dancing couple, with an 'animated' dance of two corresponding sets of computer generated triangles. Due to the prevalence of performance art in LA²⁰, there is little confusion as to why these artists referred to Performance elements within their work. Allen explains within an interview for Art Scene pt.1 (1990); 'I'm really concerned with the art of motion, computer animation is an abstract representation'. Allen's work appeared to be playing with the idea of performance within the digital realm, questioning the boundaries between physicality and computer simulation.



The name World Wide Web emerged towards the end of the year 1990^{21} , although websites such as EZTVmedia had been online since 1987 (eztvmedia. 2013) operating on the fringe of the digital enterprise. Today, servers such as GoDaddy host

^{20:} The 2006 EZTV event 'HTTL:// Hacking The Timeline; EZTV', Digilantism and the LA Digital Arts Movement. 18th Street Arts Center, California. February 4th- April 8th 2006 featured a performance by Collage Ensemble Inc. and discussions by Kit Galloway and Sherrie Rabinowitz of Electronic Cafe International.

²¹CERN, The website of the worlds first-ever web server states the first web server launched toward the end of 1990. A number which grew to 200+ by 1993.

hundreds of thousands of websites, trafficking millions of users.

Interestingly, Max Almy and Teri Yarbrow's *The Thinker* [Fig.10], was another piece within the LA 1990 show labeled as a 'computer animation', due to the use of computer generated special effects. However, the focal point within the video is the actor. As with Allen's piece, which starts and finishes with two unmanipulated human forms, *The Thinker* idolizes the human aesthetic by choosing to keep his form true to life. It is inherent that the act of manipulation seeks to distance the subject from its content. And in both of these instances, the protagonists are certainly affected by technology, though The Computer does not yet wholly consume them.

During the narrative of *The Thinker*, the protagonist experiences a rapid evolution from early Homo sapiens to modern man. Along the way he quotes various philosophers, writers and scientists, following his evolution undergoing with the proclamation;

I like designer clothes, designer drugs and the postmodern condition. My structuralism has deconstructed. Language is a virus. Art is business. Money is religion. Philosophy is a computer science. And the future just ain't what it used to be! (Almy, M. Yarbrow, T. 1990)

Once the monologue reaches the above stage, 1990 modern day, the character becomes devoid of intellectual speak. He is incapable of prolonged engagement with any literary substance. He has lost the depth of thought conveyed by his previous incarnations and is beginning to regurgitate a high-paced skim of information obtained, using a vocabulary that is littered with buzz-words and slogans obtained via advertising. The Thinker lives in the fullest sense of the 'now.' Eerily, the 'now' from 1990 draws stark similarities to the now of today: in a digital society that prizes mass storage and download speed above explorative substance and depth of engagement.

Another animation from the *LA 1990* show that provides a mirrored vantage point for 'information overload' is Shelly Lake's *Poly Gone*. The performance showcases the artist as a builder: generating and controlling her *Avatar*. This *Avatar* is controlled by her creator and is affecting her

environment, by way of computer simulation. A huge Amphitheatre filled with decadent geometric furniture has been built and is occupied by the heroine, *Poly Gone*, who is (aside from the occasional flying object) using the home in a relatively benign domestic way. [Fig. 6]

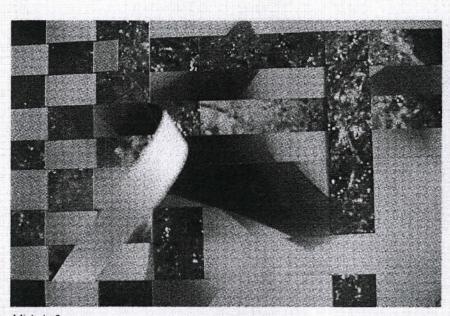
The construction of the avatar suggests the need for a reclassification of the boundaries of the self, and therefore the boundaries of the performative self. One fundamental concern given the seemingly infinite possibilities within the digital realm is a question of boundaries. Buckminster Fuller is noted by many artists of 1990 as informing such reclassifications;

Environment to each must be All universe excepting me. The universe in turn must be All that isn't me plus me. (Fuller, B. 1976)

Fuller's Ever Evolving Totality of Dimensions traces the geodesic line between existence and technology. The 'geodesic' source-sphere being the root from which a complex network of possibilities began to extend. The battle between the changing dynamics of internal space, signified that one obsticle that had to be overcome by anyone whose education was grounded in the physical: they must aspire toward the digital studio as ethereal. Digilante Artist David Em explained within an interview from 1990 how his perception of space was affected by a move toward the digital;

my internal space has changed radically. Where the first images were geometric, doing things that a computer would normally do that I was exploring while I got in to a new medium, here my space came from spending a lot of time in the south west, and so my internal spiritual ideas had changed radically reflects in the art work and this is one of the things that proves the computer is in fact a true medium as opposed to a special effects box. (Em, D. 1990) Art Scene pt.1.

[13] David Em (1990) Michele 2.



Michele 2 Construction 18x24

DAVID EM

The artists that were first experimenting with computer technology, were actively seeking the facilities of laboratories such as Charles Csuri [Fig.9] and asking to be involved. An equivalent comparison today would be an artist making their way to the large Hadron Collider in Switzerland and asking to be shown how to use the equipment for artistic purposes. Outside of LA, one review of the LA 1990 exhibition featured in Venice Magazine demonstrated excitement;

VR (Virtual Reality) is stereoscopic real-time interactive computer generated environments...

Occupants access the environment by wearing a dataglove and special goggles called eye-phones... Venice
Magazine (November 1991)

Though it could be said that this excitement was not dependent upon the work but the progression of technology.

It is undeniable that scientific documentation has produced some spectacular imagery. And though it may not be possible as an artist to be present at the site of terrestrial discovery, images from science are regularly collected and

exhibited as art²². Furthermore, as funding extends beyond contemporary frontiers, the countercultural artist recycles materials, aesthetics, and is left behind by the technology that far exceeds his reach. Pushing the distance between arts and sciences in to a turbulent terrain.

The Internet and the World Wide Web provide a medium for self-defined countercultural movements... Cyberculture is also against censorship, control and the use of computer networks to promote surveillance. (Coyne, R. 1999)

The key activity is to self; -publish, -promote, -sustain.

Technology Fetishized.

The ultimate image of a fetishised relationship with technology is shown below. The film Videodrome (1983) by David Cronenberg, illustrates an extreme desire for technology. The main character is hypnotized by a sexual attraction and becomes consumed by the television. It is a horrific portrayal of a human obsession with the object as a projection of the self.

²² images from the Hubble telescope for example. http://hubblesite.org/ the_telescope/

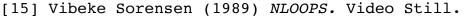
[14] Videodrome (1983) Video Still.



The film radicalizes the occupation of digital space, a concern that is illustrated within several science fiction films of the late twentieth century. In juxtaposition with this Hollywood film industry, the *Digilantes* appeared to be considerably more optimistic about the transition between digital and physical space. The anticipation for the relationship between the body and the computer, in specific relation to each practice, remained ambiguous. When given the following question in a recent interview; 'Was there a utopian anticipation for computer technology?' (Acevedo, V. Masucci, M. 2012. Andrea Foenander) Both Victor Acevedo and Michael Masucci agreed that the collective expectations of the *DigiLantes*, for the explosion of computer art, were positive. Computer Artists had to be sensitive in their initial strategies towards their equipment.

'The artist is a traveler, observer, itinerant worker who moves about the world digesting and regurgitating' (Bee, S. & Schor, M. 2000) It is necessary for intuition to take priority when leading the initial explorations of any medium. One such artist from the LA 1990 exhibition was Vibeke Sorensen who produced a hypnotic amalgamation of moving shapes and colours. The animation appeared at times, to reference shapes found in the ancient cave paintings

near Santa Barbara and California. Unlike the oftenfigurative European cave paintings, these images are usually abstract.





At the origin of our species, early Homo sapiens possessed the same ability to form complex neurological maps as we hold today. However, the development and use of tools predates this mental capacity, in fact the use tools extends far beyond our species. This means that the key instinct to consider is not an obsession with tools; it is an inherent fear of the unexplained. It may be that the overwhelming forces beyond the control of the contemporary individual are either aspirations or fears. The digital dimension at first offered a new mysticism, not to the computer manufacturers but to the users, or 'explorers'. Unequipped with the ability to produce an object, they adore and approach the platform in a new way, uncensored and inspired by unimaginable possibilities.

The cosmic hunting and fishing rights will be universal. The only owner will be the "Great Spirit"— the nonanthropomorphic god of the Indians, Eskimos and all of the Earth's earliest free-ranging humans will be re-cognized.

Mind will have returned

into complete ascendency over matter. (Fuller, B. 1976)

The primitivism metaphor used by Fuller for a process lead practice has been revived following the social networking boom by Nicolas Carr, 'As soon as you learn to be a 'skilled hunter" online... books become superfluous.' (Carr, N. 2012) Thus reiterating the loss of literary intelligence caricatured within Max Almy & Teri Yarbrow's The Thinker (1990). Meanwhile, on the other side of the Atlantic, the Young British Artists (YBA²³) were characterizing a similar thesis within their work. The altering demands of the art world, as affected by the growing freedom of information, were influenced by an increasing necessity to make spectacular statements. Perhaps this seemingly desperate attempt to gain attention for physicality, points toward the death of the physical realm.

As the twentieth century draws to a close, the essence of our social political and economic activities takes place in nonphysical, mediated space. (Rucker et al. 1992)

Contemporarily, we may consider smart phones as a transportable access to a global network, able to inform, assist or amuse. When given this freedom, the user is able to re-route both their physical and mental energies. This is often controversially deemed an evolutionary strategy, though there is a growing acknowledgment of the impossibility for our brains to adapt in tandem with such high-paced changes.

The sound track for Vibeke Sorensen's NLOOPS [fig.15] features in many of the documentational recordings for LA 1990, perhaps this basic and repetitive melodic sound is a more transferrable language when considering the virtual terrain. The sound is somewhat removed from the Cyborg culture previously discussed, in favor of a certain primitivism. However, this primitivism elucidates a certain aesthetic that is present in early Computer Art. The simple shapes, colours and sounds of the animation operate in unison. At times the graphics err towards a corporate

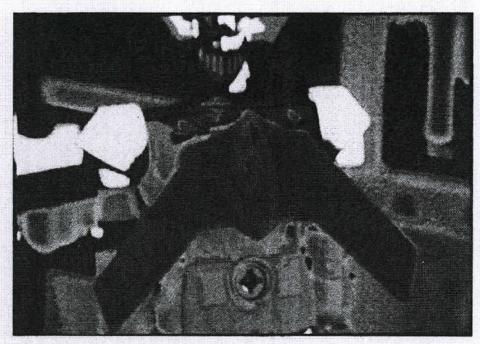
²³ Young British Artists gained notoriety throughout the nineties. The group is traceable to a warehouse show in 1998 and includes Damien Hirst, Sarah Lucas and Marc Quinn to name a few.

aesthetic but the most engaging elements are those that are regressive of any such narrative.

There are many artists within the LA 1990 show whom did not use motion graphics, although artist used an element of computer processing within their work. A magazine review of the exhibition from 1990 stated; 'The curator cited the artists' desire to have their work appraised purely on a visual level, regardless of how it was created' (Los Angeles Reader. 1993) — the artists were working to diminish the focus upon production, despite the evidence that it was an integral part of each work.

Gloria Brown-Simmons, now a teacher at MIT, produced photographic prints [Fig. 18.] Brown-Simmons stated within the LA 1990 exhibition catalogue; 'I am an experimental artist... concerned with structured abstractions.' (1990) Using the computer to create basic shapes based on information uploaded via a scanner. It is a system comparable to the way the human eye processes visual information by building images from basic shapes. Brown-Simmons deconstructed the image visually, in order to reconstruct it digitally. This 'collage' methodology may not appear dependent upon the computer per se, however it does rely on the programming aspects interlinking of the scanner and printer hardware to the computer software.

[18] Gloria Brown-Simmons (1985) Robots are our Friends



Robots are our Friends, 1985 Photographic print 11x14

Digitality²⁴ is perhaps in this case, an act of impulse. Albeit that a more technologically indulgent lifestyle is being accommodated here. The length of time it takes to produce accurate vectors has been cut. Quick loading; instant access and mass storage. The consequences of which leave users open to distractions²⁵. There is an overwhelming necessity in the digital age to script a new magna carter, with a list of commandments for the digital world. I can only guess, with the aid of the Internet, which laws could be transcribed today:

- 1. The internet is for porn. (Avenue, Q. 2003)
- 2. Cats want cheeseburgers. (Nakagawa, E. 2007)
- 3. Trolololol. (Khil, E. 2010)

Language is an interesting point of governance: The ability to articulate appears to be a portal to a higher point of authority. During the Art Scene pt.2 from 1990, wherein

 $^{^{24}}$ The condition of living in digital culture. A term from Nicholas Negroponte's *Being Digital* (1996) .

²⁵ Take a look at this website http://totallylookslike.tumblr.com/

Victor Acevedo and Rebecca Allen are questioned, there is an interesting contextual example. Allen compellingly describes the mysticism surrounding the tech whilst Acevedo displays an impressive array of technical terms that leave interviewer aghast. He is unable to describe the topics explored by the artists using relative terminology, he struggles to convey thoughts or even ask questions to a high degree of literacy.

Your legal concepts of property, expression, identity, movement, and content do not apply to us. They are all based on matter, and there is no matter here. Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion. We believe that from ethics, enlightened interest, and the commonweal, our governance will emerge. (Turner, F. 2006)

Turner has expressed within the citation above, the need for a new order of ethics. Our fundamental intuition is perhaps doomed to weaken in light of the Internet. Entrepreneurial inventors are striving to develop new ways to make cut short the pain of labor in all aspects of society, whether this is by connecting our data trails using portable network devices, developing Cyborgs²⁶, or mass marketing stem cells. Any endeavor that facilitates and promotes longevity of conscious existence seems desirable.

Each of these problems point to the question: once our sense of body is extended, how do we differentiate between the entrance and exit nodes connecting our physical and digital selves once they are in high-paced operation? And it was the *Digi*Lantes that were beginning to ask this question.

Sci-fi films surrounding the topic of digital presence appear ever more pessimistic about technology. For example, the film The Island questions the ethical implications of cloning whilst Avatar warns against deep space colonialism. The constant search for more resources, as it extends beyond our planet, may lead us toward devastation. But at least for now, there are an abundance of unanswered questions to tackle within the boundaries of our own planet. It may be credible to assume that ethics rarely

²⁶ In this instance the term is used to refer to the use of bionic limbs and prosthetics.

appear before progress, yet to the LA 1990 artists, the performance of being a Computer Artist in demonstrates a community or 'network', striving to highlight certain issues within society.

A Lost Aesthetic

Today the term 'Computer fine-artist' has disappeared. Perhaps this loss marks the benign point at which a methodology or a process becomes so ordinary that it is no longer needed. But why should this be? Surely a growing acceptance of digital tools should require the celebration of such terms, but instead such labels have been abandoned. And what of those art objects that were once held with such reverence? The redundancy of outdated equipment on which such art works depend may be one cause. In fact, the LA artists could see their own redundancy, as well as the approaching redundancy of mainframe computers. James Wrinkle [Fig.16] made ink jet prints of objects rendered in CAD programs. In the catalogue for the 1990 exhibition he

celebrated the fact that 'personal computers' can now render in multiple colors.

[16] James Wrinkle (1990) Plunger.



Plunger, 1990 Ink jet print 12x16

JAMES WRINKLE

Stories of successful products form a small part of the progressive history of digital art. Perhaps it is easier to consider failure. But early computer artists did not fail, because the act of producing any work is arguably an essential process for the development of any medium. The early-digital aesthetic, was dismissed in retrospect when faster and more powerful computer models became available. Today's standard for high-powered machines enable a greater degree of realism that makes Rebecca Allen's characterization of rendering as 'abstract' obsolete.

Most of the artists enjoyed substantial careers following the first LA ACM/SIGGRAPH exhibition. To name a few examples; Shelly Lake is featured in the Saatchi database, Gloria Brown-Simmons teaches at MIT, Tony Longson is a professor at Cal Arts, Michael Massucci remains director EZTV alongside other endeavors. Moreover, the integrity of practice has been maintained too; recent works by Max Almy & Teri Yarbrow, David Em and Victor Acevedo all retain an aesthetic similar to that of LA 1990. Colorful, Geometric

and intuitive, their art continues to be an attempt to deformalize the object-user interface.

Not only have this generation continued to explore the language of the pixel but it is evident that aesthetic tendencies of 1990 are reoccurring in contemporary fashion and Art.



[19] Jen Stark. (2013) Holographic.

Holography is one medium that became redundant after being the subject of considerable intellectual and financial investment from the sixties on. At one time holography was supported by entire exhibitions at EZTV gallery²⁷, and even a course at the Royal College of Art. And yet it fell into sharp decline largely due to the expense and limitations of the material. In recent years, holographic technology has been used to resurrect Tupac for the Coachella 2012 music festival, and in the work of Jen Stark [Fig.19], it has made a return to the gallery. Even in an educational framework; Ohio State University is offering courses in Holography beginning autumn 2013. Strikingly, the preparatory reading list for students embarking on the programme dates from 1970-1987.

 $^{^{27}\,\}mathrm{EZTV}$ has exhibited many holographic works and artists from LA 1990 with a particular interest in holography include Max Almy and Teri Yarbrow.

But has this technology been revived as a cheaper alternative to 3D Television? Or is this trend an impatient anticipation of holographic video? (BBC, 2012). Rumors have circulated for years surrounding the release of portable holographic video devices without reward. This now nostalgic concept requires technology that is still too expensive to be realised, yet the perception of holography as futuristic remains part of its mythic appeal.

Some of the artists of LA 1990 may have achieved a greater artistic longevity than others, but this does not place them in a greater position of importance. It is from the mother board (organizations such as EZTV) that the digital art processor can form connections between media and people. The Digilantes worked to gain acceptance for a new medium, not immediately after the technology was invented, but at the most essential time. This was when theorists such as Patric Prince provided a platform from which to debate the consensus that took place in our attitudes to computing, thus enabling our current plethora of artistic relationships with computers. As artist and writer Victor Burgin noted at the time (1991)

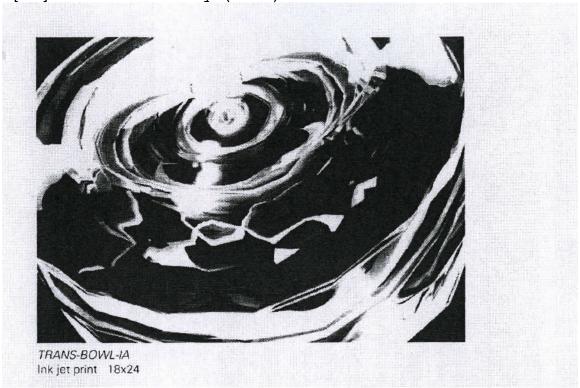
The things you can do with the technology as its advanced now, on your own desktop... You can stop it, reverse it, put it in slow-motion, and so on. And you can behave like a photographer on the street. (Burgin, V. 1991)

To revive the excitement expressed by Burgin would be a wonderful yet impossible feat. It may be that a certain degree of mysticism remains, and many emerging artists seek to revive this sense of wonder as it evokes greater imagination such as in the work of Jen Stark [fig.19]. However, some of the 1990 Artists whose theoretical practices seem most concerned with method, such as Victor Acevedo prefered to analyze technological relationships between materials rather than engage the impossibility of predicting the future.

The object-user interface relationship was at first approached with skepticism and reverence in equal measure. There were those who advocated computers as artist tools such as the *Digi*Lantes, but far more artists of 1990 who chose to uphold traditional art practices. David Hockney, is one of the most famous living artists, and has also

contributed to the reputation of ETZV by exhibiting²⁸ in the space. Hockney is famous for using digital technology and his recent use of the tablet as a tool for painting puts him in to a category of tech-ready artist. Perhaps this provides support for the end of technophobic traditionalism. Today, it is essential for creative professionals to use computer technology, to build websites and for many to use digital recording equipment and even for some to use specialized machinery such as 3D printers.

[17] Stewart McSherry (1990) Trans-Bowl-1A.



Stewart McSherry [Fig. 17] made photographic prints. More realist than any of the others of this pioneering generation, he used liquid textures to make domestic objects appear psychedelic. In the 1990 catalogue he stated 'I consider myself an abstract expressionist dealing with three-dimensional forms and space in a photorealistic way. The computer to me is a tool... The Computer's ability to create pseudo-realities is as close as possible to my own daydreaming fantasies.'(LA 1990 Catalogue)

²⁸ David Hockney is listed as having exhibited at EZTV at http://
18thstreet.org/public-programs/past-exhibitions-events/collaborationlabs/3999-2

many generations later, society is ... stepping forth into a new virtual terrain, armed with a powerful set of tools built around information and its processing techniques. (Brown, D. 1998). It may not have been considered effective in an art context to use technology in the most progressive way, but it is the excitement that comes with the first experimental play that compels the culturally sensitive to follow technological development.

HTTL:// Hacking The Timeline [Fig.20] was one of the last events at EZTV dedicated explicitly to digital art that placed emphasis on the medium. Digilantism and the LA Digital Arts Movement were discussions held at the 18th Street Arts Centre (EZTV) in Santa Monica California, February 4th- April 8th 2006, featuring performances, panel discussions, and presentations. Around one third of the artists were involved with the LA 1990 show, including Victor Acevedo, Rebecca Allen, David Em and Tony Longson.

This event celebrated digital innovators as part of a corporeal revolution, internalized by advocates of EZTV. The DigiLantes, by the very act of being a mutually supportive network of artists pioneering Digital Art, prepared each other, and the immediate vicinity, for the expression of the digital self. By utilizing various media, including illustration, performance, painting, sculpture and the very act of mutual support. The mind melds with the machine. These various images produced by the pioneering Computer Artists (some of which are illustrated in the



HTTL:// Hacking The Timeline.

image below) have resonated throughout the course of digital history, helping shape the way in which digital art is still perceived.

[20] Michael Massucci (2006)

In 1993, Journalist Gary Pfitzer states in an article from the March edition of Computer Graphics World that computer artists are 'tired by now of hearing arguments and discussions about the viability and credibility of the computer as a creative tool. (Pfitzer, G. 1993) But Pfitzer continues by quoting an account given by a collector whose central interest is digital art as; facing '80 or 90 percent of the legitimate galleries' whose tendencies towards traditional or 'established' art forms, forces them to completely dismiss all digital art or digitally assisted art. The digital factor might be ignored today, but in 1990, was it not a requirement for artists wishing to use the 'digital factor' to go against the grain in order to create something original? Throughout the timeline of digital history, it is possible to find substantial evidence to support a movement from figurative to abstract representation, as has been discussed in earlier chapters. This is in part, a reaction against the limitations of the software. The first widely distributed computers had only a fraction of the processing power that designers use today, making realism a more unattainable and therefore desirable aesthetic. Today, realism becomes a matter of ease, therefore designers such as Hannah Waldron who use a 'personal visual vocabulary' (Disignboom, 2013) yet methodologically adhere to a formal linear structure, are more interested in evoking a visual philosophy. Waldron in particular is interested in mapping using various materials. Due to the expansive capabilities available today, it becomes impossible to reproduce digital objects circa 1990 with an absolute degree of authenticity. Digital objects are in transit, each one marking their era by both the capabilities of the technology available and the aspirations of their creator subject to socio-economic strata.

If one thread woven through humanity's timeline of cultural evolution is a fascination with tomorrow's world, the liberation promised by the benefits of new technologies to expand the body, caters the desire to become *superhuman* (or what Vita-Moore calls 'H+'). Whether this 'superhuman' has greater wealth, knowledge, eyesight, fame, longevity; his technology enables him to become his *own* image of the

future, relinquishing his rural beginnings, releasing the mind from the cave.²⁹

Conclusion.

There are several instances of resurrection occurring in the contemporary field of digital art, reanimating the aesthetics of 1990s computer art by mimicking the capabilities of outdated design software. Designers appear to identify nostalgically with this aesthetic, reanimating a time when computers promised infinite power. Introducing superb possibilities for the imagination; but was this a self-fulfilling technological idolization for a tooldependent species? Or is there an integral place for the lost aesthetics of a computer-ready culture?

Many of the artists have since been celebrated as innovators, but would they have created such a tour de force outside of the computer medium, or outside of Hollywood? With the big screen budgets, well-equipped and funded laboratories and universities which surround California with a fruitful vineyard from which to harvest some powerful imagery. LA with its vibrant performance scene and reams of artists with serious determination, constantly pushing things forward, interrogating and reshaping the art world.

Michael Masucci's statement that 'The 'who's who of Hollywood' appeared at the exhibition, is just one of many testimonies to the great exposure and influence of the event upon the attendees. The contributing artists gained support for an invaluable medium and inspired visitors for years to come, influencing patrons to take action against the novelty of computer art and appreciate artists who stood for something.

Perhaps the most successful works of the *LA 1990* exhibition were those that expressed ideas hybridizing a digital presence and a physical presence. Some of the artists approached this emergent medium quite formally, by referencing traditional means. Victor Acevedo and Rebecca Allen evidenced illustrative styles, whilst Vibeke Sorensen and Tony Longson used an aesthetic that was arguably more

²⁹ David Lewis-Williams book *The Mind in the Cave; Consciousness and the Origins of Art* (2004) discusses how we became human and consequentially began producing art.

intuitive. Some sought to construct a subversive environment such as Shelly Lake and David Em, whilst others chose to question the political effects of digitization such as Max Almy & Teri Yarbrow and Gloria Brown-Simmons. Whichever way, it is clear that any of these approaches have a strong place in the computer art world of 1990 and in fact, the wealth and diversity evidenced in the LA 1990 show signifies a key point in Computer Art history. It was a time at which computers changed in the mind of the user.

The artists established a society within EZTV Gallery, both digitally and physically, an empowering maneuver capable of obliterating potentially negative receptions. Their choice to push digital art into the acceptance of the art world as a whole might be caricatured today by 'trolls' found in Internet forums such as 4Chan³⁰, writing memes as a way of gaining support for a certain purpose online. Although this comparison is of course, at a far more niche and anonymous end of the networking scale.

If LA 1990 has one inescapable contribution to history at this point it would be action, establishing computers as an 'every-day' fact of art practice. The artists involved were certainly not the first to use computers but they were the most important group to the way digital art is used today, and the most prevalent to deny the medium as spectacle.

The studio practices of some DigiLantes have since become lost through time, though the impact of the period in question is still felt in many of their works following 1990 [see appendix 1.] An enormous energy that erupted in Hollywood and charged through the many friends and colleagues of EZTV continues to scorch the practices of contemporary practitioners in LA. A sense of nostalgia, resurrected according to taste, yet affected by environmental circumstance is inherent in all, and it surfaces again today, baring signs of a turbulent history.

For artists contributing to the birth of a culture of activity, the forms that surround us are the materializations of these narratives. Hidden away in all cultural products as well as in our everyday surroundings, these narratives reproduce communal scenarios that are more or less implicit: a cell phone, an article of clothing, the

^{30 4}chan.org is an image-based bulletin board where members are celebrated based on their regularity of input.

credits of a television show, and a company logo all spur behaviors and promote collective values and visions of the digital world.

It is the use of the world that allows one to create new narratives, while its passive contemplation relegates human productions to the communal spectacle. (Bourriad, N. 2002)

The 'communal spectacle' is an inescapable human desire, a strange reassurance. It is in this same way that we must repeat patterns of aesthetics to avoid shock and smooth transitions. Skuemorphs are a useful tool for this; enabling techno-evolution to grow at a digestible rate. Similarly, to unplug from the machine too suddenly would cause complete disruption. Slow growth is good, to allow for the adjustment of our primitive brains. Early computer artists focused heavily (albeit subconsciously) on the materiality of technology. This form of worship disables a genuine relationship with the medium, but as with all practices, this initial experimentation is a necessary stage in understanding the tool. Just as a baby explores the world through play, so must we explore the possibility of a piece of software before gaining full acceptance of the technology: before transcending the tools themselves.

How will technology continue to enable the growth of productivity, production and reproduction? Now that we are at the dawn of the next stage in the digital enterprise, it is time to consider this question. We cannot predict where these questions will occur next but we can imagine, with the aid of contemporary objects of creative endeavor, what virtuality might mean to an individual sense of identity in the future and how it might change the boundaries of the bodily self and the ethics of existence.

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Appendix 1. List of LA-SIGGRAPH 1990 artists current websites

David Em \\\ www.davidem.com \\\

Gloria Brown-Simmons \\\ www.banffcentre.ca/faculty/faculty-member/321/gloria-brown-simmons/ \\

James Wrinkle \\\ www.jameswrinkle.com \\\

Kamran Moojedi \\\ www.siggraph.org/artdesign/gallery/ S03/2d/0309.html \\\

Max Almy & Teri Yarbrow \\\ www.maxalmy-teriyarbrow.com \\\

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Rebecca Allen \\\ rebeccaallen.com \\\
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Ron Davis \\\ www.irondavis.com \\\

Shelly Lake \\\ www.shelleylake.com \\\

Stewart McSherry \\\ www.linkedin.com/pub/stewart-mcsherry/
2/198/bab \\\

Tony Longson \\\ www.calstatela.edu/academic/art/
tonylongson.php

Victor Acevedo \\\ www.acevedomedia.com \\\

Vibeke Sorensen \\\ http://visualmusic.org/Biography/
Index.html \\\

Index

Atomic Era - or atomic age, used to describe the perdiod following the detonation of the first atomic bomb in 1945.

Avatar - an incarnation or embodiment.

Black Monday - 1993 stock market crash, though the term refers to other similar events.

Celebritoids - Michael Massucci's description of celebrities in 1990's LA.

Computer Art - the prerequisit term for Digital Art

Cyborgs - Persons whose physical ability is elevated by machinery. Coined by Manfred Clynes in 1960.

Ghost in the Machine — Gilbert Ryle's description of Descartes mind-body dualism, introduced in Ryles *The Concept of Mind*. (1949)

H+ - Short for Humanity+, following the transhumanist
movement.

Homeostasis — The tendency toward a relatively stable equilibrium between interdependent elements.

Millennium Bug - name for the 2000 or 'Y2K' software problem, discussed in Computers in Crisis by Jerome and Marilyn Murray 1984

Reflexivity — the coreferential relation between a reflexive pronoun and its antecedent.

Remix Culture — a term based on Lawrence Lessig's *Remix*, to describe a society which allows and encourages defivative works.

Performative — Relating to or denoting an utterance by means of which the speaker performs a particular act.

Posthuman - Originating in science fiction, futurology and philosophy. Posthumanism seeks to re-concieve the human through multiple heterogeneous perspectives (Haraway, D.J. 1991)

Skynet — artificially intelligent program which seeks to destroy mankind, from the *Terminator* film series.

Superhuman — having or showing exceptional ability or powers.

Transhuman - The Transhuman term describes the prerequisite for becoming Posthuman. It is the poit at which a human being begins to surpass his or her own limitations but is still recognizable as a human or similar. (World Transhumanist Association 2002-2005)

Virtuality — essence or potential existence, used by Gilles Deleuze to refer to an aspect of reality that is ideal.